UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HAWAII NATIONAL PARK

FILE No.

MONTHLY REPORTS

1937

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ARNOLD B. CAMMERER,
Director.
The Director  
National Park Service  
Washington DC  

Dear Mr. Director:  

There follows the report of activities for Hawaii National Park during December, 1937.

000 - General  

A heavy electric storm occurred on the night of December 24, followed by a clear sky the next morning which disclosed beautiful snow-caps on both Mauna Loa and Mauna Kea, down to about 9000 foot elevation, very appropriate to the Christmas season.

100 - Administration  

110 - Status of Work  

James A. Choffe entered on duty December 15 as clerk-accountant.

With the departure of the superintendent for Washington, on the 29th, to attend a superintendents' conference, Dr. T.A. Jagger, Volcanologist, was appointed acting superintendent, with Ranger E.F. Moosaw, Jr., as executive officer.

120 - Inspections by:  

121 - Superintendent  

Before leaving for the mainland the superintendent made routine inspections of the various park and CCC projects.

130 - Finance and Accounts  

A complete financial report for the month is attached.
150 - Equipment and Supplies

One engineer's transit and tripod, an electric cooking range, two armchairs and miscellaneous articles were received, also a relief map of this island, constructed by the Western Museum Laboratories.

170 - Plans, Maps and Surveys

Corrected road and trail utility sheets for the park were returned to the Regional Office on the 24th, and the corrected master plan forwarded that office on the 28th.

180 - Circulars, Placards, Publicity Bulletins, etc.

Papers were submitted for the Third North American Wildlife Conference by Assistant Park Naturalist Lamb, on the Hawaiian Nene, and by Ranger Kenneth J. Williams on the Pacific Golden Plover in Hawaii.

Eight information sheets giving data on various trail trips in the Kiluaea section were compiled by the acting chief ranger and mimeographed, copies of which are attached.

The acting chief ranger also delivered an illustrated lecture on board the USS Henley, which was anchored in Hilo harbor for several days.

200 - Maintenance, Improvements and New Construction

230 - New Construction

Final inspection and acceptance was made of project PP 677.14, employee's quarters, on the 18th.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger and Guide Service

Chief Ranger Joseph H. Christ remained on duty as acting camp director and project superintendent for the CCC camp, and Ranger Kenneth J. Williams continued as acting chief ranger.

480 - Natural Phenomena

Dr. Stanley S. Ballard, Research Associate in Geophysics for the Park Service, who is connected with the University of Hawaii, and Dr. John H. Payne, also of the same school, visited the park from the 20th through the 23rd, for the purpose of collecting gas samples, etc.

On the 17th, a public hearing was conducted by Major F.E. Bermel, District Engineer of the US Engineering Corps, at the offices of the Hilo Chamber of Commerce in connection with the proposed erection of lava
barriers for the protection of Hilo, and deepening and widening of the Hilo harbor. The superintendent and Dr. Jagger were both in attendance at this hearing and submitted papers which were read by Major Bermel's assistant.

A detailed report of the activities of the Volcano Observatory is attached.

450 - Miscellaneous

During the month the nursery for raising native planting materials was started. Seeds are being germinated in the nursery of the Territorial Forestry Department in Hilo. Seedlings received during the month included 37 mamani plats, with approximately 50 per plat, 2 plates of hau, containing 75 seedlings and one of koa with 52 seedlings. Four hundred and eighty three mamani were transplanted into cans to be grown for landscape planting.

500 - Use of Park Facilities by the Public

610 - Increase or Decrease in Travel

Travel at Kilaeua amounted to 14,741 visitors as compared with 13,266 for December 1936, and at Haleakala the district ranger reports 1155 visitors as against 3352 for the same period last year, which was due to the very inclement weather in that section.

530 - Visitors

December 18 - Ernie Pyle, special writer of the Scripps-Howard newspapers, for 2 days,

Dr. Harold St. John, Professor of Botany at the University of Hawaii, and a party of students. While in the park the park naturalist spent two days with him in checking some of the less known plants. They departed on the 22nd.

December 20 - Mr. Clark Lee, Associated Press Representative in Hawaii, for several days.

December 26 - A Colonel Hils of Kansas City Missouri, who was attempting the roundtrip between there and the park in 80 hours. However, the Clipper which he expected to take on his return to the mainland, was delayed in Honolulu because of adverse weather conditions.

900 - Miscellaneous

000

During December 20 new enrollees, 16 being from Honolulu, were enrolled.
The trailside shrine and seismograph building, at the end of the Mauna Loa truck trail, is reported as being 60% completed. Repair work was done on approximately 9 miles of the Hilina Pali road. Good progress was made on other maintenance projects.

The camp basketball team won four out of its first five games of the season. Other activities included field trips to the footprint area and Chain of Craters, in addition to hikes to various spots of interest in the park, also boxing.

It will be interesting to the Service to learn that the Hilo Iron Works has a reproduction of Gref Teller's water color of the Tempe Wick House at Morristown National Historical Park on its 1938 calendar. Superintendent Cox was informed of this, and we have requested the Iron Works to furnish him with a copy of the calendar.

The Keahou ranch, comprising some 35,000 acres, leased by A.M. Brown from the Bishop Estate, and adjoining the park boundary, was sold to W.H. Shipman Ltd., of Hilo, which concern is one of the largest ranch owners on the island.

Respectfully submitted

T.A. Jaggar
Acting Superintendent

By:
J.M. Woosam, Jr.
Exec. Ofcr.
New Superintendent's Residence

View of side toward crater (front) before landscaping
New Superintendent's Residence - Rear View (before landscaping)
Living room looking toward dining room
New Superintendent's Residence

View of bathroom from living room
New Superintendent's Residence
New orientation disk as erected at Hilina Pali showing coastline and Apua Point in distance (CCC Project)

New Trailside Shrine at Makaogahi Crater (CCC Project)
## STATISTICAL REPORT NO. 6
### FINANCE AND ACCOUNTS
#### December, 1937

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Appropriation</th>
<th>Allotted</th>
<th>Expended &amp; Obligated</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-10000</td>
<td>National Park Service, 1938</td>
<td>$44,832.00</td>
<td>$43,286.74</td>
<td>$1,545.26</td>
</tr>
<tr>
<td>14-10000</td>
<td>National Park Service, 1938 (NPP)</td>
<td>350.00</td>
<td>23.04</td>
<td>326.96</td>
</tr>
<tr>
<td>14-10000</td>
<td>National Park Service, 1937</td>
<td>44,500.00</td>
<td>44,083.00</td>
<td>417.00</td>
</tr>
<tr>
<td>14-1010</td>
<td>Roads &amp; Trails, National Park Service</td>
<td>22,500.00</td>
<td>19,631.04</td>
<td>2,869.96</td>
</tr>
<tr>
<td>14-1130</td>
<td>Roads &amp; Trails, National Parks,</td>
<td>40,870.65</td>
<td>40,389.09</td>
<td>481.56</td>
</tr>
<tr>
<td></td>
<td>Emergency Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-405/90762</td>
<td>P.W.A., Allotment to Interior,</td>
<td>9,303.00</td>
<td>9,182.81</td>
<td>110.19</td>
</tr>
<tr>
<td>14-403/90634</td>
<td>N.I.E., Interior, National Park</td>
<td>13,000.00</td>
<td>12,278.56</td>
<td>721.44</td>
</tr>
<tr>
<td></td>
<td>Service, 1935-39</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Travel Report

**Hawaii National Park for the month of December, 1937**

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>Last Travel Year</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Private Transportation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>13,953</td>
<td>38,656</td>
<td>12,486</td>
<td>38,055</td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td>325</td>
<td>835</td>
<td>191</td>
<td>729</td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>14,278</td>
<td>37,501</td>
<td>13,677</td>
<td>38,783</td>
</tr>
<tr>
<td><strong>Other Transportation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via hotel rooms</td>
<td>463</td>
<td>1,980</td>
<td>389</td>
<td>1,364</td>
</tr>
<tr>
<td>Persons entering via trains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation</td>
<td>463</td>
<td>1,980</td>
<td>389</td>
<td>1,364</td>
</tr>
<tr>
<td><strong>Grand Total All Visitors:</strong></td>
<td>14,741</td>
<td>39,481</td>
<td>13,066</td>
<td>40,147</td>
</tr>
</tbody>
</table>

- **Automobiles in public camps during month:**
- **Campers in public camps during month:**
### Travel Report

**Haleakala National Park, Hawaii**... National Park for the month of December 1937

#### Private Transportation:

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars first entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td>331</td>
<td>1022</td>
<td>249</td>
<td>750</td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>1155</td>
<td>5011</td>
<td>1246</td>
<td>3842</td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>1155</td>
<td>5011</td>
<td>1246</td>
<td>3842</td>
</tr>
</tbody>
</table>

#### Other Transportation:

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons entering via stages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL ALL VISITORS</td>
<td>1155</td>
<td>5011</td>
<td>1246</td>
<td>3842</td>
</tr>
</tbody>
</table>

#### Automobiles in public camps during month:

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**10-157**

(Dec. 1937)
## Report of Park Revenues

**Hawaii National Park for the Month of December, 1937**

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Total</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Remitted</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>On hand close of month</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenues received this year to date</td>
<td>70.75</td>
</tr>
<tr>
<td>Park revenues received last year to date</td>
<td>298.50</td>
</tr>
<tr>
<td>Increase      decrease</td>
<td>227.75</td>
</tr>
<tr>
<td>Per cent of increase      decrease</td>
<td>.763</td>
</tr>
</tbody>
</table>
Hawaii National Park for the Month of December, 1931

<table>
<thead>
<tr>
<th>Category</th>
<th>This Month</th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees beginning of month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg. P.W.</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Non-Appointed P.W.</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Number of additions</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Number of separations</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of employees close of month</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Number of promotions during month</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Aggregate amount of leave without pay</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### United States Department of the Interior
National Park Service

**Status of Authorized Projects**

#### Hawaii National Park for the month of December, 1937

<table>
<thead>
<tr>
<th>Description of projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>520.1 Haleakala Road, Post Construction (F.A.)</td>
<td>91</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>523 Uwekahuna-Bird Park Road, surfg., treatment, 1.75</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>524 Residential Area Roads, completion 3/4 mile clrg., grdg., and surfg., (F.A.)</td>
<td>98</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>526 Headquarters Area Roads, Improvements (F.A.)</td>
<td>99</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>1.P.663.14</strong> For the erection of one observation station &amp; toilets; one office &amp; checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleakala.</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>1.P.677.14</strong> Employee's Residence and connecting service lines for newly appointed U. S. Commissioner, including purchase of equipment.</td>
<td>100</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>
Hawaii National Park

REPORT OF SALES OF PUBLICATIONS

December, 1937

<table>
<thead>
<tr>
<th>Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>996</td>
<td>147.10</td>
</tr>
</tbody>
</table>

**GOVERNMENT PUBLICATIONS:**

<table>
<thead>
<tr>
<th>On hand beginning of month,</th>
<th>996</th>
<th>147.10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total,</td>
<td>996</td>
<td>147.10</td>
</tr>
<tr>
<td>Sold during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>On hand at close of month,</td>
<td>996</td>
<td>147.10</td>
</tr>
</tbody>
</table>

**NON-GOVERNMENT PUBLICATIONS:**

<table>
<thead>
<tr>
<th>On hand beginning of month,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received during month,</td>
</tr>
<tr>
<td>Total,</td>
</tr>
<tr>
<td>Sold during month,</td>
</tr>
<tr>
<td>On hand at close of month,</td>
</tr>
</tbody>
</table>

| Cash on hand beginning of month, | 12.12 |
| Sales during month,             | 0.00  |
| Total,                          | 12.12 |
| Remitted during month,          | 0.00  |
| Balance,                        | 12.12 |
January 10, 1938

Mr. Edward G. Wingate, Superintendent,
Hawaii National Park,
Hawaii, T. H.

Subject: Report of the Hawaiian Volcano Observatory for December, 1937

Dear Mr. Wingate:

The month of December was marked by the Budget meeting for 1938 of the Directors of the Hawaiian Volcano Research Association, by the presenting of papers on Kilauea work at the meeting of the Hawaiian Academy of Science, by progress in construction of Mauna Loa seismograph cellar, by the U. S. Engineers' hearing in Hilo on Lava Barriers Survey, and by more gas collecting by University workers.

Volcanic Activity of the month:

Until the solstice season of December 21, the month was extraordinarily quiet at Halemaumau pit and the earth tremors few and small. Seismicity became three times as great after solstice, and five large distant earthquakes in Mexico - Central America were recorded. Thirteen of the local shocks were from Kilauea, six from Mauna Loa, and two from beyond Mauna Loa. The following are the local data:

<table>
<thead>
<tr>
<th>Week ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack openings</th>
<th>Quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 5</td>
<td>3.25</td>
<td>0</td>
<td>3.5</td>
<td>10</td>
</tr>
<tr>
<td>December 12</td>
<td>2.25</td>
<td>0</td>
<td>1.0</td>
<td>7</td>
</tr>
<tr>
<td>December 19</td>
<td>2.00</td>
<td>0</td>
<td>6.0</td>
<td>7</td>
</tr>
<tr>
<td>December 26</td>
<td>6.50</td>
<td>1</td>
<td>0.0</td>
<td>20</td>
</tr>
<tr>
<td>January 2</td>
<td>7.50</td>
<td>0</td>
<td>2.5</td>
<td>19</td>
</tr>
</tbody>
</table>

An earthquake was felt in Hilo, December 26, another in Kona, December 30, and one at Kilauea, January 1, was in the perceptible class.

There were two large distant earthquakes, December 21, one each on December 23, January 1 and January 2, and measured distances were 2340, 3725 and 3500 miles. The press reports indicated Mexico.

Work of the Volcanologist:

Dr. Jagger spent the first week of December in Honolulu at meetings of Hawaiian Volcano Research Association and Hawaiian Academy of Science. At the latter scientific papers by present or former workers of the Volcano Observatory were the following:

Stanley S. Ballard
Preliminary Analysis of Kilauea Solfataric Gases.

John H. Payne
Willard H. Eller  Measurement of Earth Tilt
Chester N. Wentworth  Intrusive rocks of the Leeward Slope, Koolau Range, Oahu
Austin E. Jones  Geologic History of West Maui, Hawaii
Harold T. Stearns

Mr. Stearns also presented a paper at the Social Science Association on the growth of the islands, with remarkable colored motion pictures and slides of eruptions.

The Board of Directors of Research Association on December 3 passed a budget estimate of money to be raised for 1938, and the end of December showed a balance in their Treasury of only $441.70. Their budget estimate of $9740 made in February 1937 was not realized. They reached $7373 in total receipts. The project to print delayed publications had to be postponed again. There is little hope they will raise more in 1938.

The Mauna Loa seismograph cellar, built by C.C.C. labor, was inspected December 14. December 15 and 16 were given to escorting Major Bernal, U.S. Engineer and his civilian assistant Mr. Marcroft around Hawaii island. On the evening of December 16 projection slides and films of lava flow were shown to these officials. On December 17 the hearing on improvement and protection of Hilo Harbor was held by these officers. Dr. Jaggar and Mr. Wingate presented the case for the lava-flow protection dikes.

On December 20, Professors Ballard and Payne, spectroscopist and chemist respectively, arrived at the National Park and stayed three days collecting more gas samples at Sulphur Bank with improved drying and filtering devices. The object is to obtain a sample for spectroscopy, where the obscuring effect of the more obvious gases will be removed, so as to reveal the rare gases, if they are present. Naturalist Lamb took photographs of the train of collecting vessels, including three Willigan towers.

A new rectangular mirror telescope for star navigation experiments, simplifying former designs, was constructed by Okuda under Dr. Jaggar's direction toward the end of the month.

Superintendent Wingate left for Washington on December 29, Dr. Jaggar becoming Acting Superintendent.

Work of the Seismologist

Mr. H. H. Waseche, Assistant Geologist, on Dec. 3 overhauled the Halesuuman seismograph, polishing pivots and tuning uniformly the two component pendulums.

December 9-10 a regular series of levels was run around Halesuuman pit with the Lésta level after the instrument had been repaired in San Francisco. The level was found to be in adjustment, showing values that checked those found with Stanley level last month.

No relative change of level was found for the Pit Rim.

On December 10 an anemometer was installed at Observatory. The next day this was put in operation to record on the Bosch Amor chronograph of the cellular seismograph. On December 19 a second anemometer was adjusted for use at Red Hill on Mauna Loa. The Observatory anemometer was connected with telephone line and a test run made with Seismologist Waseche's cottage: this was satisfactory and the second anemometer was
similarly tested. The telephone wires will be used for Red Hill at 10,000 feet on Mauna Loa, so that from the Park readings of wind velocity there can be made at any time.

On December 18, Mr. Ernie Pyle of Scripps-Howard news service was guided; he is recommended by Dr. Ernest Grisning, Dec. 21 and 26. Mr. Waasche assisted Dr. Ballard and Payne and Professor Richard Tolman, December 26 he took S. Sato, Observatory librarian, to the hospital for appendicitis treatment.

Mr. Waasche has started collecting data for an investigation of seismic activity on the island of Hawaii for 1935-1937.

Work of the Assistants:
A. Okuda returned to Hilo, December 25, after two months in Honolulu physics laboratory and shops making seismoscope parts and learning instrument making. The seismoscopes are nearing completion.

S. Sato started negative classification and card-cataloging December 8. This involves copying all the note-book lists, and checking all negatives and prints. At the end of the month Sato was operated on for appendicitis.

Publications by or concerning Workers of the Observatory


"On talks with Volcanoes" by Margery Stoneham Douglas, article on F. A. Ferret, who was the first field man in 1911 at Hawaiian Volcano Observatory, Saturday Evening Post, Dec. 25, 1937.

"The Volcano Grows: scientists and engineers study ways and means of halting a lava flow toward Hilo", by Henry Dougherty, Honolulu Advertiser Jan. 9, 1938. (Copy herewith).
Visitors and Lectures:

There were the following visitors of note to Observatory:

Dec. 12 - Dr. Clyde Miller, Propaganda Institute, Columbia University.
Dec. 15 - Major P. E. Berman and Mr. Marshock, U. S. Engineers.
Dec. 26 - Professor Richard Coleman, water engineer of Stanford University
Dec. 30 - N. C. Atherton of Honolulu

The following lectures were given:


Dec. 16 - "Lava flow mechanism" (illustrated), Hawaii National Park, by T. A. Jaggar.


Very respectfully,

T. A. Jaggar,
Volcanologist.
January 11, 1938

Report of the Acting Camp Director, CCC-BNP, to the Park Superintendent, Hawaii National Park, for the Month Ending December 31, 1937.

During the month of December, we enrolled 20 new enrollees which helped considerably to fill up our ranks. The conduct of these new men is commendable. We are now near our quota of enrollees.

Good progress was made on the following projects:

Landscape Maintenance:
Work consisting of hoeing hard weeds, button grass, rag weeds and guavas, and trimming slopes and the cutting of grass on the roadside constituted work done on this project.

Tree Planting:
Work was started but temporarily abandoned because of inadequate equipment for the transplanting of the heavier trees.

Horse Trail Maintenance:
Filled up holes; widened trail; trimmed uluhis and guavas and hoed weeds, covering 7 miles in all.

Foot Trail Maintenance:
One day 12 man-days were used in repairing guard rails on the Sandalwood Trail.

Truck Trail Maintenance:
Repairs over 9 miles of the Hilina Pali road were completed from December 1 - 6th.

Goat Corral:
The goat corral is nearly complete. Everything should be completed by the end of January.

Removal of Exotics:
Work consisted mostly of removing Jerusalem artichokes and guava trees and also noxious grasses.
Telephone Line Maintenance:

The park telephone line was repaired and straightened out.

Trailside Museum & Seismograph:

This project located on Mauna Loa is 60% complete with Nakas and Markiewitch's gangs doing the constructing.

Educational and Recreational Activities:

Field trips to Foot Prints and Chain-of-Craters plus, hikes to numerous areas in the park were taken.

Basketball has gotten off to a nice start with our teams winning four out of five games. We have beaten the Kilauea Military Camp, St. Marys School and Pahala.

Boxing is taking its share with 22 eager fighters training daily.

Movies were shown twice during the month.

Newspapers, library books, magazines and typing are keeping many enrollees occupied.

Father Gregory held his regular church service.

Camp Sanitation:

Throughout the month the camp was kept in a fine clean state, with bunkhouse No. 2 and cottage No. 7 winning the month's prize for being the best kept buildings.

All rain troughs, roofs, etc. were cleaned as well as the windows etc.

The total camp strength at the end of December was 137. The 15 boys we received from Honolulu are fitting in nicely with the camp. They seem to be a fine bunch of fellows.

Respectfully submitted,

Joseph M. Christ
Acting Camp Director, CCC HNP
HALEMAUMAU

DISTANCE: From Volcano House: 6 miles round trip; 2½ hours. If not by car at pit: 3 mile; 1½ hours.

This is the most famous trail in Hawaii National Park and the oldest of active trails. It crosses the floor of an active volcano, and was probably well traveled before Civil War days. Until the lava dome to the pit was constructed in 1919, this trail was the only approach to the base of the goddess Pit. It has been destroyed many times by lava flows.

PRINCIPAL TREES: Ilima. Forest deploled of large trees a century ago.
Ohia-Lehua. The Lehua is the flower of Hawaii.

FLEURS: Many types can be found on this trip.

BERRIES: Aki. Beres poison berry which contains single pit.
Ani. Extremely hard w'ood. Was used for spears.
Ohia. Its edible berries were sacred to the goddess Pele.
Palila. Beres clusters of orange berries, late summer. Silvery leaves.
Pokomo. Sometimes called Hawaiian Heather. Berries red to white.
Uhi. Seda. Sometimes used in thatching houses.

VINES: Kukui Nono. Black berries edible to Nono (Hawaiian goose).
Lilikoi. Water lemon. Fruit edible.

Apapane. Hood and neck blood-red; wings dark.

GEOLOGICAL FEATURES. Where the descending trail first meets the lava floor, an older cliff 500 foot nearby is called Waldron Lodge. Differences in the types of the various lavas arranged by the trail, as shown by islands of Vold recent flows, are easily discernable. These are:
1868-84; 97-94; 1919-21. The spatter cone called "Little Beggar", dates back to 1894. Near the pit, ash, gravel and boulders scattered by the explosive eruption in 1894 are encountered. Evidence of drilling through the lava, a scientific experiment carried out some years ago, may be seen. Puhoehoe lava, earthquake cracks, lava tubas, lava toes, olivines, and other interesting volcanic specimens may be found. The olivines indicate basic lava typical of ocean basins.

Byron Lodge, Waldron Lodge and fault blocks south of the Volcano House, are all good illustrations of normal or gravity faulting. These same structural features give the clue to the volcanic operations known as magnetic stoping, which has evidently been more or less responsible for Kilauea Crater and other craters of the world of this same type.

Informational signs along the trail add to the interest of the hike.

(SEE MAP ON REVERSE)
KIPUKA PU'UALU
(BIRD PARK)

DIRECTIONS: Leave Volcano House via main road. Turn right at sign beyond Kilauea Military Camp, through Golf Course to ancient tree molds. Follow dirt road to picnic ground outside Kipuka Pu'ualu.

PICNIC GROUND: Drinking water, shelter, tables, benches, and comfort stations are available. Enter Kipuka Pu'ualu by turnstile off main parking area.

KIPUKA PU'UALU is on acre 100 acres in ext. nt, 3/4 miles West from Volcano House. A 1-milo loop trail from the end of the road leads the visitor to points of interest, making a total of 3 miles round trip. Allow half a day for the full distance on foot. If partly by automobile, 1 hour.

DESCRIPTION: An ancient lava flo, dividing into two branches, spared this beautiful area of rare plants and magnificent trees. The contrast in the vegetation in this spot with the country surrounding it will prove interesting to the visitor who sees it for the first time. Small informational signs along the trail give the names and uses of many plants.

BERRIES: There is only one poisonous berry in the National Park, the Akele, a red berry recognized by its single hard-seed. One specimen of the Akele grows to the left of the trail within 15 yards of the turnstile gate. The edible berries are: White strawberry; pohu; thimble; akale.

INTERESTING TREES:

Alani. Leaves were used to perfume kapa.

Koa. -A magnificent specimen, 14½ feet in circumference grows near trail.

Koloe. The new terminal leaves are red. The red sap was used to dye kapa.

Kopiko.-On one specimen is found the rare Hawaiian mistletoe.

Maizeko. Inner bark used to make Hawaiian kapa.

Monami. Bears clusters of golden flowers from December to March.

Monole. Soapberry. Sheds its leaves in winter. Seeds used for beads.

Noio. False sandalwood. This tree is common in Kipuka Pu'ualu.

Ohia-Lohan. The largest specimen in the park grows near trail.


Popala Kopae. Supplied bird lime for catching birds.

SHRUBS: Ti or Kl. One of the most useful plants in the islands, its broad leaves were used as wrapping for food.

Milo. Used to make fragrant isis.

BIRDS: The birds likely to be seen at all seasons are;

Apepano. Hand and neck blood-red; wings dark.


Elepahio. Brown, with white bars on wing. Named after its song.

RETURN VIA MAIN ROAD.

(SEE MAP ON REVERSE.)
This is one of the most interesting hikes in Hawaii National Park. Take trail across main road from Volcano House. 2 3/4 hours, 7 miles, round trip if walking all the way. 2 hours, 5 miles, if met by car at Thurston Lava Tube.

The vegetation covers most of the interesting types found at this elevation. Weird lava formations are encountered at the 1832 cascade and 1866 floor. Hundreds of birds accompany the hiker with their songs. The view of Kilauea crater at several points along the trail is superb. The trail sometimes winds its way beneath towering cliffs hundreds of feet high, then passes through the cool, canyon-like walls of tropical vegetation. Mosses and lichen cover the rocks, encouraging the growth of other plants. Trees and fern mounds can be seen where the 1832 cascade roared down the crater walls from Byron Ledge.

**PRINCIPAL TREES:**
- **Lehua:** Flowers of this forest depleted of large trees a century ago.
- **Ma'ili:** Paper Mulberry. Inner bark was used to make Hawaiian Kapa.
- **Chi-lehua:** Lehua is the flower of Hawaii.
- **Gilia:** Bright green leaves quiver in the slightest breeze.
- **Kukui:** Flowers in clusters which later change to dark-red berries.
- **Kamani:** All types can be found on this trip.
- **Sherwood:** Hardy; Extremely hard wood. Was used for spears.
- **Aloha:** Bear poison berry which contains single pit.
- **Kamani:** A small shrub of no particular value.
- **Kakoo:** Its edible berries were sacred to the goddess Pele.
- **Ka'ale:**berries edible. Slightly bitter.
- **Pele:** Bears clusters of orange berries in late summer. Silvery leaves.
- **Punane:** Sometimes called Hawaiian Heather. Multi-colored berries.
- **Uloa:** Soft. Sometimes used in making thatched houses.
- **Ukunui:** Blue berries were used for dye.

**HERBS:**
- **Kukui:** Nene. Creepers. Berries edible only to Nene. (Hawaiian Goose)
- **Lilikoi:** Waterlily. Fruit edible.
- **Mamane:** Blooms profusely April & May. Red to magenta flowers.
- **Uhi:** Was used for cordage.
- **Wawasole:** Nodding clubmoss. Creepers taking root here and there.

**BIRDS:**
- **Aloha:** Head and neck blood red. Wings black.
- **Elepalo:** Canoe bird. Named after its call.
- **Elele:** Nightingale. Bright, cheerful exotic, seemingly well established.

Informational signs and rustic benches along the way add to the leisurely enjoyment of the trip.

*(SEE MAP ON REVERSE)*
HAPAU CRATER

Napau crater, situated 2½ miles beyond the end of the paved Chain of Craters' road, is one of the many beautiful spots of unspoiled wilderness in Hawaii National Park. It was active for a brief period in 1838. A passable truck trail follows the rim of Macapuu for one mile, leaving 1½ miles to hike. There can be turned easily in a cleared space conveniently provided for that purpose. Time required for hike, 2 hours.

Boundaries of an area ravaged by a forest fire last century are plainly noticeable in the smaller trees and altered vegetation.

The foot trail through the forest, much of the time shaded by a canopy of rich tropical vegetation, is one of the most pleasant and interesting hikes in the park. Differing patches in the plant life within the crater indicate the boundaries of ancient lava flows. Being seldom visited, Napau harbors thousands of birds, some of them being rare native Hawaiian species.

Tree molds and lava trees are found near the trail. Walls of a factory built in 1851 were solid, the silky fibers from certain ferns, was collected, dried and shipped away to be used as stuffing for mattresses and pillows, still stand as a monument to a bygone industry. A large cave surrounding the ancient factory was entirely lined of large ferns for this purpose.

The trail traverses the hot steam fields where one of the several branches of the elusive 1840 eruption emerged. Cracks on the floor of the crater still emit steam.

PRINCIPAL TREES:

- Ohia-Lehua. The Lehua is the flower of Hawaii.
- Kolea. Several related species. Wood was used for beams in grass huts.
- Puamani. Flowers in clusters which later change to dark red berries.

VINES:

- Foli. Found elsewhere in the park, here is at its best. Fibers of the stem were used for cordage, baskets, helmets.
- Uhi. Was also used for cordage.

SHRUBS:

- Chelo Kulaam. Berry edible but slightly bitter.
- Painiu. Bears clusters of orange berries in late summer. Silvery leaves.
- Pukenui. Sometimes called Hawaiian Heather. Multi-colored berries.
- Uhi. Sedge. Used in making thatched houses.

BIRDS:

- Apepene. Head and neck blood-red. Wings black.
- Omeo. Rare Hawaiian thrush.

(SEE MAP ON REVERSE)
1790 FOOTPRINTS AND MAUNAIKI

Hiking distance to footprints, 1 mile; Maunaiki, 2 miles. Time necessary for round trip from Volcano House, 4 hours.

From Volcano House drive along main road towards Pahala for about 8 miles to beginning of trail across Kea'auan flow. Just beyond the sign which marks the beginning of the trail, a parking place has been cleared on both sides of the road. The road parallels Kea'auan flow, an escarpment over which Kea'aua flow cascaded in several places on its 35 mile trip from Kama Lea. This flow is undated though pro-1790, for the ash of that explosive eruption is found on its surface.

FOOTPRINTS: One version of the story: In the year 1790, before Kamahanaha gained control of Hawaii, a rival chief of Kau, Keou, returning from a raid on Kamahanaha's district, camped near Kea'auan crater, presumably to give his warriors an opportunity to replenish their stock of stone axes from the crags for which the crater was named. Driven away by severe explosions from Kale'umumu he moved down the desert, his party dividing into three sections. A severe explosion caught them, killing some of the advance party about 12 miles away, destroying all of the middle section 8 miles or so from the pit but leaving the nearest party a scant 2 miles away, unharmed. The footprints are found in the ash of that explosion, which fell in the form of mud, as banks of mud rain drops testify.

Weird formations in the pahoehoe of the area are also very interesting. A prehistoric lava river which the trail crosses on the way to Maunaiki deserves a pause. Widely scattered shrubs and ferns and some stunted trees are striving to gain a foothold. They are the advance guard of vegetation, a sign of the endless cycle of nature; volcanoes building up with lava; the vegetation obey supported by time and the elements, breaking it up into soil.

MAUNAIKI: The black ridge beyond the footprints is the result of the 1920 desert eruption which lasted several months, the lava having emerged at this point along Kilauea's southwestern rift. Much of the surface of Maunaiki's pahoehoe lava is rainbow tinted and as perforated as Swiss cheese. The black pitch to the right of the mounting trail is on. At the summit of the ridge the lava crust collapsed forming a small crater. For 14 years after the eruption the lava remained so hot in several places that it was customary for every party of visitors to ignite sticks from its heat. Since 1934, however, this has not been possible.

SEE MAP ON REVERSE
There are several ways to reach this little-known awe-inspiring spot. This pali is the result of a fault, several square miles of country having subsided 1500 feet at some remote times. A truck trail, 9 miles long, branches off from the Chain of Craters road near Devil’s Throat and the whole trip may be made by car in half a day. For those who would add variety to the trip a foot or horse trail down Kau Desert begins about a mile below Uwekahuna. This trail is part of a system which connects with Maunaiki, Yellow Cone, and loops back through Pepelua to Hilina, a distance of 24 miles. Another and shorter trail to Hilina, only 11 miles long, branches off to the left before reaching Maunaiki. If met by car at Hilina a one-day, part auto, part foot trip may be made.

Along the desert trail weird formations bear silent testimony to the turbulent sea of molten lava which once covered the area. The direction of these flows indicates that their source was not Kilauea Crater but several spots along the rift marked by a line of cones running south from Kilauea. An abundance of Pele’s hair shows the direction of prevailing winds. Mud rain drops are also plentiful. Dry river beds indicate heavy rains at long intervals. None but the most hardy plants exist and those are stunted and sickly looking.

BIRDS: The deadly stillness of the desert is seldom broken by the song of birds. Occasionally a solitary Plover may be seen or the sweet song of a Skylark heard. A small hill, Puu Koa, harbors several Koaes which may nest inside its hollow cone.

The short trail to Hilina branches off near a dead Ohia tree standing desolately alone on a low ridge, its two stark branches resembling arms lifted supplicatingly to the heavens, reaching for the life-giving moisture, pleading for the rain that seldom comes in that region. The trail divides again farther along, the Hilina branch to the right, the left spur joining the Hilina truck trail about 3 miles from Devil’s Throat. Everywhere along the desert, mounds of wind-blown sand, mixed with Pele’s hair, reflect innumerable rays from the scorching sun, necessitating dark glasses for comfort.

For the last two miles the trail crosses a grassy kipuka, occasional scrubby Ohias striving for existence. At Hilina a Hui o Pele shelter has been constructed which contains a telephone. Water, a fireplace and horse corral are available. In front of the shelter arrows on a bronze plaque set in a block of lava point to the principal places of interest to be seen from the pali.
CRATER RIM BRIDLE PATH

The crater rim bridle path is a 12½ mile loop, requiring about 2½ to 3 hours to circle on horseback at a moderate pace. With a side trip to Kilauea and a museum visit, the time is 4 hours.

Almost every type of vegetation and every kind of country peculiar to the Volcano area is encountered on this ride. Entering the loop just behind the Volcano House, the path skirts the Hilo road for half a mile, crosses it, and for a short distance until it crosses the road to Thurston Lava Tube, makes use of the bed of an old railroad that once led to a Koa mill, on the lower slopes of Mauna Loa.

After crossing the Lava Tube road, the path follows the old Keauhou road past both Twin Craters. Leaving this roadway, the path cuts through the dense forest of that region, the tall Ohie-Lohou trees and arching fronds of the giant tree ferns forming a cool canopy over the rider's head.

Crossing the Chain of Craters road, a little way beyond the junction of that road with the rim road, the path enters a quite different type of forest, the trees beginning gradually more scattered, the ferns more scanty, until the crater, Koa-keokeo, is reached, when vegetation practically ceases.

A tie rack on the edge of Keau-kakeo affords the rider an opportunity to rest his mount and stretch the kinks out of his own knees.

From Keau-kakeo, the Kau Desert is crossed. Should a visit to the fire pit be desired, a joining path, with its base at another tie rack near Halemaumau parking area, makes the side trip possible.

Good speed can be made across this barren stretch by trained riders, there being ample time after leaving the desert, to cool the animal.

The place is crossed where the 1921 lava stretched out an adventurous flume into the desert. It is interesting to note that this sortie of Halemaumau lava outside the boundaries of Kilauea crater, is the only surface overflow on record during historic times.

Leaving the desert, the path follows the edge of Kilauea crater past Wakahama, where another tie rack will allow the rider to dispose of his horse, should he wish to pay a visit to the museum.

From the museum the path continues along the Steaming Bluffs, crosses the main road on the steam flats to the Sulphur Banks and back to the starting point, behind the hotel.

The longer circuit through the Kau Desert to Hilo Pali and return is described on another sheet.

(SEE MAP ON REVERSE)
UNWEKANU. A MUSEUM OF VOLCANIC SPECIMENS.

Via Sulphur Banks - Steaming bluffs, returning by Sandalwood Trail.
DISTANCE: 5 miles round trip. TIME: 2½ to 3 hours, with museum visit.

SULPHUR BANKS: Just to the right of Volcano House, there is an immense bank of almost pure sulphur, formed throughout the centuries by deposits from the numerous steam jets which are still constantly adding pure sulphur crystals to the bulk of the banks.

STEAMING BLUFFS: On emerging from the Sulphur Banks, cross the road to the Steaming Bluffs trail. A rude bench conveniently placed at the lookout post invites you to pause and admire the magnificent view offered of the entire Kiloua crater. The trail follows the edge of the bluffs all the way to Unwekahuna Museum. Returning via Sandalwood trail to the hotel adds greatly to the interest of the trip.

NATURAL HOT HOUSE: Steam constantly issuing from cracks along the bluff encourages the growth of Yellow Gingerlily - Ei or Zi - Guava - Ilea vine - Lichen - Mosses and Algae. These plants would not grow so luxuriantly if deprived of the warmth.

SANDALWOOD: Several wide cracks are bridged over on this trail. Lookouts at intervals offer an opportunity to look down into the heavily wooded, deep chasm which affords a sanctuary for many birds.


Aloha. Bears poison berry which contains single seed.

Blackberry. Introduced pest. Very hard to eradicate.

Guava. Introduced. Fruit used to make jellies and jams.

Kapa. A small shrub of no particular value.


Ohelo. Native. Its edible berries were sacred to the goddess Pele.

Periwinkle. Bears clusters of orange berries in late summer. Silvery leaves.


Volcano Rose. Too well established to eradicate.


Yellow Gingerlily. Blossoms abundantly in late summer.

Small informational sign along the trails give the names and uses of plants.

(SHE MAP ON REVERSE)
SPECIAL ORDER NO. 17

Effective this date and until I return from the mainland, the employees of this park listed below will serve in the positions specified and as such have full authority to conduct the duties of the offices.

Dr. T.A. Jaggar - Acting Superintendent
Joseph H. Christ - Acting camp director and project superintendent CCC
Kenneth J. Williams - Acting chief ranger
Ben F. Moomaw, Jr. - Administrative assistant to the acting superintendent

Edward G. Wingate
Superintendent
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HAWAI'I NATIONAL PARK
HAWAI'I

January 3, 1938.

The Superintendent,
Hawaii National Park,
T. H.

Dear Sir:

There follows the report of the ranger division for the month of
December, 1937.

General.

General weather conditions. A heavy electric storm occurred on
the night of December 24th, followed by a clear sky the next morning which
disclosed beautiful snowcaps on both Mauna Loa and Maunakea, down to about
9,000 feet elevation, very appropriate to the Christmas season.

Administration.

Park inspections by: The Acting Chief Ranger made the usual
routine inspections of all ranger activities.

Equipment and supplies. One engineer transit and tripod, one
electric cooking range, two armchairs and miscellaneous articles were
received.

Plans, maps and surveys. Telephone changes were brought up to
date on the park map which was forwarded to the Regional office, together
with a sheet giving detailed data.

Circulars, placards, publicity bulletins, etc. Eight information
sheets giving data on various trail trips in Kilauea section were compiled
by the Acting Chief Ranger and mimeographed. These will be distributed
sparingly to the public. Copies are enclosed herewith.

Maintenance, Improvements and New Construction.

Maintenance. The only maintenance necessary was on the telephone
lines which were kept in working order.

Activities of Other Agencies in the Park.

317. Status of authorized projects of contractors. The contractor
completed quarters "17."
400. Flora, Fauna and Natural Phenomena.

410. Ranger, naturalist and guide service. The ranger division continued to alternate with the naturalist in conducting scheduled and special trips and park tours. An illustrated lecture on the park was given by the Acting Chief Ranger on board the United States Destroyer Henley.

430. Birds. The Acting Chief Ranger gave three illustrated lectures in the park on the birds of the area.

440. Animals. A check of hunting permits issued from this office from August 12, 1932 to August 12, 1933, shows 275 permits issued to hunt either goats or wild pigs. Eighty-five piggies and two hundred and seventy-four goats were reported destroyed in Kilauea section during that period. As no hunting within the park has been permitted for about two years, it is estimated that the wild piggies must now number several hundreds. Damage to the ferns in the forest would seem to uphold the justice of that estimate. An estimate of the number of wild goats is difficult to arrive at. In the last one-day drive held early in 1931, over 3,000 were corralled. Many more escaped. As no drive has been held and little hunting allowed since, the number of goats in the park must exceed 10,000.

500. Use of Park Facilities by the Public.

The District ranger in charge of Haleakala section reports a decrease of 14% over last month, due to inclement weather. Kilauea section shows an increase of 35% over last month, largely due to the holiday visitors from other islands.

550. Visitors.

Mr. Clark Lee, Associated Press representative in Hawaii, Dec. 20; Mr. Ernie Pyle, special writer Scripps-Howard newspapers, Dec. 18; Colonel Hills, who was making an attempt to make the trip from Kansas City to the Volcano and return in 80 hours, but, was delayed in Honolulu on the return trip by weather, Dec. 25.

600. Protection.

610. Police protection. Ranger Moomaw recovered a pair of shoes which had been stolen by one departing CCC enrollee from another. He returned the shoes to the owner who refused to prosecute. The shoes were stolen again from the same a few minutes later, that time apparently for good.

650. Sign. 24 Enameled signs were received at Haleakala Section and installed where needed.

Respectfully,

Acting Chief Ranger.
The Superintendent,
Third Office of the Chief Ranger,
Hawaii National Park, Hawaii

Dear Sir:

Check of travel shows 231 cars and 1,155 people were in the Haleakale Section during the month of December, 1937. A decrease of 14% under the record for last month is shown. This decrease in travel is largely due to inclement weather.

The narrative report, rangers report, weather report and monthly travel report enclosed.

Very respectfully,

J.A. Peck,
District Ranger
The Superintendent,
Third Office of the Chief Ranger,
Hawaii National Park, Hawaii.

Dear Sir:
The following report for the Haleakala Section for the month of December 1937, is respectfully submitted:

000 General.

010 Introduction.
There is nothing of importance to mention under this heading.

020 General Weather Conditions.

030 In the Park
Precipitation during this month amounted to 2.43 inches. The prevailing wind direction was from the northeast. There were 7 clear days this month.

100 Administrative.

110 Status of Work.
All work was kept up-to-date during the month.

150 Equipment and Supplies.
One 10 unit first aid kit and 2 pocket first aid kits received December 20. 24 enamel signs received December 27.

400 Flora, Fauna and Natural Phenomena.

410 Ranger, Naturalist and Guide Service.
The ranger in charge contacted park visitors whenever possible, and gave information and other service.
500 Use of Park Facilities by the Public.

510 Increase or Decrease in travel.

Check of travel shows 231 cars and 1,155 people were in the Haleakula Section during the month of December, 1937. A decrease of 14% under the record for last month is shown. This decrease in travel is largely due to inclement weather.

Very respectfully,

J. A. Peck,
District Ranger
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Hawaii National Park

MONTHLY REPORT
NOVEMBER 1937

FILE No.

IMPORTANT

This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge. All files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER,
Director.
The Director
National Park Service
Washington DC

Dear Mr. Director:

There follows the report of activities for Hawaii National Park during November.

000 - General

020 - General Weather Conditions

Rainfall at headquarters amounted to 10.52 inches, at the CCC Camp 7.93 inches and at Haleakala 3 inches. The first snow of the year fell on Mauna Loa and Mauna Kea the night of November 7-8. Mauna Loa was snow covered down to the 9500 foot level. The snow remained visible in patches until the 18th. There was a small snowfall on Mauna Kea on the 14th. District Ranger Peck reported 1 inch of snow at Haleakala, November 8.

100 - Administration

110 - Status of Work

Stanley R. Spinola who had recently been appointed to the position of clerk-accountant, left on the 20th to accept a position with higher salary with the US Customs Service in Honolulu.

120 - Park Inspections by:

121 - Superintendent

Accompanied by Chief Ranger Christ, Assistant Park Naturalist Lamb and CCC enrollee John Keliibooma, the superintendent inspected reported "ancient" burial caves near the seacoast below Hilina Pali, on the 4th. The burials were obviously of a date subsequent to the coming of the white people to the islands.
To Kalapana on the 5th to look into activities of a Chinese who had leased a portion of the land of Kahualoa proposed for addition to the park.

To Hilina Pali on the 7th inspecting all public facilities on the way.

On the 12th the superintendent attended a luncheon in Hilo for General Markham, USA, who was here in connection with US Engineering matters. The lava diversion embankment project was discussed.

The location for the new CCC camp recommended by the staff was inspected and approved November 13.

Inspected the CCC camp on the 20th with Inspector Lantz of the Department's Bureau of Investigations San Francisco office. On the 21st CCC work in Kipuka Paauulu area was inspected with Mr. Lantz.

Routine inspections of the headquarters area and going projects were made from time to time. One trip was made to the Footprint area and Mauna Kea.

125 - Other Governmental Officers

Mr. Ira Lantz, inspection from the Bureau of Investigations, Department of the Interior, San Francisco, arrived on the 20th for the purpose of investigating CCC matters. He expects to remain until the first part of December.

130 - Finance and Accounts

A complete report of the accounts is attached.

140 - Labor Situation

Due to the inability of the local WPA office to supply enough boys to keep the CCC camp strength up to normal, arrangements were made with the Honolulu WPA office to ship boys from that island over here for use in the Territorial camp at Waimea and the park camp. It is expected that approximately 30 boys will be enrolled from Honolulu.

150 - Equipment and Supplies

A radio-phone system, linking up the principal headquarters offices with the superintendent's office, was installed.

160 - Circulars, Placards, Publicity Bulletins, etc.

At the request of a Mr. Willey Ley of Brooklyn New York, who stated he wrote for foreign scientific publications, material on Hawaii National Park was furnished him.
200 - Maintenance, Improvements and New Construction

210 - Maintenance

Due to prevailing high winds throughout the month an unusual amount of maintenance was necessary on the telephone lines.

220 - Improvements

The Maui Telephone Company extended its line from the old rest-house on Haleakala to White Hill observation station.

230 - New Construction

The employees' residence at headquarters was 99% complete at the end of the month. Final construction report for the observation, checking and comfort stations at Haleakala were forwarded on the 6th.

The telephone line being constructed by the CCC from Puu Ulaula (Red Hill) to the summit of Mauna Loa by a CCC crew, was complete at the end of November. Another crew is re-aligning and improving the Mauna Loa trail in several places.

300 - Activities of Other Agencies in the Park

310 - Public Service Contractors

Revised annual financial reports for the Volcano House Company were submitted on the 19th, covering the years 1934-35 inclusive.

313 - Schedules of Rates

The 1938 rates for the Volcano Studio were submitted for approval on the 11th.

340 - Legislation Affecting the Park

The local newspapers carried items to the effect that the Inter-Island Steam Navigation Company had submitted new rate schedules to the US Maritime Commission, which, in some cases will be 25% lower than the prevailing steamer rates. For instance, the roundtrip between Hilo and Honolulu has been reduced from $32 to $25.

350 - Donations

Dr. F.W. Scully of Hot Springs, who had been a visitor in the park, donated reprints of several of his articles on ferns and preservation of plant material.
400 - Flora, Fauna, and Natural Phenomena

410 - Ranger Service

With the resignations of the CCC Camp Director, W. J. Stephens, and Project Superintendent W. S. Rycroft, Chief Ranger Joseph H. Christ was designated as acting camp director and project superintendent until the vacancies are filled, and Ranger Kenneth J. Williams has taken over the duties of the chief ranger.

Ranger Philip F. Murray left on the 26th for an extended leave of absence on the mainland. This leaves the park with only one other ranger at headquarters in addition to Mr. Williams. Request for certificate of eligibles was made on the 23rd for filling existing vacancies.

420 - Museum Service

All four of the trailside shrines have been completed and are now ready for use. Temporary exhibits are nearing completion and will be installed until such time as the exhibit plan is approved. The last structure to be built under the present CCC program, the Mauna Loa trailside museum, is nearing completion.

440 - Insects

The inspection of the park forests for insect damage, begun on the last two days of October, was continued and completed on November 3. This was made by O. O. McGrath, Entomologist with the Bureau of Entomology and Plant Quarantine, Honolulu, who was assisted by Park Naturalist Lamb and Chief Ranger Christ.

480 - Natural Phenomena

A complete report of the activities of the Volcano Observatory is attached.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

Visitors to Haleakula section numbered 1,350, an increase of 47% over last year, and at headquarters 10,922, a decrease of 8.5% under November 1936.

530 - Visitors and Special Groups

November 13 - Group of 36 Elks from Honolulu, who had come over for a joint initiation with the Hilo Lodge. A banquet was held the evening of the 13th at the Volcano House, and the men left for Honolulu the following afternoon.
November 13 - Mr. Warren Lytle, Camp Director Keanae CCC Camp (Territorial), Hana, and J.M. Fernandez, Quartermaster of the same camp, overnight.

26 - Dr. Ernest Gruening, Director Division of Territories and Apian Possessions, Interior Department visited the Haleakula section.

540 - Public Camps

What is commonplace in mainland parks is new to Hawaii - A couple with a trailer occupied Camp Hamakua Paio (old prison camp) for 3 weeks. Trailers are almost unheard of in the islands.

700 - Activities in Archaeology, Prehistory and History

On November 4 a trip was made by the superintendent, park naturalist and chief ranger to the region below Hulina Pali to investigate some burial caves that had been found during the construction of fences by the CCC. One cave was found containing a small coffin, alongside of which were found two skeletons. Evidence showed they were not very ancient burials.

900 - Miscellaneous

CCC

Camp Director W.J. Stephens submitted his resignation on the 20th to take effect at the end of his annual leave, as did Project Superintendent W.S. Nycroft. Chief Ranger Joseph H. Christ is handling their duties until the appointments of new incumbents.

Because of mental trouble it was necessary to accept the resignation of Emilia Simeone, foreman, effective October 27.

On November 6 Senior Foreman John Makaimoku was placed under arrest for taking government gasoline for use in his personal car, and the case placed in the hands of the US District Attorney in Honolulu. However, on petition of the enrollees the Attorney decided not to press the case further, and on November 24 recommendation was forwarded to the Director for Mr. Makaimoku's dismissal from the Service.

Repairs were started on the auto trail to Hulina Pali, consisting of filling up chuckholes, and general leveling off. This maintenance was necessitated by heavy hauling of building stone. A small parking place has been completed at the end of the Mauna Loa truck trail. The second small wing fence for the contemplated goat drive was commenced.

Senior Landscape Foreman George W. Pope reports that plans for the buildings to be included in the new CCC camp are about completed.
Arrangements have been made for a series of nature study trips for the enrollees. A number of meetings for the boys have been held stressing safety methods. Moving pictures are being shown once a week, and the enrollees are showing considerable interest in boxing and basketball.

In accordance with instructions, all supervisory personnel and enrollees have been fingerprinted.

Respectfully submitted

Edward G. Wingate
Superintendent
Employees residence (FP 677.14) Rear View, contract I-6p-103 (PW)

Same as above - Porte Cochere.
View inside the burial cave showing the two skulls, pile of bones and the wooden box. (Below Hilina Pali)
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Appropriation</th>
<th>Allotted</th>
<th>Expended &amp; obligated</th>
<th>Balance</th>
</tr>
</thead>
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<td>146/71000</td>
<td>National Park Service, 1936-37</td>
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<td>336.79</td>
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<td>1451000</td>
<td>National Park Service, 1935</td>
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<td>34,768.34</td>
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<td>18,638.28</td>
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<td>12,734.00</td>
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10-157
(Dec. 1933)

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

(Kiliman Section) TRAVEL REPORT
Hawaii National Park for the month of November, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>This Month</th>
<th>Last Travel Year</th>
<th>Increase for Travel Year</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>To Date</td>
<td></td>
<td>To Date</td>
<td>Number</td>
</tr>
<tr>
<td>PRIVATE TRANSPORTATION:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Motorcycles,</td>
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<td></td>
<td></td>
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<tr>
<td>Total motor vehicles,</td>
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<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles,</td>
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<td>22,713</td>
<td>12,456</td>
<td>25,569</td>
<td>-2,856</td>
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<td>Persons entering via other private transportation,</td>
<td>270</td>
<td>510</td>
<td>246</td>
<td>537</td>
<td>-27</td>
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<tr>
<td>Total persons entering via private transportation,</td>
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<td>23,223</td>
<td>12,702</td>
<td>26,106</td>
<td>-2,883</td>
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<tr>
<td>Persons entering via railroad,</td>
<td>518</td>
<td>1,517</td>
<td>441</td>
<td>975</td>
<td>942</td>
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<tr>
<td>Persons entering via trains,</td>
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<td></td>
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</tr>
<tr>
<td>Persons entering otherwise,</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation,</td>
<td>518</td>
<td>1,517</td>
<td>441</td>
<td>975</td>
<td>942</td>
</tr>
<tr>
<td>GRAND TOTAL ALL VISITORS,</td>
<td>10,922</td>
<td>24,740</td>
<td>13,143</td>
<td>27,081</td>
<td>-2,341</td>
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<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
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<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month,</td>
<td></td>
<td></td>
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</table>
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Haleakala Section, Hawaii National Park for the month of November, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>This Month Last Year</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
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</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td>270</td>
<td>771</td>
<td>250</td>
<td>501</td>
<td>270</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Cars first entry</td>
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<td></td>
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<tr>
<td>Cars reentry</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td>270</td>
<td>771</td>
<td>250</td>
<td>501</td>
<td>270</td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>1250</td>
<td>3556</td>
<td>1251</td>
<td>2616</td>
<td>1840</td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>1250</td>
<td>3556</td>
<td>1251</td>
<td>2616</td>
<td>1840</td>
</tr>
<tr>
<td><strong>OTHER TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via stages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL ALL VISITORS:</strong></td>
<td>1250</td>
<td>3556</td>
<td>1251</td>
<td>2616</td>
<td>1840</td>
</tr>
<tr>
<td><strong>Automobiles in public camps during month:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Campers in public camps during month:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### United States Department of the Interior

**National Park Service**

**STATUS OF AUTHORIZED PROJECTS**

*Hawaii National Park for the month of November, 1937*

<table>
<thead>
<tr>
<th>Description of projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>520.1 Haleakala Road, Post Construction (P.A.)</td>
<td>88</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>523 Uwekahuna-Bird Park Road, surf., treatment, 1.75</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>524 Residential Area Roads, completion 3/4 mile org., grade., and surf., (P.A.)</td>
<td>98</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>525 Headquarters Area Roads, Improvements (P.A.)</td>
<td>98</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**F.P.663.14** For the erection of one observation station & toilets; one office & checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleakala.

**F.P.677.14** Employee's Residence and connecting service lines for newly appointed U. S. Commissioner, including purchase of equipment.
REPORT OF PARK REVENUES

Hawaiian National Park for the Month of November, 1937

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received,</td>
<td>15.75</td>
<td>100.00</td>
</tr>
<tr>
<td>Total,</td>
<td>15.75</td>
<td>100.00</td>
</tr>
<tr>
<td>Remitted,</td>
<td>15.75</td>
<td>100.00</td>
</tr>
<tr>
<td>On hand close of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenues received this year to date,</td>
<td>70.75</td>
</tr>
<tr>
<td>Park revenues received last year to date,</td>
<td>273.50</td>
</tr>
<tr>
<td>Increase, decrease</td>
<td>202.75</td>
</tr>
<tr>
<td>Per cent of Increase, decrease</td>
<td>742%</td>
</tr>
</tbody>
</table>
**UNITED STATES**
**DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**

**S T A T U S  O F  P E R S O N N E L**

**Hawaii** National Park for the Month of **November, 1937**

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
</tr>
<tr>
<td></td>
<td>Reg. P.W.</td>
<td>Reg. P.W.</td>
</tr>
<tr>
<td>Number of employees beginning of month</td>
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<td>0 0</td>
</tr>
<tr>
<td>Number of additions</td>
<td>1 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Total</td>
<td>19 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Number of separations</td>
<td>1 0</td>
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<tr>
<td>Number of employees close of month</td>
<td>15 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Number of promotions during month</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>7 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
<td>27 0</td>
<td>0 0</td>
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<tr>
<td>Aggregate amount of leave without pay</td>
<td>0 0</td>
<td>0 0</td>
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<tr>
<td>Government Publications</td>
<td>Number</td>
<td>Value</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>On hand beginning of month</td>
<td>997</td>
<td>147.95</td>
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<tr>
<td>Received during month</td>
<td>0</td>
<td>0.00</td>
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<tr>
<td>Total</td>
<td>997</td>
<td>147.95</td>
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<tr>
<td>Sold during month</td>
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<td>.85</td>
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<tr>
<td>On hand at close of month</td>
<td>996</td>
<td>147.10</td>
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<table>
<thead>
<tr>
<th>Non-Government Publications</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On hand beginning of month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received during month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sold during month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On hand at close of month</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Cash on hand beginning of month | 12.12 |
| Sales during month | 0.85  |
| Total | 12.97 |
| Remitted during month | 0.85  |
| Balance | 12.12 |
Mr. Edward G. Wingate, Superintendent
Hawaii National Park


Dear Mr. Wingate:

The month of November was a time of steady progress in the research activities of the Observatory staff and its associates. The outstanding event of the month was a visit from General Markham, Chief of U. S. Engineers, who expressed interest in the proposal to survey Hilo for construction of lava barriers.

Volcanic Activity of the Month

The following are the earthquake totals and the data from Halemaumau Pit:

<table>
<thead>
<tr>
<th>Week ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack Openings</th>
<th>Quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 7</td>
<td>6.50</td>
<td>2</td>
<td>3.00 mm</td>
<td>19</td>
</tr>
<tr>
<td>14</td>
<td>3.75</td>
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<td>5.5 &quot;</td>
<td>11</td>
</tr>
<tr>
<td>21</td>
<td>4.00</td>
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<td>0.0 &quot;</td>
<td>11</td>
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<tr>
<td>28</td>
<td>9.75</td>
<td>0</td>
<td>0.0 &quot;</td>
<td>24</td>
</tr>
</tbody>
</table>

A slight earthquake November 27 was felt, and originated near Halemaumau; it damaged the seismograph there. A distant earthquake was registered November 9 incompletely. All of this record shows quiet conditions, 17 of the measurable seismic disturbances coming from Kilauea, 2 from Mauna Loa or beyond.

Work of the Volcanologist

Many of the foremoons of the month were given to study, assembling and measurement of map records of Halemaumau lava changes 1918 to 1922, in preparation of illustration for the "Geological Society of America" memoir.
There was further correspondence with Weather Bureau and Honolulu Advertiser, concerning the listing of Hawaii National Park daily temperatures in comparison with the mainland, Honolulu and Hilo. Errors of method were straightened out, so as to show Kilauea Crater temperatures cool, and in sharp contrast to the hot tropical places; while warm as compared with the frigid mainland stations in winter.

Some exhibit photographs were prepared for the Washington office. The "Volcano Letter" for September went to the printer, and the usual weekly reports on volcanic conditions were mimeographed for the press. Much correspondence throughout the month, with preparation of budget reports for 1938, was directed to the officers of Hawaiian Volcano Research Association and to the University of Hawaii, with reference to meetings coming early in December.

The Chief of the United States Engineers Major General Markham, with his aide Lieutenant Markham visited the Observatory November 11th, and was shown the plans, maps and publications concerning the proposed barriers to protect Hilo; also he visited the seismographs and was given numerous scientific reprints. The next day he was given a luncheon by Hilo Chamber of Commerce and examined the harbor and the breakwater. He announced a coming hearing in Hilo, on the Barrier Survey, December 17.

The volcanologist prepared a report for the annual budget meeting of the Directors of Hawaiian Volcano Research Association, on the work of 1937 in the Observatory, and the responsibilities of 1938 for the Association in publishing the benefits of volcano engineering projects to the Park service, to Hawaii and to science.

The question of adequate publication of the longer scientific memoirs of the Observatory is a source of much anxiety. Several manuscripts now await publication. These are not popularly interesting, but are technically important for specialists the world over. They concern the geology of Hawaii, the statistics of volcanic earthquakes, and the records of the volcanoes. If printed by the Government this material would go into libraries, and lessen the great fire risk now existing of keeping it in manuscript, in map drafts, in plates, note-books, seismograms and negatives.

The Division of Research of the Park Service should, I think have a Government organ of publication in Washington.

Work of the Seismologist

Mr. H. H. Waesche, Assistant Geologist, prepared as usual the seismologic and geodetic reports of the Observatory weekly and monthly, and produced a manuscript on "Crater Lake National Park" (Volcano Letter No. 151), which was supplemented by notes from the volcanologist and by illustrations.
Mr. Waesche reported daily weather data to Honolulu headquarters of U. S. Weather Bureau, via Naval Radio, the telephone charges being carried by Volcano House. The regulator clock of seismograph chamber was adjusted to a good rate of 1 second gain per day. A new relay coil was wound to replace one burnt out in radio time receiver, and a power transformer of increased capacity was installed. After earthquake damage of November 28, the seismologist repaired the north-south component pendulum of Haleakulau seismograph.

On November 10 Mr. Waesche inspected Chain of Craters and found possible some new sliding in Alaelea Pit; on November 19 he inspected the new seismograph cellar on Mauna Kea in process of construction.

Work of the Assistants

A. Okuda was transferred to shops in Honolulu at the University and the Vocational School for certain work on the seismoscopes and for collaboration with Dr. Eiler. He improved the seismoscope adjustments.

S. Sato nearly finished the card catalog of reprints. H. Yasunaka performed his usual tasks.

Equipment and stock furnished by the University and Research Association were ammunition, transformers, glassware and brass that were received during the month. The repaired Leitz level arrived from San Francisco November 12.

Lecture and Visitors

November 11. Visit from General Markham, Chief of Engineers, U.S.A.


Very respectfully,

T. A. Jaggar
Volcanologist.
December 7, 1937

Report of the Camp Director, OCOHNP to the Park Superintendent, Hawaii National Park, for the Month Ending November 30, 1937.

During the month of November work on our various work projects went along in a smooth systematic order with no major casualties or disruptions occurring.

Trail Improvement Mauna Loa:

Foreman Maka and his crew worked on the trail for a short time and later foreman Enina took his gang to work from where Maka left off. The trail has been partially repaired all the way up with the finishing touches to be done later. Repairs were stopped because of adverse weather conditions.

Mauna Loa Telephone Line Construction:

Foreman Maka completed 72% of the telephone line from headquarters to the summit of Mauna Loa during the first part of November. We now have telephone connections to the summit.

Trailside Shrines:

The trailside shrine at the Lava Tube was completed November 5. Supporters were made and installed on the other three trailside shrines, thus completing the trailside shrines. Foreman Markiewitch did most of the work on these shrines.

Foot Trail Maintenance:

Foreman Enos repaired trails from November 1st to the 5th.

Truck Trail Maintenance:

Work was started on the truck trail to Hilina Pali consisting of: leveling, filling up holes and breaking up lava hills.

A parking place was completed at the end of the Mauna Loa truck trail. General repairs and ditch work were done during the month.

Goat Corral:

A new wing for the goat drive was started. The wing will be completed sometime near the end of December, 1937.
Senior Foreman & Landscape Architect, George W. Pope, reports plans completed for:

1- General location
2- Utility
3- Camp Director’s Residence
4- Hospital
5- Barracks
6- Foremen’s Quarters
7- Bath Houses
8- Warehouse
9- Garages
10- Repair Shop
11- Mess Hall
12- Garage plan, two units for Park units.
13- Planting plans for Volcano House
14- Plans are being drawn for Trailside Museum exhibits
   by Louis braz
15- Master plan revisions have also been started by Louis braz

Because of these numerous plans, Mr. Pope’s work was largely restricted to indoors.

Educational and Recreational Activities:

Arrangements have been made for a series of nature study trips for the enrollee.

We have had a number of meetings for the enrollee stressing safety methods of accident prevention. During the following months we shall try to educate the enrollee as to the handling of tools etc. and see if we can’t lower our accidents from such sources.

Dr. Phillips plans on giving first aid instructions.

Interest in boxing and basketball is at a high ebb.

Arrangements have been made whereby a movie picture will be shown here in camp. The arrangements call for Palace-run pictures.

Newspapers, library books and magazines are being widely read by all.

Fire Drill:

All fire equipment was repaired or replaced during the month.
Fire drill was held at the time Mr. Ira Laxa, Federal Inspector, was here in camp.
Federal Inspector:

Inspector Ira Ledos thoroughly examined and inspected all CCC files, records, property and work projects during the time he was here.

Camp Sanitation:

The camp cleanliness and sanitation was much improved during the month. Particularly are the bunkhouses and kitchen more orderly. All buildings etc. are inspected daily for possible unorderliness. I am working out a system of awards for the best kept building. Interest is running high in that respect.

The general camp seems to be straightening out in fine order.

Respectfully submitted,

[Signature]

Joseph B. Christ
Acting Camp Director
CCC BNP
The Superintendent,
Hawaii National Park,
T. H.

Dear Sir:

There follows the report of the ranger division for the month of November, 1937.

**General**

- Nothing of unusual importance was noted during the month.
- General weather conditions in the park:
  - One light but widely spread snowfall fell on Mauna Loa and Mauna Kea. On Haleakala there was one inch of snow.

**Administrative**

- Status of work:
  - All ranger work was kept up to date in both sections.
- Park inspections by:
  - The Chief Ranger regularly inspected and supervised all ranger division work.

**Equipment and supplies.**

- A radio phone system was received and installed, linking up the principal offices at headquarters with the superintendent's office.

**Improvements and New Construction**

**Maintenance.**

- Due to high winds prevailing an unusual amount of maintenance work was necessary on telephone lines.
230 Improvements.

540 Public Works

A small ECW building at Halemaum trail, Haleakala, was removed to the administrative site for use as a storehouse.

A section of telephone line across the road to the superintendent's new quarters was removed to the back of the house.

The Maui Telephone Company extended their line from the old rest house on Haleakala to White Hill observation station.

300 Activities of Other Agencies in the Park.

310 The superintendent's new house is just about finished, or 99%.

320 Cooperating governmental agencies.

Several road and trail signs were replaced.

The telephone line to Mokuaweoweo at 13,000 feet was completed by a CCC crew.

Re-aligning and improving the Maui Loa trail in several places has been started by another CCC crew.

400 Flora, Fauna and Natural Phenomena.

410 Ranger, naturalist and guide service.

Rangers continued to cooperate with the naturalist division, conducting fifteen scheduled and special park tours. Ranger Murray left for the mainland on November 29, on annual leave. With the Chief Ranger on temporary duty with the CCC there remains only two rangers for duty.

460 Birds.

Two lectures on the birds of Hawaii were given at Kilauea Military Camp and one at Keakealani school.

500 Use of Park Facilities by the Public.

510 Increase or decrease in travel.

Visitors to Haleakala section numbered 1,350 and at Headquarters 10,922, a decrease of 1% and 16.9% respectively over the same period last year.

530 Visitors.

Dr. Ernest Gruening, under secretary of the Interior, visited Haleakala on the 28th.
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING
230 Improvements.

A small ZCW building at Halemaumau trail, Haleakala, was removed to the administrative site for use as a storehouse. A section of telephone line across the road to the superintendent's new quarters was removed to the back of the house. The Maui Telephone Company extended their line from the old rest house on Haleakala to White Hill observation station.

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Visitors to Haleakala section numbered 1,350 and at Headquarters 10,922, a decrease of 1% and 15.9% respectively over the same period last year.

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Dr. Ernest Gruening, under secretary of the Interior, visited Haleakala on the 28th.
540 Public camps.

What is commonplace in mainland parks is new in Hawaii. A couple with a trailer occupied Camp Namakani Paio for three weeks. Trailers are little used in the islands.

610 Protection.

John Makaimoku, senior foreman of the CCC was arrested on November 6th and charged with theft. The case is still pending.

650 Signs.

Several road and trail signs were repainted.

Respectfully,

Kenneth J. Williams,
Acting Chief Ranger.
The Superintendent,  
Thru Office of the Chief Ranger,  
Hawaii National Park, Hawaii  

Dear Sir:  

Check of travel shows 270 cars and 1350 people were in the  
Haleakala Section during the month of November, 1937. A decrease of  
46% under the record for last month is shown. The decrease is due to  
bad weather this month.  

The narrative report, rangers report, weather report, weekly and  
monthly travel reports are enclosed.  

Very respectfully,  

J. A. Peck  
District Ranger  

November 30, 1937
The Superintendent,
Thru Office of the Chief Ranger,
Hawaii National Park, Hawaii.

Dear Sir:
The following report of the HeleakalÄ Section for the month of November, 1937, is respectfully submitted:

010 General.

010 Introduction.
The installation of a telephone in the observation station is very helpful improvement.

020 General Weather Conditions.
Precipitation during this month amounted to 3 inches. The prevailing wind direction was from the northeast. There were 9 clear days this month.

100 Administrative.

110 Status of Work.
All work was kept up-to-date during the month.

120 Dr. Ernest Guerin visited the HeleakalÄ Section November 26.

150 Equipment and Supplies.
2 smoke-stands, 3 toilet seats and 1 truck battery received this month.

200 Maintenance, Improvements and New Construction.

210 Maintenance.
Usual maintenance work was carried on during the month.

220 Improvements.
The small building, built at the Helemanu trail by the BON, was moved to the administrative site for use as a store house.
230 New Construction.
A telephone line was built from the rest house to the observation station.

400 Flora, Fauna and Natural Phenomena.

410 Ranger, Naturalist and Guide Service.
The ranger in charge contacted park visitors whenever possible, to give information and other service.

500 Use of Park Facilities by the Public.

510 Increase or Decrease in Travel.
Check of travel shows 270 cars and 1350 people were in the Haleakula Section during the month of November, 1937. A decrease of 46% under the record for last month is shown. This decrease is due to the inclement weather that prevailed this month.

600 Protection.

610 Police Protection.
Frequent patrols were made. There were no arrests.

Very respectfully,

J. A. Peck,
District Ranger.
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
Hawaii National Park

November 23, 1937

GENERAL OFFICE ORDER NO. 55

Subject: Transportation of gasoline and kerosene oil supply

In accordance with the recommendations of the staff committee on economy it is hereby directed that delivery on all supplies of gasoline and kerosene purchased for regular park or CCC use shall be taken at the dealer's plant and hauled in a government truck properly equipped for the purpose to the park or CCC storage tanks.

It will be the duty of the park foreman to supervise this hauling and to keep an adequate supply of both types of fuel on hand. Utmost care must be exercised in this transportation to see that all necessary precautions have been taken to insure safe delivery.

Edward G. Wingate  
Superintendent
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Hawaii NATIONAL PARK

FILE NO.

MONTHLY REPORT
OCTOBER 1937

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge.

"All Files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER
Director.
The Director
National Park Service
Washington DC

Dear Mr. Director:

There follows the report of activities for Hawaii National Park during October.

October was an unusually busy month because of the number of distinguished visitors who were in the park, the most important of whom were Dr. Ernest Gruening and party and the numerous members of the joint committee of Congress studying the matter of statehood for Hawaii. Dr. Gruening arrived in Hilo by plane on October 15 and remained on the island of Hawaii until the 22nd. He was kept busy with matters pertaining to the Hawaiian Homes Commission, plantations and territorial affairs. Though he was a guest at the Volcano House for several days his many engagements prevented more than a short two days being given to the park.

The Congressional committee on statehood arrived in Hilo the morning of October 16 by steamer, commercial and Army and Navy planes. The program arranged for the committee called for a visit to the park including the G02 camp, a showing of the recent Mauna Loa eruption film, accompanied by a short address by Dr. T.A. Jaggar, a visit to and review at the Kilauea Military Camp, and luncheon at the Volcano House; after lunch they proceeded to the Kona Inn for the night, stopping at various points of interest enroute, and on the following day continued around the island with lunch at the Waimea hotel, arriving back in Hilo in time to catch the planes and boat for a visit to the Island of Maui. This schedule was followed only in spirit as the Congressional visitors generally were so interested in various things along the way that it was impossible to keep the cars together even during the short drive up to the park. Upwards of 50 persons were in the official party, not including local people who drove them around. The following senators and representatives were in the party: Senators; W.H. King, chairman; Joseph V. O'Mahoney; Ed. B. Burke; Tom Connally; Guy M. Gillette; Eyestr Lundeen; and Representatives Bertrand Snell, minority leader; John Rankin; Clifford Hope; Schuyler O. Bland; John Kerr; Eugene Crowe; Claude A. Fuller; John Folan; Joseph Martin Jr.; Claude Parsons and
Delegate S.W. King. Superintendent and Mrs. Wingate accompanied the party throughout the trip and had the pleasure of having Senator and Mrs. Gillette as their guests, for the two days. Every opportunity possible was taken to contact each member of the group with considerable time being given to Representatives Crowe and Rankin and Senators O'Mahoney and Landeen. Park Clerk Constance Whitney stole the show from the rangers in "contacting" the distinguished visitors and had no less a personage than Senator Connally as her guest at luncheon. In all it appeared that the committee gained a favorable impression of Hawaii and the prevailing seriousness of purpose of the committee and its desire to acquire exact information certainly was pleasing to the island people. The entertainment features offered were, however, not overlooked.

On October 18, Senator and Mrs. Wyllard Tydings travelling separately from the rest of the committee, arrived in the park escorted by Princess Kawananakoa. The Tydings were guests of the princess during their stay in Hawaii and at her request the superintendent conducted them on a tour through the park and a visit to the Kalapana region. The princess graciously furnished her car and chauffeur for the trip. Apart from considerations of statehood Senator Tydings was keenly interested in everything pertaining to the Hawaiian people. The "Kalapana Bill" HR 1996, was discussed with him. He was thoroughly sympathetic toward retaining section 3. The Tydings left on the 20th.

020 - General Weather Conditions

Precipitation at headquarters was 7.21 inches, at the Haleakala section 1.00 inch and at the Kiluaea CCC camp 6.82 inches. Maximum and minimum temperatures at headquarters were 75 and 52 degrees respectively.

100 - Administration

110 - Status of Work

All work was current

120 - Park Inspections by:

121 - Superintendent

The superintendent returned from an inspection trip on the Island of Maui on the 9th. Inspections were also made of the Mauna Loa trailside museum, Kipuka Pukanui, the new trailside shrines, CCC camp and public buildings during the month.

126 - Other Interior Department Officers

Dr. Ernest Gruening, Director of the Division of Territories and Insular Possessions, Mrs. Gruening and their son, Peter, accompanied by
Secretary of the Territory Charles Hite, visited the park from the 15th to the 18th, leaving the island on the 22nd. They were given special attention by Dr. Jaggar, the superintendent and other members of the staff.

126 - Congressional Committees

In addition to the main body of the committee on Statehood, Senator and Mrs. Millard Tydings were visitors in the park between the 18th and 20th.

District Ranger Peck reports that the following Congressmen visited the Haleakala section on their return from this island to Honolulu: Rep. J.H. Solan, Clifford B. Hope, Joseph W. Martin, Claude Fuller, Claude V. Parsons, John E. Hanks, John E. Kerr; and Senators Tom Connally and Edward R. Burke.

Representative Costello of the Military Affairs Committee paid a flying visit to the Kilauea Military Camp on the 10th.

130 - Finance and Accounts

A detailed financial report for this park is attached.

180 - Circulars, Publicity Bulletins, etc.

The weekly radio talks which have been given by staff members since the first of the year were discontinued at the end of the month.

An article, prepared by the superintendent, at the request of the editor of the Paradise of the Pacific magazine Christmas number, was forwarded during the month.

On October 18 the issue of Hawaii Territorial Commemorative stamps was first placed on sale. The stamp carries an engraving of the statue of Kanehameka the first. It is said that at his birth the skies were darkened, the lightning flashed, the thunder rolled, the seas were heaped up - at about the same hour that the stamps were placed on sale a thunder storm of considerable violence occurred. In Hawaii these storms are relatively rare.

200 - Maintenance, Improvements and New Construction

230 - New Construction

The trail and telephone line being constructed by the CCC from the 10,000 foot resthouse, to the summit crater of Mauna Loa were 90% completed at the end of the month, and the employees' residence (PP 677) 85% completed.
260 - Improvement of Nearby Highways

The survey party for the proposed Hilo-Kona road, which will run between Mauna Loa and Mauna Kea, and cut off considerable distance between these two points, had approximately 44 miles surveyed by the middle of October. This survey is under the supervision of T. Warren Allen of the US Bureau of Public Roads, and is being done by the WPA.

300 - Activities of Other Agencies in the Park

320 - Cooperating Governmental Agencies

Construction is proceeding at a fairly satisfactory rate on the barracks at the military camp, for the permanent enlisted personnel.

340 - State, County or Municipal Legislation Affecting the Park

Representatives Eugene Crow and John Rankin showed considerable interest in Inter-Island and Public Utility rates while they were in the islands, and have stated that an investigation into these seemingly high transportation rates might be forthcoming unless the Inter-Island undertook voluntarily to revise them. The Inter-Island promised an immediate study. Copies of the resolution framed by the Hilo Federal Business Association requesting an investigation of the Inter-Island were given these men, at their request and Representative Crow separately wrote the President of the Association for additional copies.

400 - Flora, Fauna and Natural Phenomena

420 - Museum Service

Work is being continued by the CCC, under supervision of the park naturalist, on displays for the various trailside shrines.

440 - Insect Survey

O.C. McBride, Entomologist in charge of the Honolulu office of the Bureau of Entomology and Plant Quarantine, arrived in the park on the 30th for the purpose of making an inspection of forest conditions in cooperation with the National Park Service. Arrangements have been made whereby Mr. McBride's travel expenses on these trips are paid by this office.

460 - Birds

Reports of the student technicians, Walter Donagho and Harold Craddock on their season's work in connection with native birdlife were transmitted your office on the 14th.

460 - Natural Phenomena

While the Congressional committee on statehood was visiting the park, Dr.

4
Jaggar, at the request of the superintendent, talked to the assembled group at Uwakuna museum on the matter of the lava embankments for the protection of Hilo. A detailed report on the activities of the Volcano Observatory is attached.

490 - Miscellanea

On October 21 the local newspaper carried an article regarding a rare species of tree found by the survey party for the Hilo-Kona road, in the saddle between Mauna Loa and Mauna Kea near the 1850 flow, in a very desolate region. It remotely resembles a pine and Associate Territorial Forester L.W. Bryan believes it may be exocarpus sandwichensis, and is endemic to the islands. Apparently it grows only in this small area in the lava, not far outside the proposed new boundary line. Your office has been furnished a separate report on the discovery.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

At Kiluea there were 13,818 visitors as compared with 13,938 for October 1936, and at Haleakala 2606 as compared with 1366 for the same period last year.

530 - Visitors and Special Parties

In addition to the Congressional committee there were the following visitors:

October 2 - Dr. Rexford Guy Tagwell, for luncheon
Dr. and Mrs. F.J. Scully of Hot Springs, Arkansas, who are especial friends of Superintendent Libby, for a few days. They also visited the Haleakula section, where they were given especial attention by the superintendent and District Ranger Peck.

5 - Gene Sarazen, famous golfer and Mr. and Mrs. Albert Davis Lasker, former head of the US Shipping Board, for luncheon.

9 - Mrs. Charles T. Wilder and Miss Maya Riven of Honolulu, for the week-end. Mrs. Wilder is the executive secretary of the Outdoor Circle, which organisation now handles Hi O Pale matters.

4 - Dr. Paul Fourmarier, professor at the University of Liége, Belgium, departing on the 7th. He was given especial attention by Naturalist Lamb and Assistant Geologist Waasche. The superintendent, who was on Kauai at the time of his visit there, escorted him through the Haleakula section.
Protection

A general survey was made of all buildings in the park to comply with fire protection requirements.

Accidents

Two automobile accidents occurred during the month. One happened to Charles Kauhi, park laborer, while going up the Uwakahuna hill. He explained that something went wrong with the car and he tried to pull it to the right side of the road, with the result that it turned upside down, spilling him and the other occupants out. Investigation showed that the right rear tire must have blown out. The other accident happened to Manuel Ariola, Filipino, of Hilo. He stated that while making the turn to go to Uwakahuna museum from the main road, his right front tire blew out, causing the car to run into the bank. There were no serious injuries in either accident.

Miscellaneous

Young Charles Elderts, son of William Elderts, laborer in the park, was released from the hospital on the 9th, where he had been since August 16, as the result of being hit by an automobile while riding his bicycle in the park area. The insurance company made a settlement out of court which covered all expenses and left a trust fund in the bank for the boy.

After receiving a radio on September 25 to the effect that $25,000 had been allotted for reconstruction of the CCC camp a message was received on the 6th that the budget had stated these funds were not available. Then on October 25 we received word from the Regional Office that the money had been re-allotted and arrangements are now underway for the construction of a new CCC camp in a new location. The present buildings are under lease from the Volcano House Company.

The regular quarterly dinner-meeting of the Hilo Federal Business Association was held at the Volcano House on the 29th, entertainment being furnished by Deputy US Marshal Harry Martin and his music troupe. Dr. Sexton - US Public Health Service representative on this island, also showed some very interesting pictures taken on his tour of Europe this summer with his family.

A very successful Halloween costume party was given at the Volcano House on the evening of the 30th by Headmen Wingate, Moana, Lamb and Popo, to which the personnel of the park and military camp, and also people living in the general vicinity were invited. The main feature was a scavenger hunt, the winning team being Sam Lamb, Captain E.M. Allott, Miss Margaret Gardner and her house guest.
Costume prize-winners were Hugh Waesche, who made a most charming and attractive girl, and Constance Whitney, whose costume consisted mainly of her neighbors' off-size clothing.

Mrs. Isadora Maggioros, of Athens, and her two children, arrived the early part of the month, for a visit of six months or more. Mrs. Maggioros is the daughter of George Lycurgus, manager of the Volcano House.

Respectfully

Edward G. Wingate
Superintendent
Project FP 677, employees' quarters, under construction, contract I-6p-103 (FW)

Garage, administration building, CCC Project No. 31
Rear view administration building, showing parking area completed under force account Job No. 524 and corner of garage CCC Job No. 51. Old road obliterated in center of picture.

View from main highway showing obliteration of old administration building entrance road.
Congressional party visits Kilimanjaro. Washington officials will recognize Senator Tom Connally without hat in center along rail talking to Ranger Murray.

Senator & Mrs. Tydings visited the park separately from main Congressional party as guests of Princess Kawanakoa. Senator & Mrs. Tydings, Naturalist Lamb, and Joe, the Princess' chauffeur.
Superintendent and Mrs. Wingate, Senator and Mrs. Guy M. Gillette, and Ranger Williams, at Halemaumau, during the visit of the Congressional Committee on Statehood.

The superintendent, Mrs. Tydings and Senator Tydings at Halemaumau
Mr. Edward G. Wingate, Superintendent
Hawaii National Park

Subject: Report of the Hawaiian Volcano Observatory for October 1937.

Dear Mr. Wingate:

October was a month of considerable production of articles, reports, and lectures by the staff of the Hawaiian Volcano Observatory, and there were numerous visitors owing to the coming of members of Congress to the Park, and of Dr. Ernest Gruening, Director of Territories and Island Possessions in the Department of the Interior. There were no important changes in the dormancy of the Hawaiian craters.

Volcanic Activity of the Month

The following are the earthquake totals and the data from Halemaumau pit:-

<table>
<thead>
<tr>
<th>Week ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack Opening</th>
<th>Local tremors and quakes</th>
</tr>
</thead>
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<td>October 10</td>
<td>7.00</td>
<td>4</td>
<td>7.00 mm</td>
<td>12</td>
</tr>
<tr>
<td>17</td>
<td>6.25</td>
<td>0</td>
<td>0.00</td>
<td>12</td>
</tr>
<tr>
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<tr>
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<td>6.00</td>
<td>2</td>
<td>4.75 mm</td>
<td>16</td>
</tr>
</tbody>
</table>

A feeble shock October 15 was from Kilauea Crater and was felt in National Park and Hilo. A somewhat stronger shock classed as slight occurred October 25 and was felt in National Park and Hilo.

Portions of distant strong earthquakes were registered October 4 and October 5, without definite phases.

Work of the Volcanologist

During the first week of the month the Volcanologist prepared an estimate requested by the Director's office in Washington, showing what sums might be added to the allotment in 1939 for Volcanologic Studies in Hawaii. This was based on the records of the last two years whereby certain parts of the payroll, equipment and expenses of the Hawaiian Volcano Observatory have been paid for by outside agents, such as the Hawaiian Volcano Research Association and the University of Hawaii. This estimate was transmitted to E. G. Wingate, Superintendent of Hawaii National Park.

Usual attention was given during the month to producing the weekly press reports, and the manuscript of the Volcano Letter for August was transmitted to Honolulu for printing.
An addition to the daily routine was begun about the middle of the month, at the request of W. F. Feldweis, Meteorologist in Charge, U.S. Weather Bureau, Honolulu. This consists in the transmission of daily maximum and minimum temperatures, rainfall and clouds via Naval Communications Office to Honolulu Weather Bureau Station, for publication in the Honolulu papers of daily comparative data, for cities of the United States, and for stations in Hawaii of which the Kilauea section of Hawaii National Park is one.

Work was resumed on the monograph for the Geological Society of America, with its map illustrations, to be entitled Origin and Development of Craters.

Visitors from the Congress were Representative Costello of California October 10, and the larger committee of numerous Senators and Representatives October 16. During their visit to Uwekahuna Museum the Volcanologist addressed them on the subject "Hawaii National Park and the Protection of Hilo Harbor," accompanied by motion pictures of the recent eruption of Manna Loa exhibited by Naturalist Lamb.

Dr. Gruening arrived October 15, the Volcanologist accompanied him to Kilauea crater pit October 16, he heard the lecture and saw the motion pictures with the Congressional Committee and had luncheon at the Volcano House that day. The next day Dr. Jaggar accompanied Territorial Secretary Hite and Dr. Gruening up the Manna Loa road, and along the Chain of Craters drive in the forenoon, and in the afternoon took Dr. Gruening on foot to the fossil footprints and Manna Loa. The next day October 16 Dr. Gruening visited the Volcano Observatory and was given a set of its publications.

During the next two weeks the Volcanologist prepared certain memoranda requested by Dr. Gruening, dealing especially with the possibilities of the enlargement of Hawaii National Park on Manna Loa, and with the need for a fireproof building for the records of the Volcano Observatory and the collections etc. of the Naturalist's offices and exhibition rooms.

October 28 was spent in Honolulu at the University of Hawaii making arrangements for summer courses and research in volcanology and geophysics, in both Honolulu and National Park for the summer of 1938. It is proposed that Dr. Jaggar give a general illustrated lecture course in Honolulu for the six weeks of the summer session June-July 1938, as was last done in 1935. Also an advanced seminar course in volcanology and geophysics will be offered for graduate students under several professors. In addition the advanced research work of Professors Jaggar, Eiler and Ballard will be conducted in Hawaii National Park laboratories as was done in 1937. Dr. Bachman reports that an application has already been received from an instructor in geology of the University of West Ontario.

A report was prepared at the request of the Travel Bureau of the Matson Navigation Co. on "The Hawaiian Volcanoes."
Work of the Seismologist

Assistant Geologist H. H. Wasche on October 3 conducted Dr. and Mrs. Sculley of Hot Springs, Arkansas through the Park, and on October 4 and 5 he gave some time to conducting Professor Fourmarier to places of interest. This geologist is Professor in the University of Liege, Belgium, and was returning from the International Congress of Geology in Russia. Mr. Wasche was able to show Professor Fourmarier the daily routine of field work at Halemaumau pit.

The Hilo seismograph station, which was recently overhauled, required some attention for adjustment and repairs on October 6, and on October 8 the main regulator clock of the seismograph cellar at the Observatory had to be removed for overhauling, and a spare clock was installed in its place.

On October 12 and thereafter, the Stanley level was tested and satisfactory levels were run from station "Spit" of the southern rim rock of Kilauea Crater to the northwest benchmark of Halemaumau pit. The closing of the circuit gave satisfactory checks and indicated that the northwest benchmark had lowered with reference to "Spit" since the last level run in January 1937. A study of comparative values of the levels run since 1934 discovered that the precise level (sent to San Francisco for adjustment) had given correct qualitative values, even if they were not precise quantitatively.

The results indicate that the northwest Halemaumau benchmark, with reference to "Spit" has lowered about fifteen inches since the end of the Kilauea eruption of October 1934, or else the "Spit" station has been relatively elevated.

Mr. Wasche completed his weekly report of October 24. He was on sick-leave October 19 to 30, requiring some operative attention in Hilo Memorial Hospital which was successful.

Work of the Assistants

Progress was made by the librarian S. Sato in the laborious task of classifying pamphlets and books stored in the University of Hawaii building, pamphlet cases were made for him in large number by the mechanic A. Okuda, and the latter continued his work in preparing seismoscopes for the telephone exchanges, while Yasumaka continued to operate the instrument stations and do the outdoor work of the garages and shops, as well as acting as janitor for the Observatory buildings.
Lectures

October 1, Honolulu, talk by Dr. Jaggar to the Territorial School for the Deaf and Blind.

October 16, Uwekahuna Museum, lecture to Congressional Committee by Dr. Jaggar "Hawaii National Park and the Protection of Hilo Harbor."

Visitors

October 5, Professor Fourmarier, Professor of Geology, University of Liege, Belgium.

October 10, Representative Costello, of Hollywood, California.

October 16, Congressional Delegation, accompanied by Honorable Samuel Wilder King, Delegate from Hawaii.

October 17, Honorable Charles Hite, Secretary of the Territory of Hawaii.

October 18, Honorable Ernest Graening, Director Division of Territories and Island Possessions, U.S. Department of the Interior.

Very respectfully

T. A. Jaggar
Volcanologist.
REPORT OF THE CAMP DIRECTOR, CCC KP TO THE PARK SUPERINTENDENT
HAWAII NATIONAL PARK, FOR THE MONTH ENDING OCTOBER 31, 1937.

The discharges for the month were as follows:

To obtain permanent employment 2

Though the enrollment failed to show any increase, prospects were held out by the W.P.A. selecting agency that this would be rectified at an early date.

Inspection of the limited number of boys turned over to the Project Superintendent, good progress was made on the following projects:

Fencing park boundary: This was completed during the month.

Eradication of exotics was continued. Mauna Loa trailsides museum: The stonework is about 60% completed, the digging of the seismograph pit was slow owing to the presence of hard rock but will be completed by the 3rd of November. Information Pointers were completed at the rest house at the 10,000 feet level, Hilina Fali and at the lookout wall at Pua Halehulu on October 22, 1937. Landscape Maintenance - grass and weeds were cut on about half of the park highways.

Trail improvement Mauna Loa: - Foreman Maka and 14 enrollees were in camp at the 12,000 feet water hole, part of the month and then at the Mauna Loa Summit, rest house. Seven miles of line are completed and connection should be made with headquarters early in November.

No work was done on the tree planting job at the Military Camp.

Park garage construction: This garage was completed on October 21.

Truck trail maintenance: Work was continued on run off ditches on the Mauna Loa truck trail.

Horse trail maintenance: Foreman Enos, in charge of a crew of 5 enrollees has put most of the trails in serviceable shape.

Tree preservation (Hilina Fali): Material for the second corral and drift fence has arrived and work will start early in November.

The Senior Foreman (Landscape Architect) George W. Pope, reports plans completed for:

1. A minor road - Kilauea Military Camp.
2. A fire control map of the Hawaii National Park by Leader, Louis Bras.
Plans drafted:

Planting & landscaping plan for the Volcano House.

Plans for the new CCC Camp.

Trailside Shrine Information sheet by Louis Bras.

The educational advisor Gardner O. Eyer reports: continuation of classes in typing; newspaper work, penmanship and arithmetic. Ample reading matter was provided for those interested.

The recreation officer has reported a great interest in boxing and a great deal of promising material is being developed. With the courtesy of Major Harry J. Collins, Commanding Officer, Kilauea Military Camp, permission has been granted for Corporal Craig to assist in training when not on duty. Corporal Craig has had wide experience in training the sector boxing teams at Schofield Barracks.

An outside basketball league has been formed for inter crew games and lively interest is being shown.

Music is still the main evening pastime.

For the first time since the camp started in 1934 no accidents either lost time or minor were reported from the projects. Measles appeared sporadically during the month necessitating quarantine.

The weather continued good and no time was lost on that account.

Respectfully submitted,

[Signature]

Wilkinson J. Stephens
Camp Director, CCC Camp
The Superintendent,  
Thru Office of the Chief Ranger,  
Hawaii National Park, Hawaii  

Dear Sir:  
The following report of the Haleakale Section for the month of October, 1937, is respectfully submitted:

000 General.  
010 Introduction.  
The visit of the Congressional party to this section of the park was very successful. Although there was some fog in the crater, it cleared away enough to afford a good view for the party. Many favorable comments were made by the Congressman and the other members of the party.

020 General Weather Conditions.  
There was 1 inch of rain during this month. The prevailing wind direction was from the northeast. There were 16 clear days.

100 Administrative.  
110 Status of Work.  
All work was kept up-to-date during the month.

120 Park Inspections by  
121 Superintendents  
The Haleakale Section was inspected by Superintendent Edward G. Wingate October 1 - 4 - 5.

124 Congressional Committee  
The following Congressman visited the Haleakale Section on October 18:

Hon. Joseph C. O'Mehoney  
" J. H. Tolm  
" Clifford R. Hope  

Hon. Guy M. Gillette  
" Ernest Lundeen  
" Schuyler Otis Bland
Hon. Joseph W. Martin  
* Tom Connally  
* Bertrand H. Snell  
* John H. Kerr  
* William H. King  
* Jack Nichols  
* Claude A. Fuller  

Hon. Claude V. Persons  
* Edward R. Burke  
* John E. Rankin  
* Eugene R. Crowe  
* John J. Dempsey  
* S. W. King, Terr. Rep.

200 Maintenance, Improvements and New Construction.

210 Maintenance
The usual maintenance work was carried on during the month.

400 Flora, Fauna and Natural Phenomena.

410 Ranger Naturalist and Guide Service
The District Ranger was on duty at White Hill area whenever possible, during periods of heaviest travel, to give information and other service.

500 Use of Park Facilities by the Public.

510 Increase or Decrease in Travel
Check of travel shows 501 cars and 2506 people were in the Haleakula Section during the month of October, 1937. An increase of 25% over the record for last month is shown.

800 Protection.

610 Police Protection
Frequent patrols were made. There were no apparent violations.

Very respectfully,

J. A. Peck,  
District Ranger
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Appropriation</th>
<th>Allotted</th>
<th>Expended &amp; Obligated</th>
<th>Balance</th>
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</thead>
<tbody>
<tr>
<td>1481000</td>
<td>National Park Service, 1938</td>
<td>$44,432.00</td>
<td>$42,328.03</td>
<td>$2,103.97</td>
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<tr>
<td>1481000</td>
<td>National Park Service, 1938 (NPS)</td>
<td>360.00</td>
<td>0.00</td>
<td>360.00</td>
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<tr>
<td>1471000</td>
<td>National Park Service, 1937</td>
<td>$44,500.00</td>
<td>$44,046.66</td>
<td>$453.34</td>
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<tr>
<td>146/71000</td>
<td>National Park Service, 1936-37</td>
<td>335.00</td>
<td>336.79</td>
<td>1.21</td>
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<tr>
<td>1451000</td>
<td>National Park Service, 1935</td>
<td>36,040.00</td>
<td>34,768.34</td>
<td>1,271.66</td>
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<tr>
<td>14-1010</td>
<td>Roads &amp; Trails, National Park Service</td>
<td>22,500.00</td>
<td>18,464.47</td>
<td>4,035.53</td>
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<tr>
<td>14-1130</td>
<td>Roads &amp; Trails, National Parks, Emergency Construction</td>
<td>40,670.65</td>
<td>40,151.05</td>
<td>719.60</td>
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<tr>
<td>14-405/90762</td>
<td>P.W.A., Allotment to Interior, National Park Service, 1935-39</td>
<td>9,303.00</td>
<td>9,192.61</td>
<td>110.19</td>
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<tr>
<td>14-443/90634</td>
<td>N.I.R., Interior, National Park Service, 1935-39</td>
<td>13,000.00</td>
<td>12,734.00</td>
<td>266.00</td>
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</table>
### UNITED STATES
### DEPARTMENT OF THE INTERIOR
### NATIONAL PARK SERVICE

#### TRAVEL REPORT

**HAWAII** National Park for the month of **OCTOBER, 1937**

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>Last Year</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>12,579 12,579 13,113 13,113</td>
<td>-534</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td>240 240 291 291</td>
<td>51</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>12,819 12,819 13,404 13,404</td>
<td>-585</td>
<td>4/3</td>
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</table>

#### OTHER TRANSPORTATION:

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons entering via trains</td>
<td>999 999</td>
<td>534 534</td>
<td>465 465</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise</td>
<td>999 999</td>
<td>534 534</td>
<td>465 465</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation</td>
<td>999 999</td>
<td>534 534</td>
<td>465 465</td>
<td>87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL ALL VISITORS</td>
<td>13,818 13,818</td>
<td>13,932 13,932</td>
<td>120</td>
<td>805</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Automobiles in public camps during month:**

**Campers in public camps during month:**
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT
 Haleakala Section, Hawaii National Park for the month of October, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>This Month Travel Last Year To Date</th>
<th>Increase for Travel Year Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIVATE TRANSPORTATION:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td>501</td>
<td>501</td>
<td>251</td>
<td>251</td>
<td>250</td>
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<tr>
<td>Persons entering via motor vehicles</td>
<td>2506</td>
<td>2506</td>
<td>1365</td>
<td>1365</td>
<td>1141</td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>2506</td>
<td>2506</td>
<td>1365</td>
<td>1365</td>
<td>1141</td>
</tr>
<tr>
<td>OTHER TRANSPORTATION:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via stages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL ALL VISITORS</td>
<td>2506</td>
<td>2506</td>
<td>1365</td>
<td>1365</td>
<td>1141</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REPORT OF PARK REVENUES

Hawnali National Park for the Month of October, 1937

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received,</td>
<td>1.00</td>
<td>6.00</td>
</tr>
<tr>
<td><strong>Total,</strong></td>
<td><strong>1.00</strong></td>
<td><strong>6.00</strong></td>
</tr>
<tr>
<td>Remitted,</td>
<td>1.00</td>
<td>6.00</td>
</tr>
<tr>
<td>On hand close of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Park revenues received this year to date, 52.00
Park revenues received last year to date, 173.50

**Increase** Decrease 121.50
Per cent of decrease .70
## United States
### Department of the Interior
#### National Park Service

### Status of Authorized Projects

<table>
<thead>
<tr>
<th>Hawaii National Park for the month of October, 1937</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Description of projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>520.1 Haleakala Road, Post Construction (F.A.)</td>
<td>86</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>523 Uweakuma-Bird Park Road, surf., treatment, 1.75</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>524 Residential Area Roads, completion 3/4 mile olag., gdrk., and surf. (F.A.)</td>
<td>98</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>525 Headquarters Area Roads, Improvements (F.A.)</td>
<td>98</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>F.P.</strong> 663.11 For the creation of one observation stat. &amp; toilets; one office &amp; checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleakala.</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>F.P.</strong> 677.14 Employee's Residence and connecting service lines for newly appointed U. S. Commissioner, including purchase of equipment.</td>
<td>85</td>
<td>15</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

---
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

HAWAII NATIONAL PARK

REPORT OF SALES OF PUBLICATIONS

OCTOBER 1937

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNMENT PUBLICATIONS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On hand beginning of month,</td>
<td>1,011</td>
<td>$149.35</td>
</tr>
<tr>
<td>Received during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>1,011</td>
<td>$149.35</td>
</tr>
<tr>
<td>Sold during month,</td>
<td>14</td>
<td>1.40</td>
</tr>
<tr>
<td>On hand at close of month,</td>
<td>997</td>
<td>147.95</td>
</tr>
</tbody>
</table>

|                              |        |         |
| NON-GOVERNMENT PUBLICATIONS: |        |         |
| On hand beginning of month,  |        |         |
| Received during month,       |        |         |
| Total                        |        |         |
| Sold during month,           |        |         |
| On hand at close of month,   |        |         |

| Cash on hand beginning of month, | $13.24 |
| Sales during month,              | 1.40   |
| Total                            | $14.64 |
| Remitted during month,           | 2.52   |
| Balance                          | $12.12 |
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATUS OF PERSONNEL

Hawaii National Park for the Month of October, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
</tr>
<tr>
<td>Number of employees beginning of month Reg. P.W.</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Number of additions</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Number of separations</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of employees close of month</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Number of promotions during month</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>32</td>
<td>15</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Aggregate amount of leave without pay</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
MEMORANDUM TO SUPERINTENDENT WINGATE.

November 1, 1937

The following is a report of work under my supervision during the month of October, 1937.

1. Completed cess pool at superintendent's residence.
2. Laid parkway cable at superintendent's residence.
3. Hauled rubbish and cleaned park eight times.
4. Pumped water to high tank ten times.
5. Renailed roof on lecture hall.
6. Renewed steps, quarters #7 and #9.
7. Repaired toilets and filled tanks, lava tube.
8. Completed painting center strips on road.
9. Cleared and painted oil stoves at warehouse.
10. Checked and issued gasoline.
11. Attended repairs to cars and trucks.
12. Hauled and delivered groceries.
13. Filled toilet tanks at pit.
14. Made daily inspections superintendent's new residence.
15. Repaired tables at prison camp.
16. Cut grass on lawns at all residences twice.

R. R. Cragie
Foreman.
November 3, 1937

The Superintendent
Hawaii National Park

Dear Mr. Wingate:

There follows the report of the ranger department for the month of October.

000 - General

The most noteworthy event of the month was the visit of the Congressional Committee on statehood for the Territory, which arrived on this island on the 16th, made a tour of the park, had luncheon at the Volcano House, and went on to Kona Inn for the night, returning to Honolulu by steamer and plane the next day.

020 - General Weather Conditions

Precipitation at headquarters was 7.21 inches, at the Haleakala section 1 inch and at the Kilauea CCC camp 0.57 inches. Maximum and minimum temperatures at headquarters were 75 and 52 degrees respectively.

100 - Administration

110 - Status of Work

All work was current in both sections. The special reports on economy and fire protection requirements were completed during the month.

120 - Park Inspections by:

Routine inspections were made of all work in progress both park and CCC projects. The Haleakala section was inspected by the superintendent on the 1st, 4th and 5th.

124 - Other Interior Department Officers

Dr. Ernest Gruening, Director Division of Territories and Insular Possessions, Mrs. Gruening and their son Peter visited the park from the 15th to the 18th.

126 - Congressional Committees

In addition to the committee on statehood Senator and Mrs. Millard Tydings were visitors in the park between the 18th and 20th.

District Ranger Peck reports that 19 members of the statehood committee visited the Haleakala section on the 18th.
170 - Maps, Plans & Surveys

During the month plans for a road at the Kilauea Military Camp and a fire control map were completed. The CCC senior landscape foreman also supervised work on the landscaping at the military camp, the new employee's residence, a trailside shrine, Manna Loa trailside museum, and landscaping and roadside sloping around headquarters area.

180 - Circulars, Publicity Bulletins, etc.

Radio talks were given each Tuesday afternoon by members of the staff, the last being on the 20th. It is our plan to discontinue these radio talks for a while.

200 - Maintenance, Improvements and New Construction

210 - Maintenance

The usual maintenance of roads, trails, equipment etc., was carried on for the month.

220 - New Construction

The trail and telephone line to the summit crater of Manna Loa were 80% completed at the end of the month, and the employees' residence (FP677) 25% complete.

300 - Activities of Other Agencies in the Park

320 - Cooperating Governmental Agencies

Construction is proceeding at a satisfactory rate on the barracks at the military camp for the permanent enlisted detachment.

400 - Flora, Fauna and Natural Phenomena

420 - Museum Service

Work is being continued under the CCC on displays for the various trailside shrines.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

At Kilauea there were 13,818 visitors as compared with 13,938 for October 1936 and at Halema'uma'u 2,905 compared with 2,905.

530 - Visitors and Special Parties

In addition to the congressional committees there were the following visitors
October 2 - Dr. and Mrs. F.J. Scully of Hot Springs Arkansas, who are especial friends of Superintendent Libby, for a few days. They also visited the Haleakula section.

October 5 - Gene Sarazen, famous golfer and Mr. and Mrs. Jessye Laaker (movies) for luncheon.

600 - Protection

620 - Accidents

Two accidents occurred during the month. One happened to Charles Keuki, while going up the Uwakahuna hill. He explained that something went wrong with the car and he tried to pull it to the right and it wanted to go to the left. The next thing he knew the car tipped over, spilling him and the other occupants out. Further investigation showed that the right rear tire must have gone flat suddenly.

The other accident happened to Manuel Ariola (Filipino) of Hilo. He states that while making the turn to go to Uwakahuna museum from the main road his right front tire blew out causing the car to run into the bank.

630 - Fire Protection

A general survey was made of all buildings in the park to comply with fire protection requirements.

650 - Signs

All signs needing repairing and painting were attended to.

Respectfully submitted

Joseph H. Christ
Chief Ranger
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Hawaii National Park

MONTHLY REPORT
SEPTEMBER, 1937

FILE NO.

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge.
All files should be returned promptly to the File Room.
Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER, Director.
The Director
National Park Service
Washington DC

Dear Mr. Director:

Following is the report of activities in this park for the month of September.

100 - General

020 - General Weather Conditions

Precipitation at headquarters area was 3.47 inches, at the CCC camp, 4.287 inches and at Haleakala .50 of an inch. Maximum temperature at headquarters was 75.1 and the minimum 54 degrees.

110 - Status of Work

The services of Anna H. Searle, assistant clerk-telephone operator, seasonal, were terminated close of September 25. The new position of clerk-accountant, was filled by the appointment of Stanley Spinola, a local eligible on September 20.

All office work was up-to-date, including the filing of a large amount of miscellaneous CCC correspondence.

120 - Park Inspections By:

121 - Superintendent

The superintendent left by plane for Maui on the 20th, where he remained for the balance of the month.
124 - Other Interior Department Officers

H.B. Tillett, Field Supervisor CCC, who had been on a sheep hunt in the Pohakuloa section with a group of Army fliers, arrived in the park on the 29th, leaving the next morning, after conferring with park and CCC officials.

125 - Other Governmental Officers

On September 19 Mr. and Mrs. Lewis Deabler, Parliamentarian of the US House of Representatives, accompanied by Mr. James Sanderson and Mr. Herbert Shipman of Honolulu, arrived unexpectedly on a trip around the island. They were met by the superintendent, who had intended taking the afternoon steamer to Maui, but the preliminaries to luncheon required so much time that though he did not lunch he missed the steamer and had to take the plane on the 20th. Mr. and Mrs. Deabler visited the Haleakula section on the 21st accompanied by Mr. Stafford Austin and the superintendent.

On the 15th Chief Postal Inspector E.P. Aldrich and party, including Mr. and Mrs. Charles Pfaffungerger, E.R. Eggleston, J.J. Doran and W.J. Sutterfield, escorted by Mr. John H. Wilson, Postmaster of Honolulu, were overnight hotel guests. They were given special attention.

130 - Finance and Accounts

There is attached a detailed financial statement for September. Final estimate, administration, protection and maintenance for 1939 were mailed on the 5th.

170 - Maps, Plans and Surveys

The plans for a grease rack building and one for a woodshed were completed.

180 - Circulars, Placards, Publicity Bulletins, etc.

Radio talks by staff members were given each Tuesday over the local station, KBUU.

Three thousand extra copies of the circular of general information were received from the Washington office. Copy for the new edition of the circular was forwarded on the 19th. This copy was a complete revision of the old circular and prepared by Seasonal Ranger Eugene Burns.

At the request of the editor of the Paradise of the Pacific Assistant Naturalist Lamb prepared an article on themana which were discovered by student technicians Graddock and Donaghy, the article appearing in the September issue of the magazine.

Two press releases were issued, one on the conducted trips up the Mauna Loa truck trail and the other regarding plans for seashore development in Hawaii National Park, provided the legislation on the proposed Kalapana addition passes Congress. The trips over the truck trail are an attempt to satisfy
the demands of the public to visit that section of the park and allow considerable criticism resulting from keeping the road closed. They seem to be achieving their purpose and at the same time the road is still kept closed to general travel.

The Honolulu Advertiser for the 16th also contained an article on the park by Mr. Charles E. Fraiser.

200 - Maintenance, Improvements and New Construction

210 - Maintenance

Work was started by a CCC crew on repairing and relocating the Manna Loa trail from the end of the truck trail to the summit. The park crew took advantage of all sunshiny days by patching roads.

230 - New Construction

The new employee's residence, (FF 677) was about 60% complete at the end of the month.

Work was started by the CCC on the trailside shrine at the end of the Manna Loa truck trail.

District Ranger Peck reports that the four shelters in Haleakula crater which were constructed by the CCC are improvements much appreciated by the public.

300 - Activities of Other Agencies in the Park

320 - Cooperating Governmental Agencies

Construction was started on the barracks for the permanent enlisted personnel at the Kilauea Military Camp and at the end of the month the studding and piers for one wing were completed.

360 - Legislation Affecting the Park

On September 12 a letter and memorandum were addressed to the Director, enclosing copy of a resolution adopted by the Hilo Federal Business Association requesting an investigation of the prevailing inter-island steam navigation company's rate structure, by the federal government.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist and Guide Service

The services of seasonal ranger Gordon Mackenzie were terminated at the close of September 30.
420 - Museum Service

The temporary exhibit installed in the "Haleakula trailside shrine has been completed and is being studied by a large percent of the visitors. This serves a very useful purpose in the educational program as it reaches many independent visitors not otherwise contacted. A temporary exhibit has been installed at the Lava Tree Waikua shrine and another is in the process of completion for the Kipuka Punalu (Bird Park) shrine.

460 - Birds

Technicians Graddock and Donaghho terminated their bird studies for this season on the 15th. Their reports are being put in shape for publication. Their work was sufficiently successful so that it is hoped that it can be continued next year, provided there are available funds.

460 - Natural Phenomena

A detailed report of the work of the Volcano Observatory is attached.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

During September there were 14,496 visitors to the Kilauea section as compared with 16,573 for the same period last year. At Haleakula there were 2,289 visitors. For the year there were 179,208 persons at Kilauea and 23,957 at Haleakula, making a total for both sections of 203,165 as compared with 186,049 for last year, or an increase of

530 - Visitors and Special Groups

September 5 - 20 Japanese school children
22 US sailors, given special lecture and tour

6 - 20 Japanese school children
20 US sailors

15 - 14 Japanese on special tour from Japan
Judge and Mrs. S.C. Huber of Honolulu, who remained until the end of the month. Judge Huber is with the US District Court.

16 - General Mees, Commanding Hawaiian Department, USA, and party.

17 - Walter Macfarlane of the Territorial legislature, overnight.

18 - Mr. and Mrs. Worth O. Aikman of Maui and Honolulu visited the Kilauea section. Mr. Aikman, an associate of the late Lorrin A. Thurston, was a most active figure in promoting the Haleakula and is a fine friend of the Park Service.


22 - Dr. Walter Schyns of Belgium, who is a Director of the Belgian State Botanical Garden, Brussels, Professor at the University of Louvain, and associate member of the Royal Institute of Colonial Belgium, left on the 26th. While in the park he was taken around by the naturalist, who also escorted him around the island.

4
September 27 - General Woodruff and party from Fort DeRussy, Honolulu.  
29 - C. Yamazaki, Japanese consul-general for Hawaii, for the day.

600 - Protection

620 - Fire Protection

The usual quarterly fire hazard inspection was made of all buildings in the park. Two fire drills were held and all tools checked and handles tightened. The annual forest fire report was submitted on the 29th.

On the 17th a preliminary report of the staff committee on building fire protection was mailed Mr. Ahern in San Francisco.

900 - Miscellaneous

Gunder E. Olson, former camp director for the Haleakala CCC camp, who has been transferred to the position of quartermaster in the Kilauea camp, arrived on the 29th. He was accompanied by Mrs. Olson and their small son. The Haleakala camp was disbanded at the end of this period, and the boys and equipment transferred to the Territory, to be used in their Kula forest preserve camp on Maui.

On the 25th the boys and supervisory personnel of the Kilauea camp gave a most enjoyable luau for the boys were leaving camp, to which all the local people were invited. There were some 150 guests in addition to the enrollees and officials of the camp.

On the same night the boys of the Haleakala CCC camp were also entertained at a luau, given by Camp Director Gunder E. Olson and Foreman Harry Alu, which was held in Wailuku. A number of guests were invited and with the boys enjoyed an unusually fine meal and Hawaiian entertainment.

Respectfully submitted

Edward G. Wingate  
Superintendent
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<tr>
<th>Symbol</th>
<th>Appropriation</th>
<th>Allotted</th>
<th>Expended &amp; Obligated</th>
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UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Hawaii National Park for the month of September, 1937

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<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>This Month To Date</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
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<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent</th>
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<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
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</tr>
<tr>
<td>Cars first entry</td>
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<tr>
<td>Cars reentry</td>
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<tr>
<td>Motorcycles</td>
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<tr>
<td>Total motor vehicles</td>
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<tr>
<td>Persons entering via motor vehicles</td>
<td>13,488</td>
<td>167,710</td>
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<td>14,796</td>
<td>173,763</td>
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<td>-6,053</td>
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<td>378</td>
<td>4,073</td>
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<td>171,208</td>
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<td>15,174</td>
<td>177,836</td>
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<tr>
<td></td>
<td>-6,628</td>
<td>.037</td>
</tr>
</tbody>
</table>

|                        |        |         |
| **OTHER TRANSPORTATION:** |        |         |
| Persons entering via trains | 608 | 8,000 |
|                        | 579 | 8,213 |
|                        | -213 | .025    |
| Persons entering via other transportation |        |         |
| Total other transportation | 608 | 8,000 |
|                        | 579 | 8,213 |
|                        | -213 | .025    |
| GRAND TOTAL ALL VISITORS | 14,495 | 173,208 |
|                        | 15,753 | 166,049 |
|                        | -6,941 | .036    |

|                        |        |         |
| **Automobiles in public camps during month:** |        |         |
| Campers in public camps during month |        |         |
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Haleakula Section, Hawaii
National Park for the month of September, 1937.

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>This Last Month</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIVATE TRANSPORTATION:</td>
<td></td>
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<tr>
<td>Cars first entry,</td>
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<tr>
<td>Cars reentry,</td>
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<td></td>
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<tr>
<td>Motorcycles,</td>
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<td>Total motor vehicles,</td>
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<td>Persons entering via motor vehicles,</td>
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<td>23,957</td>
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<tr>
<td>Persons entering via other private transportation,</td>
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<tr>
<td></td>
<td>2,289</td>
<td>23,957</td>
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<tr>
<td>OTHER TRANSPORTATION:</td>
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<tr>
<td>Persons entering via stages,</td>
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<tr>
<td>Persons entering via trains,</td>
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<tr>
<td>Persons entering otherwise,</td>
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<tr>
<td>Total other transportation,</td>
<td>2,289</td>
<td>23,957</td>
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<tr>
<td>GRAND TOTAL ALL VISITORS,</td>
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<td></td>
<td>2,289</td>
<td>23,957</td>
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<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month,</td>
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</tr>
<tr>
<td>Campers in public camps during month,</td>
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</table>
### Report of Park Revenues

**Hawaii National Park for the Month of September, 1937**

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received,</td>
<td>0.00</td>
<td>53.75</td>
</tr>
<tr>
<td>Total,</td>
<td>0.00</td>
<td>53.75</td>
</tr>
<tr>
<td>Remitted,</td>
<td>0.00</td>
<td>53.75</td>
</tr>
<tr>
<td>On hand close of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

- Park revenues received this year to date: 51.00
- Park revenues received last year to date: 167.50
- **Increase Decrease**: 116.50
- Per cent of **Increase Decrease**: 69.5%
### STATUS OF AUTHORIZED PROJECTS

**Hawaii National Park for the month of September, 1937**

<table>
<thead>
<tr>
<th>Description of projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>520.1 Haleakala Road, Post Construction (T.A.)</td>
<td>84</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>523 Uwakahuna-Bird Park Road, surf., treatment, 1-75</td>
<td>100</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>524 Residential Area Roads, completion 3/4 mile surf., grdg., and surf., (T.A.)</td>
<td>98</td>
<td>0</td>
<td>6</td>
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<tr>
<td>525 Headquarters Area Roads, Improvements (T.A.)</td>
<td>98</td>
<td>0</td>
<td>3</td>
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<tr>
<td>F.P. 663.14 For the erection of one observation station &amp; toilets; one office &amp; checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleakula</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>F.P. 677.14 Employee's Residence and connecting service lines for newly appointed U.S. Commissioner, including purchase of equipment</td>
<td>70</td>
<td>30</td>
<td>30</td>
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<tr>
<td></td>
<td>Number</td>
<td>Value</td>
<td></td>
<td></td>
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<tr>
<td>-------------------------------</td>
<td>---------</td>
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<td></td>
<td></td>
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<td><strong>GOVERNMENT PUBLICATIONS:</strong></td>
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<tr>
<td>On hand beginning of month,</td>
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<tr>
<td>Total,</td>
<td>1,039</td>
<td>152.15</td>
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<td>Sold during month,</td>
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<td>149.35</td>
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<tr>
<td>Received during month,</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Sold during month,</td>
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<td>Balance,</td>
<td></td>
<td>13.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
United States
Department of the Interior
National Park Service

Status of Personnel

Hawaii National Park for the Month of September, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
</tr>
<tr>
<td></td>
<td>REG. FW.</td>
<td>REG. PW.</td>
</tr>
<tr>
<td>Number of employees beginning of month</td>
<td>23 0 5 0</td>
<td>24 0 5 0</td>
</tr>
<tr>
<td>Number of additions</td>
<td>1 0 0 0</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>Total</td>
<td>24 0 5 0</td>
<td>24 0 8 0</td>
</tr>
<tr>
<td>Number of separations</td>
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<td>Number of employees close of month</td>
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<td>21 0 8 0</td>
</tr>
<tr>
<td>Number of promotions during month</td>
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<td>0 0 0 0</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>67 0 0 0</td>
<td>20 0 0 0</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
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<td>8 0 0 0</td>
</tr>
<tr>
<td>Aggregate amount of leave without pay</td>
<td>0 0 0 0</td>
<td>0 0 0 0</td>
</tr>
</tbody>
</table>
October 5, 1937

Mr. Edward G. Wingate, Superintendent
Hawaiian National Park, T. H.


Dear Mr. Wingate:

September was a quiet month at the Hawaiian Volcano Observatory after the completion of the field work of the University scientists, which had occupied the summer. The usual press reports, crater observations and routine were accomplished, and the Volcano Letter for the month of July was completed and sent to press. The assistant geologist after returning from his leave brought the seismological and engineering data up to date.

Volcanic Activity of the Month

The following are the earthquake totals and the data from Halemaumau Pit:

<table>
<thead>
<tr>
<th>Week ending</th>
<th>Slides</th>
<th>Crack Openings</th>
<th>Local tremors &amp; Quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 5</td>
<td>3</td>
<td>3.00 mm.</td>
<td>20</td>
</tr>
<tr>
<td>12</td>
<td>9</td>
<td>0.50 mm.</td>
<td>15</td>
</tr>
<tr>
<td>19</td>
<td>7</td>
<td>6.00 mm.</td>
<td>9</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>6.50 mm.</td>
<td>9</td>
</tr>
<tr>
<td>October 3</td>
<td>7</td>
<td>4.00 mm.</td>
<td>15</td>
</tr>
</tbody>
</table>

A feeble shock September 15 was felt near Kilauea Crater. Otherwise most of the local disturbances were tremors, and most of the very feeble shocks were of Kilauea origin.

A distant earthquake probably of Aleutian origin occurred September 3, another of indicated distance 3485 miles occurred September 15, two incomplete records were made September 15 and September 19 another September 20, and one of distance 3290 miles September 23. The clustering of these five large distant earthquakes within the week of the equinox was noteworthy. Finally a last distant earthquake was recorded September 23, mentioned in the press as in Japan.
Work of the Volcanologist

The greater part of the month was given to office work, and the last week the Volcanologist was in Honolulu engaged in University work and in conferences of the Hawaiian Volcano Research Association.

On September 9 the Volcanologist with Messrs. Lamb, Pope, and Masuche visited the upper terminus of the Mauna Loa road and selected a site for the first Mauna Loa seismograph cellar. This will be placed several hundred feet uphill from the road, so as to avoid disturbances from road traffic.

The Volcanologist directed A. Okuda's construction of seismoscopes during the month, one instrument was set in operation, and two more were constructed.

The reviewing of the manuscript by Dr. Stearns on the geology of Lanai, was completed, and returned to the author.

On September 16, T. J. Jaggar was appointed a member of the Committee on Diversified Agriculture of the Chamber of Commerce of Hilo, a meeting being held at that time under the chairmanship of Dr. Milton G. Rice. This Committee has to deal with the problem of greater utilization of Hawaiian soil for the production of food supplies, and similar committees are actively working under numerous organizations in the other islands. The part that the Hawaiian Volcano Observatory can take in assisting this work, is illustrated by Bulletin No. 66 of Hawaii Agricultural Experiment Station, on the physical features of Kona in relation to soils; one of the authors was H. A. Powers, Assistant Geologist at the Observatory. The work of our volcanoes achieves both construction and destruction of soils, and it is fitting, both here and in Maui, that the scientific workers in the National Park volcanic centers should take an interest in the question of diversified crops, which, as General Drum has pointed out, greatly affects the future of Hawaii in any time of emergency.

Referring to the proposed surveys of the region between Mauna Loa and Hilo, having in view the protection of that city, a letter of September 21 from the Chief of Staff, Hawaiian Department, indicates that the airplane flights, from South Cape in July was unable to accomplish its photographic mission on account of clouds. It was planned to take oblique views of the Mauna Loa slope above Hilo. It may be expected however, that such aerial surveys will be made in the future, when the detailed line survey is organized for the Hilo barriers, under the Engineer Corps.

A letter of September 13 to Director, National Park Service from the Superintendent of Lassen Volcanic National Park states that Professor Perry Bury, of the Department of Geology, University of California will furnish a high-grade photographic recording seismograph to Park Headquarters at Mineral. It is very desirable that this offer be accepted and that the seismograph cellar necessary for installation of this Wood-
Anderson instrument be constructed, so that the Lassen Park may become one of the stations in the network of precise seismology, organized for California by the University in Berkeley. This is in every way appropriate, as the Section of Volcanology started such service in 1927, using instruments of less precision.

The Volcanologist has discussed with the Superintendent of Hawai'i National Park, the importance of making colored Kodachrome lantern slides of Mauna Loa. There are many subjects for such slides along the Mauna Loa rift belt. The future of Mauna Loa development in the National Park scheme, is greatly dependent on good projection and lectures. Mauna Loa is the main center of Hawaiian volcanic activity. It appears desirable for the National Park to organize exploration with extensive first-class photography there, and I would recommend that the Spring and Summer of 1938 include a number of expeditions to all parts of the great rift belt, where there are strikingly colored cones, chasms, lava flows, sulphur banks, caverns, crateral features, and hot vents. Complete photography of details of this region has never been attempted, and the new Kodachrome project, from a miniature camera, makes possible such lantern slides, as were never dreamed of fifteen years ago.

On September 23, Volcanologist Jaggar was chairman of an Examining Committee to examine the thesis of Candidate Austin Emery Jones for the Degree of Master of Science at the University of Hawaii in Honolulu. Mr. Jones was formerly seismologist at the Hawaiian Volcano Observatory. He passed a satisfactory examination and presented a thesis on "Empirical Studies of the Seismic Phenomena of Hawaii." This thesis will be printed as an Occasional Paper of the University of Hawaii, and presents a statistical investigation of many seismograms of the Hawaiian Volcano Observatory.

Work of the Seismologist

Assistant Geologist H. H. Waesche was steadily at work during the month on bringing the seismological records up to date. On September 9 he made new pictures of the locality on the east rim of Halemaumau pit where former crack No. 25 had caved in.

Work of the Assistants

The work of the Librarian S. Sato continued as usual in classification, indexing and filing of the records and books, and the mechanical assistants Yawatake and Okuda continued their regular tasks of operating the stations and building instruments.

Lectures

Visitor

September 22, Dr. Walter Robyns, Director of the Botanic Garden of Belgium, Professor in the University of Louvain.

Very respectfully,

T. A. Jaggar,
Volcanologist.
HVO REPORT OF THE CAMP DIRECTOR, CCC UNP TO THE SUPERINTENDENT
HAwAI NATIONAL PARK FOR THE MONTH ENDING SEPTEMBER 30, 1937.

The labor turn over for the month follows:

Kaleakula Section:
  Reduction of force. EFS. 31

Kilauea Section:
  Expiration Term of Service 19
  To obtain permanent employment 10
  Fraudulent enrollment. (under age) 1

Total 61

The Project Superintendent reports that a total of 2144 man-days were worked on approved projects during the month.

The repairs to the Administration Building were completed on September 30th.

Work was continued on the removal of exotics and good progress shown in the elimination of the Jerusalem Cherry along the Mauna Loa-Giant Koa trail.

Project 34, "Tool Boxes was completed on September 3rd.

The Mauna Loa Trailside Museum was started September 13th with the excavation work for the seismograph cellar. Actual building of the Museum started on September 21st.

The Information Pointer at Kilina Pali has been completed and two others at Pauohu and the 10,000 ft. rest house are in course of construction.

The Planting at the Kilauea Military Camp is progressing well and some large manani trees are boxed ready for removal.

A few days work in October will see the completion of the Park Garage in rear of the Administration Building. Trail improvement and Telephone line construction Mauna Loa are going ahead satisfactorily. The trail being completed ahead of the telephone which is finished construction two miles above the 10,000 feet rest house. Foreman Maka and a crew of 18 boys are now in camp at Red Hill.

The teacher reports little increase in attendance at classes but an increase in application shown by those enrolled. It is being proposed that a class be started in wood-carving and the suggestion has met with enthusiasm by the enrollees and Foremen alike.
The baseball season finished with the camp in third position in the local league. Amateur boxing has developed strength and some of the boys are showing considerable talent, three being entered in the Play-ground Commissions competition.

The Camp Surgeon reports the camp health as good, the sickness consisting only of common colds.

Respectfully submitted,

[Signature]

Wilkinson J. Stephens,
Camp Director, CCC EMP.
The Superintendent,
Thru Office of the Chief Ranger,
Hawaii National Park, Hawaii

Dear Sir:

Check of travel shows 408 cars and 2004 people were in the Haleakala Section during the month of September, 1937. A decrease of 38% under the record for last month is shown.

The narrative report, rangers report and weather reports are enclosed.

Very respectfully,

[Signature]

J. L. Peck,
District Ranger.
The Superintendent,
Thru Office of the Chief Ranger,
Hawaii National Park, Hawaii

Dear Sir:
The following report of the Haleakala Section for the month of September, 1937, is respectfully submitted:

000 General.

010 Introduction.
The four shelter houses, completed this month by the EW, are improvements much appreciated by the general public.

020 General Weather Conditions.
Rain during the month amounted to .50 of an inch.
The prevailing wind direction was from the northeast. There were 14 clear days during the month.

100 Administrative.

110 Status of Work.
All work was kept up-to-date during the month.

120 Park Inspections by

121 Superintendents
The Haleakala Section was inspected by Superintendent Edward G. Wingate September 20 - 30.

150 Equipment and Supplies.
One cord of stove wood was purchased this month.

200 Maintenance, Improvements and New Construction.

210 Maintenance.
Some of the shoulders along the road were built up and the edge of the surfacing replaced.
400 Flora, Fauna and Natural Phenomena.

410 Ranger, Naturalist and Guide Service.

The District Ranger was on duty at the White Hill area whenever possible, on week-ends and periods of heaviest travel, to give information and other service.

500 Use of Park Facilities by the Public.

510 Increase or Decrease in Travel.

Check of travel shows 408 cars and 2004 people were in the Holehedge Section during the month of September, 1937. A decrease of 36% under the record for last month is shown. The decrease is due to the fact that vacation days ended during this month.

600 Protection.

610 Police Protection.

Frequent patrols were made. There were no arrests.

Very respectfully,

[Signature]

J. A. Peck,

District Ranger.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Hawaii NATIONAL PARK

FILE NO.

MONTHLY REPORT
AUGUST, 1937

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge. All files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ABNO B. CAMMERER
Director.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HAWAII NATIONAL PARK
HAWAII

OFFICE OF THE SUPERINTENDENT

September 10, 1937

The Director
National Park Service
Washington DC

Dear Mr. Director:

Following is the narrative report for this park for the month of August, 1937.

000 - General

Outstanding event of the month was the visit of the Secretary of the Treasury, Hon. Henry Morgenthau and family. The Secretary, his two sons and aide arrived in Hilo on August 6 on the Coast Guard Cutter Roger B. Taney and was followed the same day by Mrs. Morgenthau and daughter who arrived on Inter-Island plane. They were all met in Hilo by the superintendent, accompanied by Ranger Moosaw and Mr. George Lycurgus. Following a drive around Hilo, which took in various points of interest and the arrival of Mrs. Morgenthau the party left for a trip around the island staying at various ranches and the Kona Inn before coming up to the park. The Secretary's three children arrived in the park for lunch on August 9 and were taken on a tour by the superintendent and Mr. Earl Thacker of Honolulu, leaving that afternoon for Honolulu. The Secretary and his wife arrived the afternoon of the 11th, remaining in the park until noon the following day when they left for Honolulu by plane. A program of old songs, chants and hulas was arranged for them by the superintendent and Mr. Lycurgus. They were taken around the Kilauea section of the park by Dr. Jagger and the superintendent the morning of the 12th, followed by lunch at Dr. Jagger. They were afterward driven down to the plane by the superintendent and Mrs. Wingate. While in the park the Secretary inspected the Kilauea Military Camp, was shown the Manna Loa eruption film by naturalist Lamb and visited points of interest inspected the CCC camp. Before leaving Hilo the Secretary officiated at a tree planting ceremony on the now more or less famous Banyan Drive, where the President, other Cabinet officials, Amelia Earhart and other notables have similarly officiated. Secretary Morgenthau was the fifth member of the President's cabinet to visit the Kilauea section of the park, but was the only one who had time enough to get more than a cursory glimpse of it. The Secretary asked many questions concerning the park administration and made several suggestions, the most important of which concerning the CCC were taken up in special letters to the Director. It was a distinct pleasure to meet the Morgenthau and have the opportunity of showing them something of the park.
020 - General Weather Conditions

Of more than passing interest was the exceptionally heavy rain during the first three days of the month, when 20.99 inches was recorded. The only other 3-day rain which approaches that in the last 15 years fell on December 25-27, 1927, when 19.75 inches was recorded. The greatest fall in 24 hours was on August 1, amounting to 9.06 inches and has been exceeded only once in 13 years when 9.25 inches fell on September 7, 1927. No serious damage was done as the rain was rather constant though it was necessary to close the road between Hilo and the park for several hours. The rain, together with a spasm of earthquakes, opened a gaping hole in the ground about 10' across just a few feet from the superintendent's house. It appeared that the earthquakes had slightly opened a deep-seated crack paralleling the crater rim on the upper side of the house and the widening permitted the excessive rainfall wash down the overlying ash and soil. Total rainfall at Kilauea for the month was 24.75" and at the CCC camp 22.76". Rain at Haleakala amounted to 4.34". Temperatures at headquarters were 76° maximum and 64° minimum. Light snow fell on Mauna Kea during the first part of the month.

100 - Administration

110 - Status of Work

On August 4 a corrected copy of the annual report was mailed the Director.

Following the suggestion of Secretary Morgenthau and after considerable study by the CCC camp director and landscape foreman, a recommendation was made by letter August 30 for an allotment of $25,000 to completely rebuild the CCC camp on a new site.

On August 24 the Civil Service office in Honolulu was requested to furnish a certificate of eligibles to fill the new authorized position of clerk-accountant, grade 7, salary $1,620 per annum.

120 - Park Inspections by:

121 - Superintendent: With the exception of an overnight camping trip to Hulima Pali one inspection of the Mauna Loa truck trail and one of the supposed Hawaiian ruins near Makapuhi crater, only routine inspections were made of going projects in the vicinity of park headquarters. On the trip to Hulima Pali forest conditions were inspected as far as the shelter at Kipuka Pepeln. Upward of 200 goats were seen and close observation failed to reveal a single tree of any species less than 15-20 years old. Water erosion also was seen to be doing considerable damage. Some wild jackasses were heard. For the benefit of former employees of this park, now resident on the mainland, these animals are no longer, since the advent of the trans-pacific planes, known by their former name of "Kona Nightingales" but are called "Kona Clippers". On his camping expedition the superintendent was accompanied by one Master Kapuakidung Wingo, age 6, who thus spent his first night under the stars.

125 - Other Governmental Officers: Postoffice Inspectors F.J. Gould and T.J. Evans were in the park the 20th and 21st, in connection with inspection of the local postoffice.
130 - Finance and Accounts

The financial report is attached.

140 - Labor Situation

Mr. Thomas Nahiuwa, representative of the pineapple company on the island of Lanai, was in the park on August 22 for the purpose of recruiting labor from the CCC camp for work on Lanai. Several enrollees have left camp to accept employment on Lanai and others have left to work on the plantations. Island industry is making a genuine, though belated, effort to attract citizen labor to the plantations. As a result of this drive the WPA selecting agency for the CCC has been unable to keep the camps at full strength and despite statements made to Chief Forester Coffman during his visit to Hawaii by Mr. Frank Lacey, head of the WPA in the Islands, it does not appear that the enrollment quota can be filled unless boys whose families are not strictly on relief are permitted to enroll. The superintendent thinks they should.

The contractor on FP 877 has been unable to locate any skilled masons who are citizens and will probably have to resort to alien labor for this part of the work.

150 - Equipment and Supplies

Curtains and rods for the Haleakula checking station were received, in addition to one washing machine, for the Kiliman section, which had been declared surplus by the Federal Housing Administration.

180 - Circulars, Placards, Publicity Bulletins, etc.

At the request of Petrie Maudell of Berkeley, pictures of Hawaiian petroglyphs were mailed him for use in feature newspaper articles. Dr. Jaggar also sent him material in connection with the work of the Volcano Observatory. Assistant Park Naturalist submitted an article accompanied by photographs to the Paradise of the Pacific magazine, regarding the recent discovery of the new; also copy of the press release on this same discovery, was forwarded to Nature Magazine. At the request of George Mellen of the Mellen Associates, advertising agents in Honolulu, data on the history of the Volcano House, as well as George Lycurgas, present manager, for use in a future number of the Sales Builder, was supplied. Radio talks were given each Tuesday over the local station as follows: 9 by Ranger Williams and one each by Dr. Eller of the University of Hawaii, who has been cooperating with the Volcano Observatory in tile measurements and instruments, Seasonal Ranger Burns and Assistant Park Naturalist Lamb. On the receipt of the press release from the Director's office regarding regionalisation of the Service and promotions and appointments of regional and assistant regional officers, a press bulletin concerning the
appointments of former superintendents of this park, or officials who have visited the islands, was sent out to the local newspapers by this office. Press release in connection with the allotment of funds to Hawaii National Park for the 1938 fiscal year was issued also. Early in the month our supply of information circulars was exhausted and on the 14th a request was made to the Director for 3000 additional copies.

200 - Maintenance, Improvements and New Construction

220 - Improvements

Force account jobs 524 and 525, residential area roads, completing 3/4 mile clearing, grading and surfacing, and headquarters area roads improvements, were both 98% complete at the end of the month.

230 - New Construction

On August 21, Project FP 687, employee's residence was 30% complete. A new garage, being constructed by the CCC, at the rear of the administration building was started. Construction of a grain and saddle room from salvaged materials was commenced at the upper end of the Mauna Loa truck trail under force account. The last of the 4 shelter cabins being constructed by the CCC in Haleakula crater was nearing completion.

240 - Improvements of Approaches to the Park

With the arrival of a new light roller, the contractor on the Pahala section of the round-the-island road is making rapid progress.

300 - Activities of Other Agencies in the Park

320 - Cooperating Governmental Agencies

Approval of plans for construction of barracks for permanent enlisted personnel at Kilusa Military Camp was received, and it is expected work will commence shortly.

340 - State, County or Municipal Legislation Affecting Parks

Word was received from Delegate King that after passage by the Senate of his bill, HR 1995, with an amendment he had requested, the bill lay on the table until the next session when he hoped to be able to have the amendment deleted. The bill was to add the Kalapana and Footprint areas to the park. This action by the Delegate met with local approval.

At the regular meeting of the Hilo Federal Business Association on August 19, the superintendent, with the concurrence of the Executive Committee, offered a resolution which in brief stated that in view of
legislation offered and approved during the recent session of the Territorial legislature pointing out the prevailing high freight and passenger rates charged by the Inter-Island Steam Navigation Company, that as federal officer charged with protecting federal funds, the members of the association had no choice but to inform the heads of their departments of these facts and request that an impartial investigation be made as to the fairness of these rates. The resolution was carried without a dissenting vote being recorded. Copies will be forwarded when received from the secretary.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist, and Guide Service

Seasonal ranger-naturalist Robert L. Fowler left on the 24th. Though his appointment is not actually up until the early part of September, he took advantage of his accrued annual leave. Seasonal ranger Eugene Burns also left the park on the 30th, in order to accept a permanent position on the staff of the Hilo Tribune-Herald.

460 - Birds

Of possible interest to the Wildlife Division, the following is quoted from a letter written on August 18 by George C. Munro, Associate in Ornithology with the Bernice P. Bishop Museum in Honolulu, to the Editor of the Honolulu Star-Bulletin, and which was reprinted therein.

"....Before outlining steps that can be taken to perpetuate this and other species and making them a scenic public attraction let us look into the history of the bird (Hawaiian stil Himantopus kumasi)

"In the Birds of the Hawaiian Islands by Wilson and Evans, Judge Dole is quoted (probably in his Synopsis of the Birds Hibberts Described From the Hawaiian Islands). This was communicated in February 1869 to the Boston Society of Natural History by Mr. Dole. He mentioned that this bird was 'common in ponds and swamps all over the group.' However, there is no record available that it was found on Hawaii or Lanai.

"Himantopus kumasi was named by Dr. Stejneger in 1887. He says: 'Himantopus kumasi which I take great pleasure in naming after Mr. Wladimir Knudsen, who made the interesting collections on which this paper is based needs only comparison with Himantopus mexicanus.' Dr. Praciong says: 'Here (at the lagoon at Kahului) I also observed a Himantopus which Mr. Dole designates as Himantopus candidus.' Scott Wilson (about
1888) said 'I obtained specimens near Koko Head.'

*There were plenty at the lagoons at Mana, Kauai in 1891 when Mr. H.C. Palmer and myself in the Rothschild expedition collected there and I took specimens of young there in 1895. The old birds were so excited that as I walked along on the dry mud the birds struck my hands folded behind my back with their wings as they darted at me with loud cries.*

Dr. E.C.L. Perkins records in Fauna Hawaiian a in the nineties that 'the Hawaiian stilt is a common and widely distributed bird in the islands and in some localities is abundant. I have seen it on Kauai, Oahu, Molokai and Maui, it is also found on Kiihau. Some years ago it was a familiar sight on the sides of the railroad a few miles out of Honolulu.'

*What do we find now? The stilt is still on Kiihau, on Kauai I doubt if it exists and I failed to find it on Maui. Its old haunts on Kauai are now growing cane; it is no longer on the Kauaii pond at Kalihiu where it undoubtedly used to frequent. I think it is still on Molokai. I saw recently a flock of 75 to 100 on the Kakehau pond at Kailua, Oahu, and Dr. Frick informs me he has seen it on the mainland near Quarantine Island.*

*Now here is a distinctive Hawaiian bird, odd in build with its long slender pink legs, yet beautiful with its glossy black back and pure white underparts. It is named after one of the pioneers who helped to build up the prosperity of these islands and whose descendants are respected members of our community. It is slowly but surely being driven to the wall by advancing industry and introduced plants.*

*It and other birds can be saved and perhaps again distributed (as to the Kauai pond at Kalihiu) of sanctuaries are provided and introduced plants prevented from covering up the shallow water where they feed. Birds in inviolate sanctuaries become fearless of humans and a great public attraction. So the preservation of shore birds need not be entirely scientific, sentimental or economic but can combine them all. Birds preserved in sanctuaries from which the public is excluded (as is sometimes necessary) are not of nearly so much value as those that can be seen by many without detriment.*
490 - Natural Phenomena

Assistant Geologist Hugh H. Wasson, who had been on the mainland on leave, and also doing some work in the San Francisco office, returned to duty on the 21st. A complete report of the work of the Volcano Observatory is attached.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

At Kīlauea section there were 16,590 visitors as compared with 18,861 for August 1926, and at Haleakalā 3280, an increase of 21% over last month.

520 - Visitors and Special Groups

The visit of the Secretary of the Treasury, Henry Morgenthau and his family has been reported under 600-General.

Professor and Mrs. Haller of the University of Vienna visited the park for several days and made a trip to the summit of Mauna Loa, accompanied by Ranger Konnum. They were given special attention by the Superintendent and Dr. Jagger and others.

On August 3 Miss Helga Iverson, Editor of Sunset Magazine, spent a few hours in the park.

August 5 to 10 - Hon. and Mrs. L.W. Whethome, Commissioner of Public Lands, Territory of Hawaii.

Mr. and Mrs. Kenneth P. Emory, and their two children, arrived in the park on the 23rd for a stay of approximately one week. Mr. Emory is connected with the B.P. Bishop Museum of Honolulu.

Groups of Hawaiians, Japanese actors, members of the American Legion Women's Auxiliary as well as Legion members, school teachers, YMCA (Young Men's Buddhist Association), TMCA boys, US Navy, regular and fliers, made use of the park facilities during the month and received special attention in the way of lectures, etc.

Associate Judge James J. Hanks, of the Territorial Supreme Court, and his son who is visiting him from Orlando Florida, spent several days at the Volcano House.

540 - Public Campgrounds

Several groups made use of the campgrounds, ranging from one night to two weeks.
610 - Police Protection

August 15, Ranger Hoomawapenhad a Mr. Iwamoto of Hilo for reckless driving and speeding. Iwamoto was stopped after an exciting chase of nearly 10 miles, being stopped 25 miles west of the Aua entrance. He was brought back to park headquarters where the superintendent referred the case to the US District Attorney. He was ordered to report to the District Court in Honolulu, where he was fined $25 and placed on probation for two years.

620 - Fire Protection

A fire drill was held at the CCC camp the evening of the 5th, to which there was excellent response. The hose detail had the pump started, hose connected and water on the fire within four minutes, and the ranger in charge states their technique was correct, starting at the base of the fire and working around and up.

630 - Accidents

On August 16, a Mrs. E.W Layton of Honuapo, driving through the park from Hilo, ran into and seriously injured Charles Elderia, the 11-year-old son of William Elderia, a park employee. The injured boy was taken to the Military Camp hospital and later transferred to the Hilo hospital, and at the end of the month was still in a very critical condition, it being necessary to have two brain operations performed. Action in the case is being withheld by the US District Attorney, pending outcome of the boy’s injuries.

900 - Miscellaneous

The American Legion Hawaiian Department and its Women’s Auxiliary held their annual convention in Hilo August 12-14. The women visited the park on the 12th and the men on the 14th. Because of Secretary Morgenthau’s visit the superintendent was unable to be present at the opening session and Ranger Murray was delegated to represent him in welcoming the Legion to the park.

Ranger Murray also represented the superintendent at a celebration in Hilo on the 25th anniversary of the founding of the von Hanno-Young Company, local business concern.

The Hilo Tribune Herald on August 8 carried an editorial tribute to Amelia Earhart, written by Volcanologist T.A. Jagger from which the following is quoted:

8
"Things happen in the world of mankind not scheduled in economic planning.

These things are done by individuals despite adversity. Increasingly they are done by women: Joan of Arc, Florence Nightingale, Frances Willard, Amelia Earhart. Not all are privileged to die. More things are wrought by dying than this world dreams of.

"Wile willed to fly as the gull flies, as the golden plover migrates, athwart the glove, as bird men fly amid roar of motors and petrol and grease."

Frank F. Fischer, park mechanic, passed away on the 20th, after an illness of several months. The entire park staff attended the funeral; all pallbearers, were members of the park staff and in uniform. The staff kept continuous watch over the body from 6 p.m. August 20 to 2 p.m. August 21. Mr. Fischer was beloved by many poor people of foreign birth with whom he worked as an avocation to bring them to an understanding of his Christian beliefs. His funeral and private service was conducted by the members of the foreign congregation. Mr. Fischer's place in this park community will be difficult if not impossible to fill.

A very informal, bachelor luau was held at Kalapana on the 25th, in honor of Seasonal Ranger Burns and Ranger-naturalist Fowler.

Respectfully submitted

Edward C. Wingate
Superintendent

OW
Uniformed personnel of Hawaii National Park—
Bottom row left to right: Supt. E.G. Wingate; Ranger-Mat'1st B.L. Fowler; Ranger P.E. Murray; Mat'1st S.H. Leal; Ranger C.D. MacKenzie; Ranger J. Burns; Asst. Sociologist H.H. Wescueh
Back row: Ranger K.J. Williams; Dr. C.A. Jagger; Park Foreman R.R. Craig; Chief Ranger J.H. Christ; Ranger B.F. Hooew; Chief Clerk J.K. Higashida.
Group of Japanese actors from Nikkatsu Studio, Tokyo who were in the islands making a Japanese picture, though the person on the extreme left is Constance Whitney of this office, Chief Clerk J.X. Higashida in uniform and Sanji Abe of the Hilo Police force third from right. Others are: Kyoji Sugi; Miss Belko Hoshi; leading lady; Mitsuco Makino, director; Takashi Watanabe, photographer; and Koji Shim.
I.

Secretary of the Treasury and Mrs. Morgenthaler at Halesaumah.

Secretary Morgenthaler and party at Uenakahuna Museum. The Secretary is in the white hat with Mrs. Morgenthaler facing camera.
Secretary Morgenthau plants a tree on Banyan Drive, Hilo. Mrs. Morgenthau in dark dress with members of Hilo Park Commission and Supt. and Mrs. Wingate in background. Five cabinet members besides President Roosevelt have planted trees on this drive.
Photo showing location of accident to Chas. Elverts on August 16, 1937. Ranger Moonaw standing on spot where automobile hit the boy on the bicycle coming out of driveway on left. The boy was seriously injured and at end of month condition remained uncertain.
Large hole opened over deep sub-surface crack beside Superintendent's residence during heavy rains the first part of the month.
Two photos showing excavation necessary to complete job of repairing small section of Rim Road where crack (visible in center of 2nd picture just beneath Ranger's foot) paralleling road opened allowing road material to filter down.
Two views "before and after" showing extent of widening of Hotel and Post Office entrance roads done under Project 529. The old entrance was very narrow and dangerous.
Two views showing progress of construction in one employee's quarters.
PP677 Contract #F-8-P-103 PW.
GGG Project No. 31. Garage - Administration Building.
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Appropriation</th>
<th>Allotted</th>
<th>Expended &amp; Obligated</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1461000</td>
<td>National Park Service, 1936</td>
<td>$44,532.00</td>
<td>$8,209.14</td>
<td>$36,322.86</td>
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<tr>
<td>1471000</td>
<td>National Park Service, 1937</td>
<td>$44,500.00</td>
<td>44,070.11</td>
<td>429.89</td>
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<tr>
<td>146/71000</td>
<td>National Park Service, 1936-37</td>
<td>336.00</td>
<td>336.79</td>
<td>1.21</td>
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<tr>
<td>14-1010</td>
<td>Roads &amp; Trails, National Park Service</td>
<td>22,500.00</td>
<td>19,432.84</td>
<td>3,067.16</td>
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<tr>
<td>14-1130</td>
<td>Roads &amp; Trails, National Parks, Emergency Construction</td>
<td>40,870.65</td>
<td>39,725.66</td>
<td>1,144.99</td>
</tr>
<tr>
<td>14-405/50762</td>
<td>P.W.A., Allotment to Interior, Park Service, 1935-39</td>
<td>9,303.00</td>
<td>9,192.81</td>
<td>110.19</td>
</tr>
<tr>
<td>14-443/50834</td>
<td>N.I.R. Interior, National Park Service, 1933-39</td>
<td>13,000.00</td>
<td>12,734.00</td>
<td>266.00</td>
</tr>
<tr>
<td>1451000</td>
<td>National Park Service, 1935</td>
<td>36,040.00</td>
<td>34,786.34</td>
<td>1,271.66</td>
</tr>
</tbody>
</table>
**TRAVEL REPORT**

**Hawaii** National Park for the month of August, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>Last Year</th>
<th>Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>15,160</td>
<td>154,222</td>
<td>17,531</td>
<td>158,967</td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td>253</td>
<td>3,099</td>
<td>418</td>
<td>3,695</td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>15,413</td>
<td>157,321</td>
<td>17,949</td>
<td>162,662</td>
</tr>
<tr>
<td><strong>OTHER TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains</td>
<td>1,177</td>
<td>7,392</td>
<td>912</td>
<td>7,634</td>
</tr>
<tr>
<td>Persons entering otherwise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation</td>
<td>1,177</td>
<td>7,392</td>
<td>912</td>
<td>7,634</td>
</tr>
<tr>
<td><strong>GRAND TOTAL ALL VISITORS:</strong></td>
<td>16,590</td>
<td>161,713</td>
<td>18,461</td>
<td>170,306</td>
</tr>
</tbody>
</table>

**Automobiles in public camps during month:**

**Camper in public camps during month:**
United States Department of the Interior
National Park Service

Travel Report
Haleakala Section, Hawaii National Park for the month of August, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>This Month</th>
<th>Last Travel Year</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td>656</td>
<td>4,238</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>3,280</td>
<td>21,668</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>3,280</td>
<td>21,668</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OTHER TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via stages,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL ALL VISITORS,</td>
<td>3,280</td>
<td>21,668</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percent</td>
</tr>
</tbody>
</table>

Automobiles in public camps during month, . . . . .
Campers in public camps during month, . . . . .
**Report of Park Revenues**

**Hawaii National Park for the Month of August, 1937**

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received</td>
<td>26.00</td>
<td>3.75</td>
</tr>
<tr>
<td>Total</td>
<td>26.00</td>
<td>3.75</td>
</tr>
<tr>
<td>Remitted</td>
<td>26.00</td>
<td>3.75</td>
</tr>
<tr>
<td>On hand close of month</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

- Park revenues received this year to date: 51.00
- Park revenues received last year to date: 113.75
- Decrease: 62.75
- Per cent decrease: 55.2%
<table>
<thead>
<tr>
<th>Description of projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>580.1 Haleskala Road, Post Construction (F.A.)</td>
<td>82</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>583 Uwekahuna-Bird Park Road, surfg., treatment, 1.75</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>584 Residential Area Roads, completion 3/4 mile olrg., grdz., and surfg., (F.A.)</td>
<td>98</td>
<td>6</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>585 Headquarters Area Roads, Improvements (F.A.)</td>
<td>93</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>F.P. 663.14 For the erection of one observation station &amp; toilets; one office and checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleskala.</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>F.P. 677.14 Employee's Residence and connecting service lines for newly appointed U.S. Commissioner, including purchase of equipment.</td>
<td>40</td>
<td>30</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
**UNITED STATES**
**DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**

**STATUS OF PERSONNEL**

**Hawaii National Park for the Month of August, 1937**

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Number of employees beginning</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>of month</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Number of additions</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Number of separations</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Number of employees close of</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>month</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Number of promotions during</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>month</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Aggregate amount of annual</td>
<td>194</td>
<td>0</td>
</tr>
<tr>
<td>leave taken</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Aggregate amount of sick</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>leave taken</td>
<td></td>
<td>37</td>
</tr>
<tr>
<td>Aggregate amount of leave</td>
<td>194</td>
<td>0</td>
</tr>
<tr>
<td>without pay</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
August, 1937

<table>
<thead>
<tr>
<th>GOVERNMENT PUBLICATIONS:</th>
<th>Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>On hand beginning of month,</td>
<td>1,062</td>
<td>154.55</td>
</tr>
<tr>
<td>Received during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total,</td>
<td>1,062</td>
<td>154.55</td>
</tr>
<tr>
<td>Sold during month,</td>
<td>23</td>
<td>2.40</td>
</tr>
<tr>
<td>On hand at close of month,</td>
<td>1,039</td>
<td>152.15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NON-GOVERNMENT PUBLICATIONS:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On hand beginning of month,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received during month,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sold during month,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On hand at close of month,</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Cash on hand beginning of month, | 9.98 |
| Sales during month, | 2.40 |
| Total, | 12.38 |
| Remitted during month, | 1.94 |
| Balance, | 10.44 |
Mr. Edward G. Wingate, Superintendent
Hawaii National Park, T.H.


Dear Mr. Wingate:

The usual press reports, crater observations and routine were continued. Mr. H.H. Waasche, Assistant Geologist returned from San Francisco, August 21.

Of the University of Hawaii research workers, Mr. Iwao Miyake finished his shopwork and seismograph tests August 4, Professor Willard H. Eller continued his work until August 18, and Dr. Stanley S. Ballard arrived August 14, and was engaged in work with gases until August 23.

The President has signed the Rivers and Harbors bill; and in succession to the visit of Colonel R.S. Thomas, July 9, Lt.-Colonel E.S. Thomas of the 3rd U.S. Engineers visited the Observatory August 27, and thereafter made a reconnaissance of the sites for the proposed Hilo barriers; surveys for these are authorized in the bill.

Volcanic Activity of the month

The following are the earthquake totals and the data from Halemaumau Pit:

<table>
<thead>
<tr>
<th>Week ending</th>
<th>Slides</th>
<th>Crack openings</th>
<th>Local tremors &amp; Quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 8</td>
<td>1</td>
<td>25.0 mm.</td>
<td>15</td>
</tr>
<tr>
<td># 15</td>
<td>1</td>
<td>40.5 mm.</td>
<td>21</td>
</tr>
<tr>
<td># 22</td>
<td>22</td>
<td>95.5 mm.</td>
<td>35</td>
</tr>
<tr>
<td># 29</td>
<td>3</td>
<td>15.0 mm.</td>
<td>47</td>
</tr>
</tbody>
</table>

There were felt shocks of Kilauea origin August 3, August 10, August 23 and August 27; and two others probably of Mauna Loa and Hualalai origin August 16 and 18, these being felt on the west side of the island. Of all the measured shocks twenty-one indicated Kilauea distances of origin and eight were from Mauna Loa or beyond. A distant earthquake August 20, corresponded with the disaster at Manila.
Work of the Volcanologist

Until the return of the Assistant Geologist, the Volcanologist continued to measure the seismograms, and Ranger Ben Moomaw assisted in measurement of cracks at the pit, and in the recording of radio time service.

With the assistance of the mechanic Okuda, the Volcanologist made progress during the month in testing and improving the models for earthquake pendulums designed as seismoscopes to be placed in telephone stations.

Mr. L.W. Branch, Manager of Hawaii Telephone System, has secured the consent of Mr. Hummel, General Manager of Mutual Telephone Company of the Territory of Hawaii, that we install these instruments at the various exchanges with a view to receiving quantitative data from all over this island, concerning the size and time of earthquakes recorded.

The instrument tests indicated that the magnification was insufficient to announce feeble earthquakes. August 2, a magnifying lever was added and set up for testing. August 5, a very heavy pendulum with six foot boom was set up. August 23, an earthquake produced no sufficient effect on three of the four models installed.

Thereafter a change of plan was adopted, using a heavy mass and a horizontal magnifying lever, designed to ring a buzzer on a six-point annunciator. A model of this type has been announcing earthquakes successfully for years at the Hawaiian Volcano Observatory.

On August 1, an article was prepared for W. F. Feldwisch, Meteorologist in Charge, U.S. Weather Bureau, Honolulu, dealing with modern data concerning Mauna Loa and Kilauea; for a new edition of the general statement, issued by the Weather Bureau, on the statistical climatology of the Hawaiian Islands.

On August 2, some assistance was given draftsman Pope of the ECW Service, in designing diagrams for a chart exhibited at the kiosk at Halemaumau.

August 3, a delegation of Japanese teachers of the Territory of Hawaii visited the Hawaiian Volcano Observatory, and were instructed concerning its operation, and given some of the publications.

August 4, a manuscript by Ranger-Naturalist Burns was read, and corrections suggested for the new tourist pamphlet of Hawaii National Park.

Several times during the month the Volcanologist visited the seismograph station at Kealakekua, Kona, testing the damping, and readjusting the writing pens and the time clock which had been giving trouble.
During the last half of the month, a manuscript on the geology of Lanai, by Geologist Harold T. Stearns, United States Geological Survey was reviewed at the request of the author. This is an excellent work, based on comprehensive studies made by Mr. Stearns of the islands Hawaii, Oahu, Maui and Molokai. These studies are doing much to make the geology of the Hawaiian islands known for the first time. Incidentally, Mr. Stearns is a good volcanologist, and all of his writings are designed to assist the people of Hawaii to get water, and so have a practical bearing.

August 11, Secretary of the Treasury Henry Morgenthau, Jr. and Mrs. Morgenthau visited Hawaii National Park. The Volcanologist accompanied Superintendent Wingate in driving them to points of interest, and entertained them with buffet luncheon at his house, provided through the good offices of George Lycurgus, Manager of Volcano House, who had entertained the Morgenthau party at the Hotel the previous night.

August 15, the Hawaii National Park Committee, on celebration of the Centennial of the Constitution, under Chairmanship of Naturalist Lamb met at the Observatory, and tentatively decided on a celebration to be held in the summer of 1938 at the Kilauea Steam Cracks; recreating there the old Hawaiian grass hut, water collecting device, and cooking apparatus; and reviewing the volcanic events of Hawaii for the period 1787 - 1790.

University Research at Kilauea.

August 2, Mr. Miyake accompanied by members of the Observatory staff overhauled the Hilo seismograph cellar, at Saint Mary's School. The cellar was repainted and the time clock was removed and completely overhauled. The smoking chamber was placed outside of the instrument room.

August 4, Dr. Eller installed his new tiltmeter in the seismograph cell of the Kilauea Observatory. This instrument has been tested during the month, and improved, and during the autumn Dr. Eller plans to make a new instrument embodying other improvements. With an electric furnace Dr. Eller melted down samples of Hawaiian basalt during the month, having in view questions of fusibility, gas emission and collection, and the stirring that might determine the peculiarities of pahoehoe and aa lava. He was able to reduce the molten rock to a thinly viscous liquid.

August 5, and thereafter, Dr. Eller was at work on the constants of the Hilo and Kona seismographs, as determined from the test seismograms made during the previous month, after the instruments had been readjusted by Mr. Miyake. The book of results establishes a new standard of accuracy to be used by the seismologist of the station in the routine hereafter.

August 17, Dr. Ballard and Dr. Eller set up new apparatus, and collected volcanic gas at the Sulphur Bank hut. This work was continued by Dr. Ballard during the ensuing fortnight, the pumped gas being conducted through caustic potash and ice packs, using the Milligan gas tower. This
provides for removing excess of carbon and sulphur in the dried volcanic gas, which is collected in sealed tubes. These tubes are subjected to further analyses, with a view to tests for the rarer elements with the large spectrograph in Honolulu.

A small spectrograph for field use, when Kilauea Volcano breaks out, has been selected for the equipment of the Hawaiian Volcano Observatory; and should be secured at once with a view to being prepared for flame spectra, when the next activity occurs.

Reviewing the investigations conducted in the summer of 1937 on volcanologic physics, by Professors Jaggar and Elfer, Instructors Ballard and Miyake, and Geophysical assistant Setsu, aided by the mechanical staff of the Hawaiian Volcano Research Association, namely H. Yamane and A. Okuda, it appears that new work has been done throughout the summer months of 1937.

This work serves to link the physical and chemical laboratories of the University of Hawaii, the Hawaiian Volcano Observatory, and the Hawaiian Sugar Planters' Association in a mutual effort to understand the gas action, and the rock crystallization, that constitutes volcanic activity and eventually makes the soil, air and water of the earth.

It would be hard to imagine a more fundamental set-up in science at a place, Hawaii National Park, where fundamental earth processes are accessible. It is believed that this cooperation sets a new standard in the natural history of geological processes that may well be applicable to new methods of investigation for the Yellowstone and Lassen.

Work of the Seismologist

Assistant Geologist H.H. Waesche after his vacation on leave, was in the San Francisco office of the Park Service August 9 - 11, where he had the precise level tested by the maker A. Lietz Co. He consulted the office of Coast and Geodetic Survey for information concerning the trouble that the level has given. It was finally decided to leave the instrument with the Lietz Co. and to ship to them from Hawaii the tripod, with a view to having that tested also. A Stanley level was loaned by the San Francisco office; this was tested and Mr. Waesche brought it with him to Hawaii in order to continue the crater observations.

August 12 - 13, Mr. Waesche made an inspection trip at Lassen Volcanic National Park, in order to study the seismographs there and the methods of operation carried forward in the Lassen region by Dr. Carl Swartzlow, Park Naturalist. Dr. Swartzlow has in charge the instruments left by the Geological Survey when the Lassen Volcano Observatory was discontinued in 1935.

Mr. Waesche sailed on S.S. Malolo August 14, and from August 21, to the end of the month he has been at work bringing the seismological data up to date in the record books of the Observatory.
Work of the Assistants

The librarian S. Sato, appointed jointly by the Hawaiian Volcano Research Association and the University of Hawaii as clerk and assistant to the Volcanologist, has been working for many months on card cataloging and filing the large collection of pamphlets and books in the Observatory library.

The main library is contained in the sheet iron office building of the volcanologist, but this building is so small, designed originally to contain the precious records such as seismograms, photographic negatives, and notes, that the overflow of these has had to be moved to the wooden buildings.

Sato's work latterly has involved making card catalogs of the books and pamphlets in the main library and in the University building; filing all clippings, and keeping the record up to date of all accessions; filing seismograms, which are hopelessly congested by overflow from the metal case originally made for them; transfer of material back and forth from the University building five hundred yards away; packaging and storing, in the hot, dry, wooden Observatory attic, surplus publications of the Observatory, correspondence, and the less used books; transferring and cataloging the seismological books and pamphlets, which have had to be shifted to the Assistant Geologist's wooden office, in another building; and lastly, filing, selecting reserves, and setting apart sets for binding, of the Monthly Volcano Letter as published; the entire file of this publication being kept in the old wooden Observatory building, which also houses as fire hazards chemical and photographic work, electric soldering irons, and kerosene smoking apparatus for the daily seismograph routine in the basement. This wooden building also houses the main switch boxes and fuses for both the 220-volt and 110-volt currents, and the batteries and equipment for radio time signals.

This situation is obviously a continuous fire menace for the storage of the valuable records, and publication files, of the twenty-six years of observation and publication, building of instruments, and storage of instruments, of the Hawaiian Volcano Observatory. As the little metal office, also, has a wooden frame and wooden windows, and the books and seismograms are all inflammable, the situation is really serious. The record material cannot even be studied properly, where there is no room for modern filing cases and where everything has to be distributed to five rooms in three different buildings.

Sato has also learned the scientific routine in field and laboratory, so as to fit in to the program of the Observatory in case of illness on the part of the regular workers or in the event of a volcanic crisis.

The mechanical assistants Yasunaka and Okuda have been steadily at work at their usual tasks, and have also been assisting the visiting professors from the University of Hawaii, and learning much from them that will be of value to them in the future.
Visitors

The following have visited the Observatory:

- August 3, delegation of teachers, Japanese schools of Hawaii.
- 12, Hon. Henry Morgenthau Jr., Secretary of the Treasury.
- 27, Lt. - Colonel B.B. Browne, representing U.S. Engineers.
- 30, Mr. and Mrs. Emil von Haller of Vienna, Austria.
- 31, Captain Northrup Castle, Jr., of Honolulu.

Very respectfully,

T. A. Jaggar
Volcanologist.
REPORT OF THE CAMP DIRECTOR, OCG INF., TO THE PARK SUPERINTENDENT
HAWAII NATIONAL PARK, FOR THE MONTH ENDING AUGUST 31, 1937.

The labor turnover for the month was as follows:

Haleakala Section:
- Desertion: 1
- To obtain permanent employment: 1

Kiluana Section:
- To return to school: 2
- Misconduct: 2
- To obtain permanent employment: 13

The increase in discharges to accept employment has been caused by the limitation enrollment, all the boys discharged under this heading being due for separation September 30th.

Little trouble should be encountered in placing the balance of boys to be discharged as the sugar and Pineapple plantations are experiencing an acute shortage of labor and are anxious to give employment to discharged enrollees.

The Project Superintendent reports a total of 2666 man-days used on approved projects during the month.

New projects started during the month were the garage at Park Headquarters, the horse trail to Wawa Loa and the drift fence for the eradication of goats. The garage is about ready to to be roofed. The work on the drift fence has been halted to await material.

The Haleakala Section reports that the shelters in the crater will be completed by September 30th and time will be left to give a final dressing up to the completed trails.

The school teacher reports that attendance is up to the average of the past and scheduled religious services have been held during the month.

Baseball held the center of recreational activities.

The general health of the camp was good in spite of a slight scare when three cases of measles developed after week end leave had been granted. However the contact was discovered and with isolation the spread was stopped.

Operative cases were limited to one appendectomy and one
tonsillectomy and only 3 days were lost through accident.

Respectfully submitted

Wilkinson J. Stephens
Camp Director, CCC HEP.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Hawaii National Park

August 31, 1937

MEMORANDUM FOR PARK AND CCC EMPLOYEES:

We have recently received a request from Colonel E.S. Miller
Department Recreation Officer, Fort Shafter, asking that park em-
ployees desiring transportation between Hilo and Honolulu on the
"Frank" make request for such transportation as far in advance of
the sailing date as possible, in order to be reasonably assured of
securing reservations.

Edward G. Zingate
Superintendent

CC - Colonel Miller
## U.S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

### COOPERATIVE OBSERVERS' METEOROLOGICAL RECORD:

**Month of:** AUGUST 1897; Station, Hawaiian Volcano; County, Hawaii

**Latitude:**

**Longitude:**

**Hour of Observation:** 81 00 A.M.

**State:** Hawaii

### MONTHLY SUMMARY

<table>
<thead>
<tr>
<th>TEMPERATURE</th>
<th>PRECIPITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Temperature</td>
</tr>
<tr>
<td></td>
<td>Mean maximum</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
</tr>
</tbody>
</table>

### PRECIPITATION

- Total: 24.75 inches
- Greatest in 24 hours: 9.05 inches

### SNOW

- Total snowfall: inches
- On ground 16th: inches
- At end of month: inches

### NUMBER OF DAYS

- With .01 inch or more precipitation: 28
- Clear: 5
- Partly cloudy: 21
- Cloudy: 4

### DATES OF

- Fog: 25
- Dense: 
- Killing frost: 
- Thunderstorms: 
- Light: 
- Heavy: 
- Sheet: 
- Aurora: 

### REMARKS:

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**T.A. Jagger,** Cooperative Observer.
The Superintendent
Hawaii National Park.

Dear Mr. Wingate:

There follows the report of the ranger department for August, 1937.

000 General

010 - The service given by Mr. Walsh at the observation station on Haleakala during the month has been much appreciated by the public.

020 - General weather conditions.
Rain in Haleakala section amounted to 4.34 inches. There was a light fall of snow on the first of the month. In the Headquarters area 24.75 inches fell. The temperature at Park Headquarters was 76° maximum and 74° minimum. The patches of snow on Mauna Kea and Mauna Loa have entirely disappeared.

100 Administrative

110 - Status of Work.
Routine park activities were carried on.

150 - Equipment and Supplies.
Curtains and rods were received for Haleslakala checking station.

180 - Circulars, publicity, bulletins.
Radio talks were given each Tuesday, 2 by Ranger Williams and one each by Dr. Eller, Ranger Burns and Asst. Park Naturalist Lamb.

200 Maintenance, Improvements and New Construction.

210 - Maintenance
Roads, trails and telephone maintenance was carried on in both sections.

220 - Improvements
The parking area in front of park headquarters was paved. Several of the drains along the Haleakala road were enlarged and lined with stone. Roofs of buildings at Haleakala were painted.
230 - New construction.
A new garage behind park headquarters was started. Construction also commenced on a grain and saddle room from old materials at the upper end of Mauna Loa truck trail. The last of 4 shelter houses being built in Haleakala is nearing completion.

240 - Improvements of approaches to park.
With the arrival of a new light roller, the contractor on the Pahala section of the around-the-island road is making rapid progress.

400 Flora, fauna and natural phenomena.

410 - Ranger, naturalist and guide service.
Rangers continued guide services to summer visitors. One guided trip was made to the summit of Mauna Loa.

470 - Animals.
One horse which injured itself had to be destroyed.

500 Use of park facilities by the public.

510 - Increase or decrease in travel.
3280 visited Haleakala section, an increase of 21 o/o over the month of July. At Park Headquarters visited.

530 - Visitors.
Secretary of the Treasury Henry Morgenthau, Jr. and family visited the park during the second week of August. They were taken on a park tour by the Superintendent. Professor and Mrs. Goller of the University of Vienna visited the park for several days and made a trip to the summit of Mauna Loa guided by a ranger. (P-1,985,962)
Groups of Japanese actors, teachers, Y.M.C.A. members, American Legionnaires, Boys organizations and U.S. Navy made use of the park facilities during the month.

540 - Public camps.
Several groups made use of the camp, ranging from one night to two weeks.

550 Protection

610 - Police protection.
August 15, 4:30 P.M. Ranger Moomaw apprehended Mr. Iwamoto of Naalehu for reckless driving and speeding. Iwamoto was stopped after an exciting chase of nearly ten miles, finally being stopped 2½ miles west of the Enu entrance. He was brought back to Park Headquarters where the Superintendent referred the case to the U.S. District Attorney. Iwamoto pleaded guilty at the hearing and was fined $25.00 and costs.
The Superintendent

-3-

September 3, 1937

630 - Accidents

On August 16, Mrs. E. W. Layton of Homapao, driving car # ran into and seriously injured Charles Elderts, the 11 year old son of Willie Elderts, a park employee. The injured boy was taken to HMC Hospital by Mrs. Layton and later transferred to Hilo Hospital and is still in a critical condition. The case is still pending.

A car driven by Mr. Dukor went into the ditch off the Chain of Craters road and was pulled out by a ranger.

640 - Destruction of predatory animals.

Wild pigs, wild goats, mongooses were destroyed during the month.

650 - Signs.

Metal caution and speed limit signs were installed in several places on the main road which were considered dangerous.

900 Miscellaneous

Frank F. Fischer, park mechanic passed away on the 20th after a long illness. The park staff attended the funeral; all the pallbearers being in uniform.

Very respectfully,

Kenneth Williams

Acting Chief Ranger
United States
Department of the Interior
National Park Service
Hawaii National Park
Hawaii

OFFICE OF THE SUPERINTENDENT

August 31, 1937

Wailuku, Maui

The Superintendent,
Third Office of the Chief Ranger,
Hawaii National Park, Hawaii

Dear Sir:

Check of travel shows 658 cars and 3880 people were in the Heleakala Section during the month of August, 1937. An increase of 31% over the record for last month is shown.

The narrative report, rangers report and the weekly and monthly travel reports are enclosed.

Very respectfully,

J. A. Peck,
District Ranger.
MEMORANDUM to Superintendent Edward G. Wingate

The following is work accomplished under my supervision during the month of August, 1937.

1. New road Job 524 -- 98% complete.
2. " " 525 -- 98% "
4. " " " on Rim road.
5. Cleaned park and hauled rubbish, 8 times.
6. Cleaned gutters all buildings in residential area.
7. Built 4 gates for Mauna Loa Truck Trail.
8. Crated 38 packages of furniture for the Fischer family.
9. Dug cesspool and trench for drain pipe at new residence, 80% complete.
10. Laid water line for new residence.
11. Crushed 150 cu. yds of rock for future repairs on new roads.

Robert R. Craik
Foreman, HNP
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Hawaii NATIONAL PARK

MONTHLY REPORT
JULY 1937

FILE NO.

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge. All files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER,
Director.
The Director  
National Park Service  
Washington DC

Dear Mr. Director:

There follows the report of activities for Hawaii National Park during July.

COO - General

Of particular concern to many of the personnel of this park, who had been privileged to meet her, was the tragic, though heroic, ending of Amelia Earhart Putnam's world flight, somewhere on the broad Pacific, in the vicinity of Howland Island. On her first visit to the park a few days before she flew alone from Hawaii to California, she impressed everyone she met with her sincerity, enthusiasm, capability and gracious charm. From the time that her plane was reported down until all hope that her radio would function longer was gone, many ears were listening intently over sets attuned to her frequency in the hope that some word or signal might be picked up. It was useless. But for the occasional calls from the Coast Guard Cutter Itaca there was silence. Intensive search by the Navy vessels and planes revealed no trace. She was gone.

CO2 - General Weather Conditions

Precipitation at headquarters area was 7.89 inches, at the COO camp 5.75 inches and at Haleakala 2.88 inches. Maximum temperature at headquarters was 79 degrees and the minimum 54. At the end of the month snow was still visible in patches at the summit of Mauna Kea.

100 - Administration

110 - Status of Work

Nineteen thirty nine preliminary estimates were mailed on the 4th and a brief resume of the activities of the park during the fiscal year sent the governor on the 31st. This report, particularly that section touching on Inter-Island rates, was given considerable local publicity by the governor's office.
120 - Park Inspections by

121 - Superintendent

The superintendent was on Maui from the 11th to the 17th, where he spent two days in the crater of Haleakula inspecting the CCC work projects. He visited the Kamea Territorial CCC camp on the 15th and 16th. Routine inspection of regular and CCC projects was made in the Kilauea section, with two early morning inspections of the CCC camp.

130 - Finance and Accounts

The monthly financial statement will be found at the back of this report.

160 - Equipment and Supplies

Seven electric washing machines and two electric refrigerators, which had been transferred from the Federal Housing Administration, were received; also a rug for the ranger's office and furniture for the observation station at Haleakula were purchased. One LeBoi-Rix compressor and two Gardner-Denver jackhammers were received by transfer from the Pinnacles National Monument for CCC use. Inventory of all CCC equipment was completed during the month.

170 - Plans, Maps and Surveys

Twelve hundred feet of road were laid out along the east boundary of the Kilauea Military Camp by CCC landscape foreman Pope.

180 - Circulars, Publicity Bulletins, etc.

Two press releases, one dealing with the new Service administrative setup and transfers of superintendents, and the other with the discovery of wild nene, were issued.

Radio talks were given by Rangers Harry and Williams, CCC enrollee Sam Maloana (in Hawaiian) and a three-way talk with Rangers Williams and Murray and CCC Senior Landscape Foreman George Pope participating. During this program Mrs. Eugene Burns, wife of one of the seasonal rangers, gave two piano selections. There was also one program by the CCC music troupe.

Richard M. Stewart, photographer with the National Geographic Magazine, visited the park on the 10th for the purpose of obtaining pictures for his magazine.

Work is being started on two new natural history bulletins, one in connection with rocks and minerals of the park, prepared by Ranger Ben F. Moomaw, and the other on the flora of the region being prepared by Ranger-Naturalist Robert L. Fowler.

The 50th Anniversary Edition of the Hawaii Mainichi, local Japanese language paper, carried a page article on the park with a photograph of the staff.
200 - Maintenance, Improvements and New Construction

220 - Improvements

Project 524, force account, completion 3/4 mile grading, clearing, and surfacing of residential area roads, was 92% complete at the end of the month and the headquarters area roads improvement 95% complete.

230 - New Construction

The foundation of the new employee's residence (FP 677) has been poured and the project 10% complete at the end of July.

240 - Improvements in Approaches to the Park

Work on the 4.5 mile section of the Mamalahoa Highway in the vicinity of Pahala was 90% complete at the end of the month. The job consists of complete realignment, grading and surfacing and is under contract with James Glover.

Insufficiency of qualified labor as well as inadequacy of funds is seriously delaying construction of the Waiola bridge in Hilo on the route to the park. The work is being done by the county with labor supplied by the WPA. Various contract jobs required to use WPA labor have largely absorbed the supply, particularly of skilled workmen.

300 - Activities of Other Agencies in the Park

310 - Public Service Contractors

Mrs. George Lycurgus, wife of the manager of the Volcano House, passed away on the 3rd, after an illness of several weeks. The entire park staff attended the funeral.

While the superintendent was on Manu details of the temporary operation of the Haleakala observation station were worked out on the ground with Mr. E.J. Walsh, operator in that section.

On July 31 recommendation was made by letter for the purchase by the government of the buildings now leased from George Lycurgus as a part of the CCC camp.

313 - Schedules of Rates

Approved 1937 rates for E.J. Walsh, who operates the concession at Haleakala have been received.

316 - Modification of Existing Contracts

Revised special use permit covering Mr. Walsh's operations, was mailed the Director's office for approval.
400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist and Guide Service

Gordon Mackenzie entered on duty July 1 as seasonal ranger.

420 - Museum Service

A temporary museum exhibit for the Halemaumau information shrine is being prepared.

Work was continued by the CCC on the trailside shrines, which job is practically complete.

460 - Birds

While on a reconnaissance on the slopes of Mauna Loa, student technicians Craddock and Donaghe发现了 a flock of eight nene, of which Craddock obtained some fine pictures. Two are attached. Later study of this vicinity in company with Assistant Naturalist Lamb disclosed roosting sites, droppings and feathers which proved this region is frequently used. This was the first creditable report of these birds being seen in their native habitat in many years. A special press release was issued.

480 - Natural Phenomena

Dr. Stanley Ballard of the Physics Department, University of Hawaii, and Mr. Paul Cow, spent some time in the park in connection with Dr. Ballard's studies of gases and gas-collecting. Mr. Iwao Miyake, instructor in the same department, also accompanied them and remained here for a longer period to make further studies. Mr. Miyake departed on the 31st, and expects to attend Harvard for the ensuing two years, where he has received a scholarship.

A complete report of the activities of the Volcano Observatory under the direction of Dr. Jaggar, is attached.

Dean Keller, dean of the Engineering School, University of Hawaii, has been in the park for some time, cooperating with this office and the Volcano Observatory in studying ground tilt and tilt measurements, with the specific end in view of designing an instrument for measuring tilt, at a reasonable cost.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

Travel to the Kīlauea section amounted to 19,643 visitors as compared with 21,564 last year. At Haleakalā District Ranger Peck reports 2690 persons visited that section of the park.
530 - Visitors and Special Groups

July 4 - 45 Japanese contractors
5 - 50 in church group from Kona
10 - 8 YWCA girls from Honolulu
11 - 35 members Japanese Fencing Association
18 - 18 YWCA boys from Honolulu
19 - Mr. C.H. Lowe, distinguished Chinese lecturer
24 - 14 YWCA girls from Hilo
24 - 20 Japanese college baseball players
24 - Dr. Lingren, Professor of Geology, Massachusetts Institute of Technology, and daughter.

600 - Protection

640 - Destruction of Predatory Animals

Material was ordered and work started on the wing fence and corral in connection with the goat drives to be held in August and September, as an approved CCC project.

900 - Miscellaneous

Mrs. Philip Murray, wife of Ranger Murray, and two children, Robert and Phyllis, left for the mainland on the 20th.

The entire park CCC company marched in the parade held in Hilo on July 5. As new uniforms had just been received, the boys made a particularly good appearance, and in all the parade was by far the best 4th of July parade held in Hilo. The superintendent was honored by a place on the reviewing stand.

Literary exercises commemorating the 4th of July were held in Hilo on that day with Dr. T.A. Jaggar delivering one of the two principal addresses.

Respectfully submitted

Edward G. Wingate
Superintendent
Dr. T. A. Jaguar delivering one of principal addresses at Milo Literary exercises celebrating the 4th of July.
CCC enrollees from the park camp HNP-1 marching in Hilo Parade on July 4.
Group of local people bidding aloha to Mrs. Philip Murray, wife of Ranger Murray, and Robert, who left for the mainland July 20.
Flock of Reu, native Hawaiian goose (Nesochen sandvicensis) found living in wild state around 7000 foot elevation on Mauna Loa. Located by CCC Student Technician Graddock and Donagho.

August 7, 1937

Report of the Camp Director, CCC, HNP, to the Superintendent, Hawaii National Park for the month ending July 31, 1937.

The labor turnover for the month follows:

Kilena Section.

| To accept permanent employment | - - - - 4 |
| Desertion                       | - - - - 1 |

Haleakula Section.

| To accept permanent employment | - - - - 1 |

A total of 2,615 man days were worked on the following approved projects.

<table>
<thead>
<tr>
<th>Project</th>
<th>Man Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCC-7</td>
<td></td>
</tr>
<tr>
<td>112 Garage Building</td>
<td></td>
</tr>
<tr>
<td>119 Shelters (Hana)</td>
<td></td>
</tr>
<tr>
<td>119 Repair East House</td>
<td></td>
</tr>
<tr>
<td>120 Structural Improvements</td>
<td></td>
</tr>
<tr>
<td>Administration Bldg., HNP.</td>
<td></td>
</tr>
<tr>
<td>131 Fences</td>
<td>507</td>
</tr>
<tr>
<td>156 Tool boxes</td>
<td></td>
</tr>
<tr>
<td>252 Truck Trail Maintenance</td>
<td>333</td>
</tr>
<tr>
<td>705 Landscaping Undifferentiated</td>
<td>213</td>
</tr>
<tr>
<td>706 Moving &amp; Planting Trees</td>
<td>392</td>
</tr>
<tr>
<td>1001 Education, Guide Contact Station Work</td>
<td>122</td>
</tr>
<tr>
<td>1004 Eradication of Poisonous Plants</td>
<td>368</td>
</tr>
<tr>
<td>1009 Maps &amp; Models</td>
<td>10</td>
</tr>
</tbody>
</table>

Total: 2,615

The construction of the main shelters is progressing satisfactorily and will be completed on schedule. The approval of a drift fence for the eradication of goats and the protection of trees will be of great assistance in the reforestation of the lower lands in the park. Work will be started about the second of August.

The project for landscaping the Kilena Military Camp area and the moving of trees has gone along well and practically all of the soil preparation work is completed.
The health of the camp has been uniformly good. There was a slight increase in lost time accidents this month, consisting of a broken arm and several smashed and bruised fingers caused by small tools and it will be necessary to concentrate the safety work on the subject of careless handling of small tools.

The educational department is still doing good work, classes being held in Journalism, English and Typing.

Baseball held the spotlight in sports with the Camp team doing only fairly.

The music boys are still interested in concert work and moving pictures are being shown at the Camp once a week.

A troupe of Hawaiian singers and dancers volunteered their services without remuneration and gave an excellent entertainment at the camp.

The weather during the month was fair and no working time was lost on that account.

Respectfully submitted,

Wilkinson J. Stephens
Camp Director, COH-MP.
Mr. Edward G. Wingate, Superintendent
Hawaii National Park, T.H.


Dear Mr. Wingate:

Weekly press reports, the Volcano Letter for June, and crater observations were issued and continued in the course of the usual routine. The month was distinguished by continuous work by several physicists from the University of Hawaii in the Observatory laboratories. Progress was made in tests of new models of the earthquake annular crater. Through the University physicists the seismographs at Kilauea, Kona and Hilo have been renovated and tested.

Volcanic Activity for the month

The following are the earthquake totals of Halemaumau pit data for Kilauea.

<table>
<thead>
<tr>
<th>Volcano</th>
<th>Week ending</th>
<th>Slides</th>
<th>Crack openings</th>
<th>Local tremors and quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>July 4</td>
<td>2</td>
<td>6.0 mm</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>0</td>
<td>7.0</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>0</td>
<td>9.5</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>0</td>
<td>11.6</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Aug. 1</td>
<td>0</td>
<td>5.5</td>
<td>20</td>
</tr>
</tbody>
</table>

Distant earthquakes were recorded July 1, 3, 11, 22 (Alaska) and 26 (Mexico). Felt shocks were July 3, 16, 22 (a moderate earthquake, part of a sudden Kilauea swarm), 30 (a moderate earthquake and three feeble ones; another Kilauea Swarm) and 31.

Work of the Volcanologist

With the Assistant Geologist on leave, the Volcanologist measured the seismograms, and Mr. Moonaw assisted in some of Mr. Keesche’s duties. The new seismographs were tested during the month by actual earthquakes. Progress was made in new models of these instruments by Okuda, the mechanical assistant of the Hawaiian Volcano Research Association, and both he and H. Yasumaka obtained instruction in lathe work from Iwao Miyake, Instructor in Physics from the University.
Colonel R.S. Thomas, commanding the Third U.S. Engineers called at the Observatory July 9 and arrangements were made, in accordance with the wish of the commanding general H.A. Drum, for a preliminary inspection of the ground, at Hilo and on Mauna Loa, where the proposed barriers for the defense of Hilo are to be placed.

Accordingly Dr. Jaggar with Yasunaka acting as chauffeur, took Colonel Thomas to Pihomua above Hilo July 13, and followed the line of the proposed barrier thence through Kauuma to Waiakea. The ground appeared quite favorable for the project.

The party then proceeded to Kauuma, and on July 14 a successful trip in good weather was made to Kauuma, Puu Huluhulu was climbed, and the ground in the Kauuma saddle was critically inspected with a hand level having in view the pooling of lava there, and its escape to the west. Some photographs were made. Enough could be seen of the upper Mauna Loa slope by walking over the 1935 lava, to make it possible to appraise the value of the proposed upper barrier. Again the appraisal of conditions appeared to be favorable to the project, and Colonel Thomas, who has just completed the Kolekole Pass Military Road on Oahu, in reviewing roughly the Volcanologist's estimate of $800,000 for the entire defense of Hilo Harbor, thinks that this estimate is reasonable. He strongly urged that the survey proposed by the Rivers and Harbors Bill be made to include the entire project of all three barriers.

On July 13 Dr. Stanley S. Ballard, Instructor on Physics, University of Hawaii, accompanied by Mr. Paul Gow, chemist of the Hawaiian Sugar Planters' Association, arrived at the laboratory and remained three days, setting in operation oxy-clino blow-pipe apparatus for melting glass. This and numerous items of equipment and supplies for making vacuum tubes, and collecting volcanic gases, which had arrived during recent months, were checked over, found to be in working condition, and prepared for research to be carried out a month later.

Spectrograms made with the large quartz spectograph of the E.S.P.A. in Honolulu, show an excessive domination of the lines and bands of carbon monoxide for the dried gas of the Sulphur Bank at Kiluaea. An analysis carried out at the University by J.H. Payne, Assistant Professor of Chemistry, shows carbon dioxide, sulphur dioxide, nitrogen and oxygen, and not any carbon monoxide nor hydrogen. There is deficit of oxygen for the amount of nitrogen present. Some of the oxygen had combined with sulphur or carbon. The carbon monoxide in the spectrogram must have been disassociated from carbon dioxide in the discharge tube by the high voltage. The residue of the analysis will be used for further spectroscopic work. These results confirm former collections of gas at high temperature from the flames of hot lava, in that they show chemical reactions in progress even at the much lower temperatures of the hot steam at Sulphur Bank.
Instructor Miyabe arrived July 14 and set about testing our seismographs. Dr. W.J. Eller, head of the Physics Department, arrived July 31, bringing with him a special tilt meter of his own design and a magnetometer. He joined forces with Miyabe in determining the constants of our seismographic instruments, and the assistants at the Observatory went about with them to Hona, Hilo, etc. The new precision lathe, and the machine tools furnished by the Volcano Research Association, are doing good service. Mr. Miyabe built a sensitive calibrator for the seismographs. These University men are still at work at the end of the month. They have made valuable suggestions to improve the seismoscopes under construction by Okuda on Jagger's designs.

The Volcanologist held a conference with Dr. A. L. Dean, president of Volcano Research Association, in Honolulu July 20, and conferences with the University workers were held July 15 and 24. It was gratifying to be asked to make an address at the Fourth of July celebration in Hilo under the Chamber of Commerce, at a special dinner of farewell to General Drum at Kilauea Military Camp July 12, and to repeat the address on "Trends in the Philosophy of Science" at Hilo Rotary Club July 16. This address President Crawford of the University of Hawaii has ordered reprinted in an Occasional Paper of the University. A visit from Professor Waldemar Lindgren is the author of a leading textbook on Mineral Deposits and is Emeritus Professor of Economic Geology, Massachusetts Institute of Technology, where he succeeded Dr. Jagger as head of the Department in 1912.

It was arranged for Mr. Maasche to do a week's work in San Francisco in August with levelling experts, to determine what is wrong with our large precise level that has been giving unsatisfactory results.

Lectures

July 4, Dr. Jagger, "Lincoln and Darwin", Chamber of Commerce celebration, Hilo.
July 12, Dr. Jagger, "Farewell to General Drum", Kilauea Military Camp. July 16, Dr. Jagger, "Trends in the Philosophy of Science", Rotary Club, Hilo.

Visitors

The following have visited the Observatory:

June 9, Colonel R.S. Thomas, commanding U.S. Third Engineers, U.S.A.
July 10, Mr. Richard Stewart, photographer of National Geographic Eclipse Expedition.
July 10, President D. L. Crawford, University of Hawaii.
July 10, Dr. O.C. Magistad, Soil Chemist, Graduate School of Tropical Agriculture, University of Hawaii.
July 16, Major Thee, graduate Massachusetts Institute of Technology, Motor Transport Service, U.S.A.
July 17, Professor E.A. Wadsworth, Professor of Agriculture, University of Hawaii and Agricultural Experiment Station, Honolulu.

July 22, Dr. Nils P. Larsen, Director of Queen's Hospital, Honolulu, accompanied by thirteen University men from the cruise of the sailing vessel "Wander Bird" around South America.

July 28, Waldemar Lindgren Rogers, Sc.D., Professor of Economic Geology, Massachusetts Institute of Technology, accompanied by Miss Lindgren.

Very respectfully,

T.A. Jaggar
Volcanologist
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<tr>
<th>SYMBOL</th>
<th>APPROPRIATION</th>
<th>ALLOTTED</th>
<th>EXPENDED &amp; OBLIGATED</th>
<th>BALANCE</th>
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<tr>
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<td>6,215</td>
<td>1,087</td>
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<td>6,215</td>
<td>1,087</td>
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<td>Campers in public camps during month,</td>
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UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Haleakula Section, Hawaii National Park for the month of July, 1937

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<th>This Travel Year</th>
<th>This Travel To Date</th>
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<tr>
<td>Motorcycles,</td>
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<tr>
<td>Total persons entering via private transportation,</td>
<td>2,220</td>
<td>16,385</td>
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<td>Persons entering via stages,</td>
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<tr>
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<td>2,220</td>
<td>16,385</td>
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Automobiles in public camps during month, ...
Campers in public camps during month, ...
REPORT OF PARK REVENUES

Kauai National Park for the Month of July, 1937

<table>
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<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
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<tbody>
<tr>
<td>Park revenue on hand beginning of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received,</td>
<td>25.00</td>
<td>110.00</td>
</tr>
<tr>
<td>Total,</td>
<td>25.00</td>
<td>110.00</td>
</tr>
<tr>
<td>Remitted,</td>
<td>25.00</td>
<td>110.00</td>
</tr>
<tr>
<td>On hand close of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Park revenues received this year to date,</td>
<td>25.00</td>
<td></td>
</tr>
<tr>
<td>Park revenues received last year to date,</td>
<td>110.00</td>
<td></td>
</tr>
<tr>
<td>Percentage decrease</td>
<td>85.00</td>
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<tr>
<td>Per cent of percentage decrease</td>
<td>-773%</td>
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(28414)
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<tr>
<th>GOVERNMENT PUBLICATIONS:</th>
<th>Number</th>
<th>Value</th>
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<tbody>
<tr>
<td>On hand beginning of month,</td>
<td>1,066</td>
<td>156.55</td>
</tr>
<tr>
<td>Received during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total,</td>
<td>1,066</td>
<td>156.55</td>
</tr>
<tr>
<td>Sold during month,</td>
<td>4</td>
<td>2.00</td>
</tr>
<tr>
<td>On hand at close of month,</td>
<td>1,062</td>
<td>154.55</td>
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</table>

<table>
<thead>
<tr>
<th>NON-GOVERNMENT PUBLICATIONS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>On hand beginning of month,</td>
</tr>
<tr>
<td>Received during month,</td>
</tr>
<tr>
<td>Total,</td>
</tr>
<tr>
<td>Sold during month,</td>
</tr>
<tr>
<td>On hand at close of month,</td>
</tr>
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<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Cash on hand beginning of month,</td>
<td>9.88</td>
</tr>
<tr>
<td>Sales during month,</td>
<td>2.00</td>
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<tr>
<td>Total,</td>
<td>11.88</td>
</tr>
<tr>
<td>Remitted during month,</td>
<td>1.90</td>
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<tr>
<td>Balance,</td>
<td>9.98</td>
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### Status of Authorized Projects

Hawaii National Park for the month of July, 1937

<table>
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<tr>
<th>Description of Projects</th>
<th>Percent Constructed to Date</th>
<th>Percent Constructed This Month</th>
<th>Percent Constructed Last Month</th>
<th>Probable Date of Completion</th>
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<tr>
<td>520.1 Halesakala Road, Post Construction (F.A.)</td>
<td>77</td>
<td>5</td>
<td>5</td>
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<tr>
<td>523 Uweakuma-Bird Park Road, surf., treatment, 1.75</td>
<td>100</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>524 Residential Area Roads, completion 3/4 mile cirg., grg., and surf. (F.A.)</td>
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<td>12</td>
<td>15</td>
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<tr>
<td>525 Headquarters Area Roads, Improvements (F.A.)</td>
<td>95</td>
<td>5</td>
<td>25</td>
<td></td>
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</tbody>
</table>

FP 663.14 For the erection of one observation station & toilets; one office and checking station; including the purchase of one wood heating stove and miscellaneous furniture, Halesakala. 100 0 0

FP 677.14 Employee's Residence and connecting service lines for newly appointed U.S. Commissioner 10 10 0
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATUS OF PERSONNEL
Hawaii National Park for the Month of July, 1937

<table>
<thead>
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<th></th>
<th>This Month</th>
<th>This Month Last Year</th>
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<tbody>
<tr>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
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<tr>
<td>Number of employees beginning of month</td>
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</tr>
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<td>Number of additions</td>
<td>1 0</td>
<td>0 0</td>
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<tr>
<td>Total</td>
<td>24 0</td>
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<tr>
<td>Number of separations</td>
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<td>1 0</td>
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<td>Number of employees close of month</td>
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</tr>
<tr>
<td>Number of promotions during month</td>
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<tr>
<td>Aggregate amount of annual leave taken</td>
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<tr>
<td>Aggregate amount of sick leave taken</td>
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<tr>
<td>Aggregate amount of leave without pay</td>
<td>16 0</td>
<td>0 0</td>
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### U.S. Department of Agriculture, Weather Bureau

**Cooperative Observers’ Meteorological Record:**

**Month of:** JULY 1937  
**Station:** Hawaiian Volcano  
**County:** Hawaii  
**Observatory:** Hour of Observation, 8:00 a.m.

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<th>Longitude</th>
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<table>
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<tr>
<th>DATE</th>
<th>MAXIMUM</th>
<th>MINIMUM</th>
<th>RANGE</th>
<th>WIND (M.P.H.)</th>
<th>DIRECTION</th>
<th>PRECIPITATION (IN.)</th>
<th>TEMPERATURE</th>
<th>DEPTH OF SHOW</th>
<th>TOTAL DEGREES BETWEEN</th>
<th>DEPRESS</th>
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<th>SUNSET</th>
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**Monthly Summary**

<table>
<thead>
<tr>
<th>MONTHLY SUMMARY</th>
<th>TEMPERATURE</th>
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<tr>
<td>Mean maximum</td>
<td>69</td>
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<tr>
<td>Mean minimum</td>
<td>57</td>
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<tr>
<td>Mean</td>
<td>63</td>
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<tr>
<td>Maximum</td>
<td>79</td>
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<tr>
<td>Minimum</td>
<td>44</td>
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<tr>
<td>Greatest daily range</td>
<td>22</td>
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</table>

**Precipitation**

- Total: 1.05 inches
- Greatest in 24 hours: 0.10 inches
- On ground: 0.60 inches
- At end of month: 0.80 inches

**Number of Days**

- With .01 inch or more precipitation: 28

**Dates Of**

- Light Frozen Snow: 24
- Heavy Frosted: 24
- Snow: 24
- Light Hail: 24
- Heavy Hail: 24
- Clear: 1
- Partly cloudy: 24
- Cloudy: 6

**Remarks:**

- Fogs: 24
- Thunderstorms: 24
- Aurorae: 24

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**S. A. Jagger**, Cooperative Observer.

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**IN TRIPlicate**

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August 5, 1937

The Superintendent
Hawaii National Park

Dear Mr. Wingate:

There follows the report of the ranger department for July, 1937.

000 - General

Several visitors have taken advantage of the two shelters now available in Haleakala crater during the month.

020 - General Weather Conditions

Precipitation at Headquarters area was 7.89 inches, at the CCC camp 7.47 inches and at Haleakula 2.88 inches. Maximum temperature at headquarters was 79 degrees and the minimum 54.

100 - Administration

110 - Status of Work

Park activities were confined to routine inspections of all work, also field inspections, administration and planning.

150 - Equipment and Supplies

Seven washing machines and two electric iceboxes, which had been transferred from the Federal Housing Administration, were received; also one rug for the ranger's office and furniture for the observation station at Haleakula.

170 - Plans, Maps and Surveys

Twelve hundred feet of road were laid out along the east boundary of the Kilauea Military Camp by CCC landscape foreman Pope. A display for the Haleakula informa
tin shrine was partially completed.

180 - Circulars, Publicity Bulletins, etc.

Two press releases, one dealing with the new administrative setup and transfers of superintendents and the other with the discovery of wild nene; were issued.

Radio talks were given by Ranger Murray, CCC enrollee Sam Malama and one three-way talk, with Rangers Williams and Murray and Mr. Pope, in addition to a program by the CCC music troops.
200 - Maintenance, Improvements and New Construction

220 - Improvements

Ranger Peck reports that some waterproofing work was done on the windows of the observation station and a wider rail has been constructed around the relief map.

230 - New Construction

The foundation for the new employee's residence, (FP 677) has been poured.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist and Guide Service

Gordon Mackenzie entered on duty July 1 as seasonal ranger.

420 - Museum Service

CCC enrollees assisted at both the Haleakala and Waiakuna Museum during the month.

Work was continued, under CCC, on the trailside shrines and displays for same.

460 - Birds

While on a reconnaissance on the slopes of Maua Loa, student technicians Craddock and Donagho discovered a flock of eight nene, of which Craddock obtained some fine pictures. Later study of this vicinity in company with Mr. Lamb, disclosed roosting sites, droppings and feathers which proved this region is frequently used.

480 - Natural Phenomena

Dr. Stanley Ballard of the Physics Department, University of Hawaii and Mr. Paul Gow, spent some time in the park in connection with Dr. Ballard's studies of gases, and gas-collecting. Mr. Iwao Miyake, instructor in the same department, also accompanied them and remained here for a longer period to make further studies. Mr. Miyake departed on the 31st, and expects to attend Harvard University for the ensuing two years, where he has received a scholarship.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in travel

Travel to the Kilauea section amounted to 19,643 visitors as compared with 21,554 last year. At Haleakala District Ranger Peck reports 2860 persons visited that section of the park.
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING
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500 - Use of Park Facilities by the Public

510 - Increase or Decrease in travel

Travel to the Kilauea section amounted to 19,643 visitors as compared with 21,554 last year. At Haleakala District Ranger Peck reports 2690 persons visited that section of the park.
530 Visitors

July 4-45 Japanese contractors

600 Protection

610 - Police Protection

Daily patrols were made. The case of Enrollee DeMello has been made the subject of a separate report.

620 - Fire Protection

Frequent patrols were made during the month.

640 - Destruction of Predatory Animals

Material was ordered and work started on the wing fence and corral in connection with the goat drive which will be held in August.

900 - Miscellaneous

Mrs. George Lycurgus, wife of the manager of the Volcano House, passed away on the 3rd.

Mrs. Philip Murray, and two children, left for the mainland on the 20th.

Respectfully submitted

[Signature]

Chief Ranger
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Hawaii National Park

MONTHLY REPORT
JUNE 1937

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge. All files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER,
Director.
The Director  
National Park Service  
Washington, DC

Dear Mr. Director:

There follows the report of activities for Hawaii National Park during June.

000 - General

Since the termination of the maritime strike the first part of February, there has been a noticeable increase in travel to the park. From the beginning of the travel year on October 1, 1936, until the conclusion of the strike travel to the Kilauea section declined 16%, or a total loss of 10,736 persons. For about a month and a half afterward, until travel conditions had adjusted themselves a small decline in visitors was continued which reached its maximum on March 20 when the total loss was 12,400 persons. Since that time there has been a steady increase in travel, which on June 12, amounted to a total of 9,346 visitors leaving a net loss in travel for the year of 3,084 persons, or 2.4%. The hotel operators reports of gross revenues also show a similar increase. Even without volcanic activity it appears certain that when the travel year is over an increase in travel will be shown at Kilauea and Haleakula, with 56 months to go the total is 16,000 compared with 16,000 for the entire previous year.

020 - General Weather Conditions

Precipitation at headquarters area for June was 2.45 inches, at the CCC Camp 1.33 inches and at Haleakula .10 of an inch. Maximum temperature at headquarters was 76.3 and the minimum 51.6. Due to shortage of water at the Military Camp, it was necessary for the Army to haul water from Paia, a distance of some 22 miles, and during this emergency the Park Service supplied approximately 6000 gallons of water to the summer cottages within the park area. At the end of the month snow was still visible in patches on Mauna Kea.

100 - Administration

110 - Status of Work

The last half of the month was devoted almost entirely to the preparation of the 1939 preliminary estimates, which it is hoped, may be mailed the first week in July.
Miss Anna E. Searle of Hilo entered on duty on the 28th as assistant clerk-telephone operator, seasonal. This will be Miss Searle's second season in this position.

120 - **Inspections by:**

121 - **Superintendent**

Routine inspections were made of all projects under the regular appropriation as well as BOW. In addition several trips were made through Kipuka Pa'auilo to ascertain extent of defacement of trees and shrubbery which has been going on for some time in that area.

On June 14, the superintendent was the guest speaker at the Kohala Masonic Club.

123 - **National Park Service Officers**

Field Supervisor E.E. Tillott, of the BOW, visited the park on June 23 for the purpose of inspecting the local CCC camp. He also visited the Territorial CCC Camps while on the island, departing by plane on the 28th.

120 - **Finance and Accounts**

The regular financial report for the month of June will be found at the back.

140 - **Labor Situation**

Representatives of the pineapple and plantation companies have been visiting the island at different times during the month for the purpose of securing labor for their plantations. The companies are now establishing camps somewhat similar to and based on the CCC. Every effort is being made to attract local labor, and it is expected that approximately 40 boys will leave the Kiiawa CCC camp for this employment, or else to work on the various sugar-plantations on this and other islands.

150 - **Equipment**

One horse, four gallon-size fire extinguishers, two back pumps and other miscellaneous fire protection tools were purchased in June.

180 - **Circulars, Publicity Bulletins, etc.**

The regular weekly radio talks over the local station at Hilo were continued during the month, with one program being taken over by the Kuaolea music troupes from the CCC camp. Those who were Rangers Moemaw and Murray and Assistant Geologist Wassebo.

Corrected maps for inclusion in the new edition of the circular of general information were mailed on June 6.
Dr. T.A. Jaggar, volcanologist, delivered the commencement address at the Iolani School in Honolulu on the 3rd.

200 - Maintenance, Improvements and New Construction

210 - Maintenance

Work was commenced, under ECW, on repairs to the administration building, necessitated by damage from steam seeping through the walls, causing them to rot. It has been found necessary to tear out the walls of the lobby completely, and also take up the entire floor in that room.

220 - New Construction

Word was received that the contract for project FP 577, employee's residence, had been approved and the contractor, S.K. Oda, commenced construction on June 28.

At the end of the month project 524, residential area roads, completion 3/4 mile clearing, grading and surfacing, was 80% complete and project 525 headquarters area roads, improvements, 90% finished.

240 - Improvement of Approaches to the Park

The Territorial Highway Department commenced painting of a center line strip the entire length of the road from the park boundary to Hilo, and at the end of the month had about half the road striped. This should be of great assistance in driving during foggy and rainy weather.

Construction of the road across the lava flows in Kam was started under the WPA.

Good progress is being made by the contractor, James Glover, on that part of the Masaloha Highway (round-the-island road) in the vicinity of Pahala.

300 - Activities of Other Agencies in the Park

310 - Public Service Contractors

313 - Schedules of Rates

The 1937 approved rates for the Volcano House were received.

314 - Complaints

Several verbal complaints were received concerning the quality of meals served at the Volcano House.
Seasonal ranger-naturalist Robert E. Fowler, formerly of the Yellowstone, entered on duty June 4 and seasonal ranger Burns, who served one season at Grand Canyon, entered on duty June 18.

Ranger and Mrs. Harry W. Doust left the park for their new station at Colonial on June 2.

Assistant Park Naturalist S.H. Lamb and his family returned from an extended trip to the mainland on June 2. During his absence Mr. Lamb spent some time in the Berkeley office in connection with park museum matters.

During June four trail and information shrines were completed under ECW. Considerable progress has been made on the preparation of temporary displays for these shrines, which will be used until such time as the permanent displays called for in the museum development plan are approved.

ECW student technicians Harold Craddock and Walter Donagho, both of Honolulu, are making a study of the birdlife in the park. Later, if time permits, they will make studies in the various other localities on this island.

About 9:30 the night of June 4 a large, round ball of light was seen streaming across the skies by ECW Chief Clerk Underwood and Mrs. Underwood, going between Mauna Loa and Mauna Kea. Both Mr. and Mrs. Underwood were convinced at the time that it was an airplane, and it is interesting to note that this same meteor was seen by Dr. Jaggar, volcanologist, from the deck of the Inter-Island steamer, and he, at the time, was of the same opinion.

The report of the Volcano Observatory will be found at the back.

Hugh H. Wassche, assistant geologist, left for the mainland on leave, June 30. He expects to be gone approximately 6 weeks.

Travel to Maui for June amounted to 16,231 persons as compared with 12,177 for the same period in 1936. At Haleakula District Ranger Peck reports 1908 persons visited that section.
Visitors

June 2 - Lorrin P. Thurston, president and manager of the Honolulu Advertiser, for several days.

- 5 - 20 Girl Scouts and their leaders from Kohala
- 38 students from the Hakalau school
- 55 sailors from the Japanese merchant marine training ship Nippon Maru

- 6 - Another group of 55 sailors from the same ship

- 16 - 119 sailors from Japanese ship, Onda

- 17 - 125 sailors from


- 20 - 13 YMCA boys from other islands

- 16 - Dr. Mead of Brown University, Providence. He and Mrs. Mead were overnight visitors at the Volcano House.

- 21 - Dr. and Mrs. Theodore Dunham visited the Haleakula section, leaving Maui on the 22nd. They were also overnight visitors on this island, staying in the park. Dr. Dunham is an astronomer at the Mt. Wilson Observatory and he and Mrs. Dunham were on their way back from studying the recent eclipse in the South Seas.

- 16 - Mr. Rollie W. Miller of Los Angeles, the Grand Master of Masons in the California Jurisdiction and Judge Frank M. Smith of the Los Angeles Superior Court, for the day.

- 23 - Dr. Kalidas Nag, head of the postgraduate department, University of Calcutta, overnight. Dr. Nag is on the summer school faculty of the University of Hawaii as an exchange professor.

- 25 - Dr. Hans Luther, former German ambassador to the U.S. for the day. He and his party were shown around the park by Dr. Jagger.

- 27 - 250 sailors from the USS Colorado

- 28 - 100 NEDTC cadets from the same ship. On board the Colorado were the following university presidents, who also visited the park: Dr. Leo Paul Seig, Univ. of Washington; Dr. Marion Luther Brittain, Georgia Tech.; also Dr. Charles Darleth, Jr., dean of college of engineering, Univ. of Calif., and Dr. James Washington Bell, professor of money and banking and member of administrative board of the graduate school, Northwestern Univ.
600 - Protection

610 - Police Protection

Ranger B.F. Moomaw received his commission as Territorial deputy sheriff, without compensation, during the month.

Four arrests were made by the Hilo police force in the residential area just outside the park boundaries. They included several members of one of the local families, who, it appeared, were responsible for the series of petty thievery which had been going on in this section for the past several years.

620 - Fire Protection

The chief ranger's annual report on the inspection of fire hazards was mailed on the 13th, and the fire prevention and forest protection estimates for 1939 mailed on the 28th.

Because of the extremely dry spell which continued for the better part of the month it was necessary to place caution and no smoking signs at different locations in the park.

900 - Miscellaneous

On the 23rd a moonlight hike through Bird Park was conducted by Ranger Williams, with an informal street dance - music by the Kealoha troupe from the CCC camp, being held in the parking area adjacent to Bird Park for approximately half an hour before the hike.

These same boys also volunteered music for an amateur program over KSSMM (owned and operated by Hugh Wesche, assistant volcanologist) which was broadcast to a Vancouver station.

Mrs. T.A. Jagger, wife of the volcanologist, left the first part of the month, for an extended trip to Africa. She expects to be gone about four months.

The quarterly dinner-business meeting of the Hilo branch of the Federal Business Association was held at the Seaside Club in Hilo on the 16th. Officers for the ensuing year are C.L. Bowker, office manager of the Hilo WPA office, president; Sheriff Henry Martin, US deputy marshal, vice president; and Martin Pence, referee in bankruptcy, secretary. After the business meeting there was an hour of entertainment and music by the local WPA orchestra.

On June 19, a Joseph Scharch introduced himself to me stating he was connected with Delegate King in Washington. Later the same evening it was found out that he also introduced himself to one of the rangers as an inspector from
the Department of the Interior. The next day it was learned from the local chief of detectives that this man was from Honolulu and had a none too savoury reputation. However, he left the park after spending the night at the Volcano House, and nothing further was done.

Respectfully submitted

Edward G. Wingate
Superintendent
Park ranger and Mrs. Harry W. Doust, who left--Mrs. Doust, Chief Clerk Higashida, Mr. June 2 for their new station at Colonial Natl--Doust and Ranger Murray.

Park.
Temporary Ranger Elgane Burns and Mrs. Burns
Hawaiian orchestra of CCC Camp, Hawaii National Park who performed at an entertainment given at camp by CCC personnel. These same boys volunteered music for an informal radio party broadcast over amateur station XSMXM (owned and operated by Hugh H. Wessle, assistant geologist in the park) to a station in Vancouver B.C. Left to right they are Oliver Waisan, Albert Kealoha, Jackson Kawesahi and James Lahia.
Project No. 524 - Surfacing parking area in rear of park administration building.

Project No. 525 - Hotel entrance road, surfacing completed at turnaround and parking area.
ECW Job 33 - repairs to administration building. Due to continual seep­ing of steam through the walls and floor, causing the timbers to decay, it has been necessary to rebuild the outside walls of the lobby completely, and tear up the entire floor in that room.
United States
Department of the Interior
National Park Service
Hawaii National Park
Hawaii

July 9, 1937

Mr. Edward G. Wingate, Superintendent
Hawaii National Park, T. H.

Subject: Report of the Hawaiian Volcano Observatory for
June, 1937.

Dear Mr. Wingate:

Weekly press reports and crater observations have continued with the
usual routine. Numerous distinguished visitors have visited the Observatory.
Several publications have appeared. Distinct progress has been made in a
new earthquake annunciator.

Volcanic Activity of the Month.

The following are the seismograph totals and Halemaumau pit data for
Kilauea volcano:

<table>
<thead>
<tr>
<th>Week Ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack Openings</th>
<th>Local Tremors and Quakes</th>
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</table>

Feeble shocks, somewhat felt, occurred May 31, June 3, June 13, June
16, two on June 20, June 21 and June 25. Two distant earthquakes were
registered June 21 and 24. A remarkable slow horizontally moving fire-ball
with flaming tail, without noise, was seen throughout Hawaii territory at
9:50 pm June 4. Of all measured local earthquakes, 16 were from Kilauea,
6 Mauna Loa and 2 from more distant sources.

Work of the Volcanologist

The research of the month made definite progress with the seismoscope
annunciator. Cabinet instruments were set up in Mr. Washcke’s office May
28 and in Dr. Jaggar’s house June 17th. Small quakes indicated insufficient
sensitivity. This was improved by a magnifying lever and instruments were
tested on the shaking table.
A second line of investigation concerned using a microscope for inspection of a light signal to record tilt. After June 23rd the instrument shop was put in order for the use of the University Physicists in the summer research program, and at the same time a microscope was set up and tests made with micrometer scales in the ocular, against a small electric light bulb in the field of the instrument. A photo scale reduced from the card, which has been used in Halemamaa clinometers, was prepared for insertion in micrometer ocular. The light will be attached to the tilt pendulum. Its migration will be recorded photographically by automatically turning it on with clockwork at regular intervals. As there will be no contact except the light record between microscope and pendulum, an earthquake will have no pivots interposed to distort the tilt record. It is believed this mechanism will reveal the daily tilt curve, and if this registers as a closed loop, the succession of loops will reveal the seasonal and volcanic changes of tilt in the Halemamaa cellars. The photographic film or card above the microscope will remain in place quite stationary while the moving light images write a succession of dots; and the film will need changing or developing at such intervals, of a day or week, as experience shall determine. The entire mechanism can be assembled cheaply in our shops, using a small camera and common clockwork.

A letter from Dr. H. Nagaoka of the Institute of Physical and Chemical Research in Tokyo in reply to an inquiry by Mr. Jaggar, gave details of an important apparatus for diagnosing volcanic activity. At Asama volcano he has discovered that a magnetometer moves suddenly during underground volcanic disturbance. Theoretically this should be true, for liquid lava solidifying, or vice versa, changes its magnetic attractiveness. He writes "It would be interesting to measure the magnetic variations at Kilauea, as subterranean changes can be roughly inferred from the records. Observations at Asama are continued with the result that there are complicated changes before an explosion. Different intermittent disturbances are observed several weeks before the explosion, which is only marked by magnetometer jerks of great amplitude and short duration. The rumbling is always accompanied by great magnetic changes. If you wish to try the experiments, I am prepared to procure for you the apparatus with greatest speed."

The cost of this apparatus in Japan is $411.00. Professor Eller, Head of Physics Department, University of Hawaii, writes "That outfit of Nagaoka's is intensely interesting, and should give some valuable information." He will bring apparatus from Honolulu in July, and we shall make preliminary experiments by melting basalt in juxtaposition to a magnetometer.

Work of the month has involved much study of the finances of the Volcano Research Association, on which our assistants and shops and the Volcano Letter publication are dependent. These funds are somewhat uncertain, and are the cause of a good deal of worry.
Inspection of Makaopuhi pit was made June 14 with the Chief Ranger. Some motion of debris in rim cracks was discernible, and steaming sulphur exists in several places on the southwest talus. A manuscript on the Geology of Lanai by H. T. Stearn is in Dr. Jaggar's hands for revision. Office classification of press notices continues under Sato. On June 11 the wireless antenna was changed, over the Observatory, to remove it from the vicinity of a 220-volt power line. The large Lietz level came back from San Francisco June 20, and is still unsatisfactory; it will be taken back to San Francisco for investigation by Mr. Waesche in July.

Work of the Seismologist

Mr. H. E. Waesche has brought all his reports very promptly up to date so that the Volcano Letter is now published within a month following its date of issue. He ran tests for the constants of the Bosch-Omori seismographs and greatly improved their action. On June 22 he gave a Radio address over KHBC, Hilo, on "Triangulation and Level Changes at Kilauea". On the request of the Central Jesuit Station for Seismology in St. Louis our seismogram of the earthquake of April 15, 1937 was sent to that office for study. Mr. Waesche was granted leave of absence June 30 and sailed from Honolulu July 3 for six weeks in the United States on the mailboat.

Visitors.

The following have visited the Observatory:

June 5, Eugene Price, manufacturer, of Cincinnati and Pasadena.

June 23, Dr. and Mrs. Theodore Dunham, spectroscope specialist with National Geographic eclipse expedition to Canton island, from Mount Wilson.


Dr. Kalidas Nag, historian of India, Calcutta University.

June 25, Dr. Hans Luther, recently Ambassador from Germany, former President of the Reichsbank.

June 27, President Sieg, Washington State University, Professor Derleth, University of California, President Bell, Northwestern University, President Brittain, University of Georgia. Captain Triedel, U.S. Battleship Colorado.

Lectures.

June 3, Dr. Jaggar, commencement address at Iolani School, Honolulu, subject "Iolani 1862-1935".
June 22, Radio talk, H. H. Waechte, as above.

Publications.


A. E. Jones, "Ground Surface Displacements and Earthquakes at Kilauea, Hawaii, First Half of 1935". Same as above, page 9-10.

L. W. de Vis-Norton, "La Science sauve une Ville", La Revue Colombienne, Quebec, Beaureville, May 1937, p. 6, illustrations.

The "Volcano Letter" for May was published the last week in June.

Very respectfully,

T. A. Jaggar
Volcanologist
July 6, 1937.

Report of the Camp Director EOW HNP to the Park Superintendent Hawaii National Park, for the month ending June 30, 1937.

The labor turnover for the month of July follows:

Kilauea Section

<table>
<thead>
<tr>
<th>Problem</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>To accept permanent employment</td>
<td>12</td>
</tr>
<tr>
<td>Misconduct</td>
<td>1</td>
</tr>
<tr>
<td>Fraudulent enrollment</td>
<td>1</td>
</tr>
<tr>
<td>Desertion</td>
<td>1</td>
</tr>
</tbody>
</table>

15

Haleakale Section

<table>
<thead>
<tr>
<th>Problem</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>To accept permanent employment</td>
<td>1</td>
</tr>
</tbody>
</table>

Owing to the intensive recruiting of island labor by the Hawaiian Pineapple Company for their Lanai Plantation and Cannery, some losses occurred during the month of June and the probability is that there will be further losses of personnel until the saturation point is reached on the plantations.

The projects already approved have all been worked on and the end of the month brought approval of the Job applications made during May.

Work progressed rapidly on the Trail Side Shrines. The one at the Tree logs being completed except for the hinges and padlocks.

Work was started on the repairs to the Administration Building during June and is about half completed. The concrete should be poured by the 3rd of July.

Halemaumau Information Shrine, should be finished in one week after all the material back ordered has arrived.

The Landscape Architect Senior Foreman reports plans completed for the following projects:

1. Foundation planting Haleakale Shelter Cabins.
2. Entrance Portals for Volcano House Hotel.

A design for the exhibit at Halemaumau Information Shrine is near completion.

The Safety Assistant to the Superintendent will personally hold safety meetings after July 1st and will submit a detailed report of the reactions to suggestions made at these meetings.
(2)

The Project Superintendent reports satisfactory progress on the Fence project, work being continued with two crews on the Kau side.

Ditching on the Truck Trail was continued and is nearing completion.

The weather during the month was dry and a shortage of water was imminent but a good rain at the end of the month has relieved the situation.

Recreational activities were carried on as scheduled. Baseball games with local teams being played, as well as inter-crew soft ball.

The health of the camp was normal. Six lost time accidents were reported with a total loss of time of 26 days. Four of these accidents were bruises and cut feet that happened in camp, only two occurring on the projects.

Respectfully submitted,

Wilkinson J. Stephens,
Camp Director, EW HIE.
The Superintendent
Thru Office of Chief Ranger,
Hawaii National Park, Hawaii

Dear Sir:
The following report of the Haleakala Section for the month of June, 1937 is respectfully submitted:

000 General.

010 Introduction.
The construction of shelter houses in Haleakala Crater by the R.O.W is a matter of great interest to the majority of the residents of Maui.

020 General Weather Conditions.
Precipitation during the month was only .10 of an inch. The prevailing wind direction was from the northeast. There were 3 clear days during the month.

100 Administrative.

110 Status of Work.
All work was kept up to date during the month.

200 Maintenance, Improvements and New Construction.

210 Maintenance.
Usual maintenance work on the road was carried on.

400 Flora, Fauna and Natural Phenomena.

410 Ranger, Naturalist and Guide Service.
The District Ranger was on duty at White Hill whenever possible, to give information and other service.
500 Use of Park Facilities by the Public.

510 Increase or decrease in Travel
Check of travel shows 381 cars and 1908 people were in the Haleakalā Section during the month of June, 1937; a decrease of 12% under the record for last month.

530 Visitors
Doctor Theodore Dunham, Astronomer at Mr. Wilson Observatory, California, and Mrs. Dunham visited the Haleakalā Section June 21–22.

600 Protection

610 Police Protection
Frequent patrols were made during the month. There were no arrests.

Very respectfully,

J. A. Peck

District Ranger.
### Statutory Report No. 3

**Finance and Accounts**

**June, 1937**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Appropriation</th>
<th>Allotted</th>
<th>Expended &amp; Obligated</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1471000</td>
<td>National Park Service, 1937</td>
<td>$44,500.00</td>
<td>$44,404.08</td>
<td>$95.92</td>
</tr>
<tr>
<td>146/71000</td>
<td>National Park Service, 1936-1937</td>
<td>336.00</td>
<td>336.79</td>
<td>1.21</td>
</tr>
<tr>
<td>14-1010</td>
<td>Roads &amp; Trails, Nat’l Park Service</td>
<td>22,500.00</td>
<td>12,522.28</td>
<td>4,977.72</td>
</tr>
<tr>
<td>14-1130</td>
<td>Roads &amp; Trails, National Parks, Emerg.</td>
<td>40,570.65</td>
<td>39,065.43</td>
<td>1,605.22</td>
</tr>
<tr>
<td>14-405/70762</td>
<td>P.W.A., Allotment to Interior, Nat’l Park Service, 1935-1937</td>
<td>9,303.00</td>
<td>9,216.02</td>
<td>86.98</td>
</tr>
<tr>
<td>14-443/70634</td>
<td>N.I.R., Int., National Park Service, 1933-1937</td>
<td>24,085.34</td>
<td>23,769.34</td>
<td>316.00</td>
</tr>
<tr>
<td>145/61000</td>
<td>National Park Service, 1935</td>
<td>300.00</td>
<td>277.18</td>
<td>22.82</td>
</tr>
<tr>
<td>1451000</td>
<td>National Park Service, 1935</td>
<td>36,040.00</td>
<td>34,785.95</td>
<td>1,254.05</td>
</tr>
</tbody>
</table>
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Hawaii National Park for the month of June, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Month To Date</th>
<th>Last Travel Year</th>
<th>Last Travel Year To Date</th>
<th>Decrease for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles,</td>
<td>15,057</td>
<td>149,022</td>
<td>141,434</td>
<td>342</td>
<td>.002</td>
</tr>
<tr>
<td>Persons entering via other private transportation,</td>
<td>623</td>
<td>2,616</td>
<td>281</td>
<td>241</td>
<td>.069</td>
</tr>
<tr>
<td>Total persons entering via private transportation,</td>
<td>15,682</td>
<td>123,708</td>
<td>121,434</td>
<td>342</td>
<td>.004</td>
</tr>
<tr>
<td><strong>OTHER TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via Railroad,</td>
<td>549</td>
<td>4,772</td>
<td>634</td>
<td>5,635</td>
<td>.153</td>
</tr>
<tr>
<td>Persons entering via trains,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation,</td>
<td>549</td>
<td>4,772</td>
<td>634</td>
<td>5,635</td>
<td>.153</td>
</tr>
<tr>
<td><strong>GRAND TOTAL ALL VISITORS,</strong></td>
<td>16,231</td>
<td>129,440</td>
<td>122,177</td>
<td>11,851</td>
<td>.011</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATUS OF AUTHORIZED PROJECTS

Hawaii National Park for the month of June, 1937

<table>
<thead>
<tr>
<th>Description of projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>520.1 Halsekula Road, Post Construction (F.I.)</td>
<td>72</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>523 Vekukana-Bird Park Road, surf, treatment, 1.75</td>
<td>99</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>524 Residential Area Roads, completion 3/4 mile othr, grdg. &amp; surf (F.I.)</td>
<td>80</td>
<td>15</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>525 Headquarters Area Roads, Improvements (F.I.)</td>
<td>90</td>
<td>25</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>FP 663.14 For the erection of one observation station &amp; toilets; one office and checking station; including the purchase of one wood heating stove and miscellaneous furniture, Halsekula 100</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FP 677.14 Employee's Residence and connecting service lines for newly appointed U.S. Commissioner 0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Report of Park Revenues**

**Hawaii National Park for the Month of June, 1937**

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received</td>
<td>100.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Remitted</td>
<td>100.00</td>
<td>0.00</td>
</tr>
<tr>
<td>On hand close of month</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Park revenues received this year to date, 1,716.82

Park revenues received last year to date, 1,950.00

Increase, 1,262.82

Per cent of increase, 2.82
STATUOS OF PERSONNEL

Hawaii National Park for the Month of June, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10-159</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(May 1931)</td>
<td>(June 1936)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employees beginning of month</td>
<td>21 0</td>
<td>15 0</td>
</tr>
<tr>
<td>Number of additions</td>
<td>3 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Total</td>
<td>24 0</td>
<td>15 0</td>
</tr>
<tr>
<td>Number of separations</td>
<td>1 0</td>
<td>3 0</td>
</tr>
<tr>
<td>Number of employees close of month</td>
<td>23 0</td>
<td>12 0</td>
</tr>
<tr>
<td>Number of promotions during month</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>63 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of leave without pay</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Government Publications:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>On hand beginning of month,</td>
<td>1,066</td>
<td>156.55</td>
</tr>
<tr>
<td>Received during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>1,066</td>
<td>156.55</td>
</tr>
<tr>
<td>Sold during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>On hand at close of month,</td>
<td>1,066</td>
<td>156.55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Government Publications:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On hand beginning of month,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received during month,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sold during month,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On hand at close of month,</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Cash on hand beginning of month,     | 9.88 |
| Sales during month,                  | 0.00 |
| Total                                | 9.88 |
| Remitted during month,               | 0.00 |
| Balance                              | 9.88 |
MEMORANDUM to Superintendent Edward G. Wingate

The following is a report of work accomplished under my direction during the month of June, 1937.

1. The greater part of the month was spent on road construction Jobs 524 and 525. Macadamising on Hotel, Post-office, Parking area at headquarters and curve at entrance was completed. Job 524, 80% complete. Job 525, 90% complete.

Other work during the month consisted of:

1. Building washhouse, Qtrs. 13.
2. Pumping water to high tank and tanks at Qtrs 1, 2, 9, and 8. Altogether a total of 46,000 gallons of water.
3. Painted bed-room and bath-room, Qtrs. 7.
4. Sharpened Picks and crow bars.
5. Repaired toilets, Qtrs. 2 and 5.
6. Miscellaneous repair work.

Robert R. Craik
Foreman
July 2, 1937

The Superintendent
Hawaii National Park

Dear Mr. Wingate:

There follows the report of the ranger department for June, 1937.

000 General

There was little to distinguish June from any other month, except for the visit of the USS Colorado, carrying several hundred NROTC cadets.

020 General Weather Conditions

Precipitation at headquarters area for June was 2.45 inches, at the CCC Camp 1.85 inches, and at Haleakula .10 of an inch. The maximum temperature at headquarters was 95.3 and the minimum 51.6. Due to shortage of water at the Military Camp and also summer cottages in the park, it was necessary for the Army to haul water from Pahala, a distance of 22 miles.

100 - Administration

110 Status of Work

Park activities were confined to routine inspections of all work in progress, also field inspections, administration and planning.

150 Equipment

One horse, four gallon-size fire extinguishers, two hand pumps, and other miscellaneous fire protection tools were purchased in June.

170 Plans, Maps and Surveys

The new boundary line survey taken in the Footprint area was completed, and transitman Wong completed the survey in the Kilauea section.

180 Circulars, Publicity Bulletins, etc.

The regular weekly radio talks over the local Hilo station were continued during the month, with one program being taken over by the Kealoha music troupe from the CCC camp.
200 Maintenance Improvements and New Construction

210 Maintenance

Both at Kilauea and Haleakala the usual maintenance of roads, trails, telephone lines, signs and equipment was carried on. Repair work was started under ECW, on the lobby of the administration building.

220 New Construction

Work was started by the contractor, S.I. Oda, on the new employees' residence in the park.

The paving of the parking area at headquarters is 100% completed and the driveway and postoffice road at the Volcano House 95% completed.

240 Improvements of Approaches to the Park

The Territory started putting a center line stripe the complete length of the road from the park boundary to Hilo, at the end of the month, they had progressed as far as Mountainview. I believe they intend to fix all main highways in this fashion which should make for safer driving.

400 Flora, Fauna and Natural Phenomena

410 Ranger, Naturalist and Guide Service

Seasonal ranger/Robert B. Fowler, formerly of the Yellowstone, entered on duty June 4, and seasonal ranger/Charles Burns, formerly of Grand Canyon, entered on duty June 18.

Ranger and Mrs. Harry Douet left the park on the 2nd, the same day Assistant Park Naturalist and Mrs. Lamb returned to the park from the mainland.

420 Museum Service

CCC enrollees assisted both at the Haleakala observation station and at Uwekuma museum throughout the month.

During June four trail and information shrines were completed under ECW. Senior Landscape Foreman Pope and Assistant Naturalist Lamb are now working on the displays.

460 - Birds

ECW student technicians Harold Craddock and Walter Donagho, both of Honolulu are making a study of the birdlife in the park. Later they will study in the various other localities on this island. The principal reason for this ornithological study is to try and find the cause of the decline in native birdlife. The boys have several theories as to the probable cause and will attempt to prove them.
500 - Use of Park Facilities by the Public

510 Increase or Decrease in Travel

Travel to Kilauea section amounted to 12,177 for June 1936, as compared with 11,735 for June, 1937. At Haleakala District Ranger Peck reports 1908 visited that section of the park.

530 Visitors

June 21-22 - Dr. and Mrs. Theodore Dunham, visited the Haleakala section. They also visited Kilauea for several days during June. Dr. Dunham is an astronomer at the Mt. Wilson Observatory, and was on his way back from studying the recent eclipse in the South Seas.

June 2 - Lorrin P. Thurston, for several days. Mr. Thurston is the president and manager of the Honolulu Advertiser.

June 16 - Dr. Mead of Brown University, Providence RI. He and Mrs. Mead were overnight visitors at the Volcanic House.

June 26 - Dr. Hans Luther, sometime German ambassador to the US, for the day. He and his party were shown around the park by Dr. Jagger.

600 Protection

610 - Police Protection

Four arrests were made by the Hilo police force in the residential area just outside the park boundaries. They included several members of one of the local families, who, it appeared, were responsible for the series of petty thievery which had been going on in this section for the past several years.

620 Fire Protection

Because of the dry spell which continued for the better part of the month, caution signs, to be careful with fire, were placed at different locations in the park, and weekly lectures are being given at the military camp to new visitors cautioning them to be careful about smoking in the restricted areas.

640 Destruction of Predatory Animals

Two wild housecats were caught and killed during the month.

Eight days were spent during the month studying the movements of the goats in the Hilina Pali section, in connection with an anticipated drive to be held in August.

Respectfully submitted

Sincerely,

Joseph N. Christ
Chief Ranger
The Superintendent
Hawaii National Park

Dear Mr. Wingate:

The following is a list of engineering projects completed between April 15 and June 8, 1937:

Alignment - Road, Military Camp to golf links
Grades - Road around Volcano House
Grades - Administration building, parking area
Alignment and levels - Hilina Pali truck trail
(alignment with Mr. Robertson)
Alignment and levels - Mauna Loa truck trail
Checking utility layouts - CCC camp
Checking utility layouts - Area of headquarters and vicinity.
Elevations - Headquarters and vicinity (for fire purpose)

Very respectfully

Yun Seu Wong
Transitmen

NOTE: All field books and plottings have been mailed Chief Engineer Kittredge at San Francisco.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Hawaii NATIONAL PARK

FILE NO.

MONTHLY REPORT
MAY, 1937

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge. All files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER
Director.
June 10, 1937

The Director
National Park Service
Washington, D.C.

Dear Mr. Director:

There follows the report of the activities of Hawaii National Park for May, 1937.

000 - General

020 - General Weather Conditions

Total rainfall at the headquarters area was 8.61 inches, at the CCC camp 6.02 and on Haleakala 6.66. The maximum temperature at headquarters was 72.3 and the minimum 50.3. Snow is still visible, in patches, on both Mauna Kea and Mauna Loa.

100 - Administration

110 - Status of Work

All office work is current.

120 - Park Inspections by:

121 - Superintendent

Routine inspections were made of the various projects being done by EOW and regular park appropriation.

Chief Clerk Higashida was ordered to Maui for the purpose of inspecting park records, equipment, etc., and at the CCC camp at Haleakala, on the 16th. He accompanied Engineer W.B. Robertson, who stopped at Maui on his return to Honolulu. Mr. Higashida returned to Kilauea on the 22nd.

123 - National Park Service Officers

Associate Engineer W.B. Robertson, who had been here "on loan" from the San Francisco office, left here on the 16th, and stopped at Maui to make
an inspection of the Haleakala section. He left Maui on the 19th and sailed from Honolulu on the 21st.

160 - Equipment and Supplies

Two wood stoves and necessary pipe were purchased for installation in the shelters being constructed by the ECW in Haleakala crater.

170 - Plans, Maps and Surveys

Engineer Wong is about 90% completed with the surveys of projects given him by Mr. Robertson in the Kilauea section. Staking the new boundary line in the footprint area is 10% complete.

On May 5 a detailed report on the proposal to add certain lands on Mauna Loa to the park and to construct lava diversion embankments was forwarded your office.

180 - Circulars, Publicity Bulletins, etc.

Weekly broadcasts over station KHBQ in Hilo were kept up throughout the month. One was delivered in Japanese by M. Murakami, representative for the Nippu Jiji (Japanese newspaper), being a translation of a talk written for him in English by the superintendent. This same one was given in Hawaiian on May 16 by CCC enrollee Sam Kalama. Another innovation was the introduction of a CCC orchestra in conjunction with a broadcast by Ranger Williams, which was exceptionally well received.

Participation by the national park in the annual Hawaii County Fair this year took the form of a display of interesting volcanic specimens; Hawaiian woods, colored pictures of Hawaiian birds, large air photographs of the 1934 eruption, a silversword plant, a device for locating earthquakes and one of what Dr. Jaggar is pleased to call his $10 seismographs, recently and cheaply manufactured by him of odds and ends of alarm clocks, watches, etc. This last exhibit drew a lot of attention.

The Kona Star-Bulletin made favorable editorial comment in the May 14 issue in connection with a press release from this office on the proposal to make the CCC permanent.

At the request of the editor of the Maui newspaper Camp Director Olsen, of the Haleakala CCC camp, prepared a press release on the activities of the CCC in Haleakala. Several photographs were furnished the paper in connection with this article.

Corrections for the Hawaii section of Glimpses of our National Parks were made and forwarded to the office of the Editor of the Dark Service.

Copies of the April Sales Builder, Hawaii National Park edition, were received late in the month.
220 - Improvements

The resthouse at the 10,000 foot elevation (Puu U lua l a) on Manna Loa has been completely renovated. Repairs consisted of repainting the inside, removal of the wall dividing the kitchen and main room, installing spring bunks which have been fixed in such a way they can be folded against the wall when not in use, water faucet and sink installed in the kitchen and several other minor repairs, all of which make the resthouse infinitely more comfortable than before.

230 - New Construction

Project 826, headquarters area roads, was 65% complete at the end of May, as was also project 824, residential area roads.

310 - Public Service Contractors

Financial reports for the 1936 calendar year for the Volcano House Company and also Mr. E. J. Walsh of Wailuku, Maui, who has the saddle horse and resthouse concession at Haleakala, were submitted during the month.

320 - Cooperating Governmental Agencies

Some difficulty was experienced with the mail service last month. The April checks for the supervisory personnel at the Haleama CCC camp and those for the enrollees of the Haleakala camp were in addition to some other pieces of mail for this postoffice, apparently lost between Honolulu and the local postoffice. Stoppage was immediately requested on the CCC checks. However, in about three weeks' time the mail arrived, though where it had been is a mystery. This is not the first time that mail destined for the park has gone astray, though it is the first time such a large amount disappeared at one time. Major Baldwin, the finance officer for the Hawaiian Dept., USA., has stated he expects to take the entire matter up with the Postoffice Department.

Clerk-stenographer Constance Whitney received her designation as secretary of the local board of Civil Service examiners.

340 - State, County or Municipal Legislation affecting Parks

One of the local newspapers carried an editorial regarding Delegate King's request of the House Rivers and Harbors Committee to appropriate funds with which to carry on a survey for the diking of Eke against any possible lava flows from Manna Loa.
Ranger Benjamin F. Moonaw, Jr., formerly of Colonial, arrived on the 8th, and since he was on leave through the 15th, did not actually enter on the Hawaii payroll until the 16th. District Ranger Peck returned from the mainland on the 28th and Ranger Doust, who had been acting in Mr. Peck’s absence, returned from Maui on the 29th.

Notice was received of the approval of the appointments of Eugene Burns of the University of Idaho faculty, and Gordon MacKenzie of Hilo, as seasonal rangers.

 Mimeographed informational sheets have been issued by the naturalist division for the trail trips listed; the starting point in each case being the Volcano House; Uwekahuna Museum, hapen crater; Kilauea Iki; Kipuka Puaulu (Bird Park); Halemaumau and Kilauea bridge path.

420 - Museum Service

On May 6 comments by Dr. Jaggar and the superintendent on the preliminary museum development plan were forwarded the Museum Division in Berkeley.

440 - Insect Control

Form 1-612 recommending the appointment of O.C. McBride of the Bureau of Entomology, Honolulu, as research associate in entomology without compensation, has been submitted. This is made in order to make it possible for Mr. McBride to make periodic inspections of the insect conditions in the forest areas of the national park, the same to be charged to our appropriation.

Mr. McBride has also submitted a very worthwhile and complete report on his recent inspection of the forest areas of the park.

460 - Birds

A very rare bird, the Akepa (loxoceps coccinea) was definitely identified in the koa forest behind Kipuka Puaulu.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

Travel to Kilauea section amounted to 19,181 persons as compared with 14,227 for May, 1936. At Haleakala travel was 1555 persons.
530 - Visitors

May 1 - Territorial Medical Assn., overnight
Fifty four sailors from the USS Idaho

2 - Two hundred forty seven tourists from the SS Reliance, on a world cruise
7 - Mr. and Mrs. David Topping (Arlene Judge, sometime movie actress) with Territorial Representative Walter MacFarlane of Honolulu.
9 - Group of girl reserves from Hilo intermediate school,
Passengers from another world cruise liner, SS Franconia
15 - Group of Girl Scout leaders for the day
16 - Party of Girl Reserves for the day
30 - Girl Reserves from Papakou, for the day
34 - Mr. T.W. Davies of England, and his son. Mr. Davies is the brother of the chairman of the board of directors of Theo Hi Davies Co., Ltd., sugar factors of Hawaii.

600 - Protection

610 - Police Protection

Request was made of the Director's office to expedite passage of an amendment to the Hawaii National Park bill empowering US District Court to appoint a special commissioner to act on cases arising in the park.

The county police has stationed a patrolman permanently on the road between Hilo and the Volcano.

630 - Fire Protection

A fire drill was held at the CCC camp on evening while most of the boys were at the movies at the Army camp. It was not a success, since some confusion resulted when the leaders and crews were separated. This fault has since been corrected by the camp superintendent.

900 - Miscellaneous

James X. Higashida, chief clerk, was initiated into the Lion's Club of Hilo and also made a director of the Association of American Citizens of Japanese Ancestry.
Mr. and Mrs. John Makaimoku announced the arrival of a small boy on the 30th, whose name is Junior. Mr. Makaimoku is ROW head foreman and recreation officer.

Dr. Howard Chamberlin, part time CCC surgeon, Haleakala unit, died in Honolulu on May 7.

Respectfully submitted

Edward G. Wingate
Superintendent
Ranger Ben F. Moomaw, Jr., formerly of Colonial Natl. Park, and his bride, the former Miss Evelyn Robertson of Appomattox, Virginia, who arrived in Hawaii on the 8th. Mr. Moomaw is exchanging with Ranger Harry Donst of this park, who will leave for the mainland next month.
Portion Park exhibit at Hawaii County Fair in Hilo.
Note—10¢ store seismograph made by Dr. Jaggar.

Portion Park exhibit at Hawaii County Fair, Hilo.
Halenauman Information Shrine and Ranger Retreat under Construction. EGV project, Job No. 13

Close-up of stone work. Halenauman Information Shrine, EGV project, Job No. 13
Project 525. Hotel Entrance and Post Office roads improvement. Laying base course.

Trailside Shrine Makawahi. Part of WPA project. Job No. 12
Haleakalea Section. Completed shelter at Holua.
Note entrance to cave in crater wall just above chimney.
NCL project.

Showing defoliation by leaf hoppers on young Koa-
Mauna Loa Section. Photo made during inspection by O.O.
McBride, entomologist, Dept. of Agriculture.
View from window of Haleakala Observation Station showing snow in crater.

Portion of Haleakala road showing light fall of snow which brought many visitors to the mountain during February.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Hawaii National Park for the month of May, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Year To Date</th>
<th>Last Year To Date</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>17,584</td>
<td>12,913</td>
<td>110,172</td>
<td>4,137 0.038</td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td>475</td>
<td>347</td>
<td>540</td>
<td>223</td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>18,059</td>
<td>13,260</td>
<td>112,703</td>
<td>4,677 0.041</td>
</tr>
</tbody>
</table>

| **OTHER TRANSPORTATION:** |            |                  |                   |                          |
| Hotel                  | 1,122      | 5,001            | 778               | 0.156                    |
| Persons entering via trains |          |                  |                   |                          |
| Persons entering otherwise |            |                  |                   |                          |
| Total other transportation | 1,122 | 5,001 | 778 | 0.156 |

| **GRAND TOTAL ALL VISITORS:** |            |                  |                   |                          |
| 19,181                | 118,249       | 117,704          | 5,455          | 0.046                    |

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# TRAVEL REPORT

**Haleakula Section, Hawaii** National Park for the month of May, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>Last Month</th>
<th>Last Travel Year</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles,</td>
<td>311</td>
<td>2,663</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles,</td>
<td>1,555</td>
<td>13,790</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via other private transportation,</td>
<td>1,555</td>
<td>13,790</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OTHER TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via stages,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL ALL VISITORS,</strong></td>
<td>1,555</td>
<td>13,790</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobiles in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of projects</td>
<td>Percent constructed to date</td>
<td>Percent constructed this month</td>
<td>Percent constructed last month</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>520.1 Haleakala Road, Post Construction (P.A.)</td>
<td>67</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>523 Uwakamana-Bird Park Road, surfg, treatment, 1.75</td>
<td>99</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>524 Residential Area Roads, completion 3/4 mile olrg, grdg, &amp; surfg (P.A.)</td>
<td>65</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>525 Headquarters Area Roads, Improvements (P.A.)</td>
<td>65</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

**523** For the erection of one observation station & toilets; one office and checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleakala 100 0 0

**527** Employee's Residence and connecting service lines for newly appointed U.S. Commissioner 0 0 0
REPORT OF PARK REVENUES

Hawaiian National Park for the Month of May, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received.</td>
<td>150.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Total.</td>
<td>150.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Remitted.</td>
<td>150.00</td>
<td>100.00</td>
</tr>
<tr>
<td>On hand close of month.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Park revenues received this year to date. 1,618.82
Park revenues received last year to date. 1,168.82
Increase. 1,150.00
Per cent of increase. 2.60
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Hawaii National Park

REPORT OF SALES OF PUBLICATIONS

May, 1937

<table>
<thead>
<tr>
<th>Government Publications:</th>
<th>Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>On hand beginning of month,</td>
<td>1,066</td>
<td>156.55</td>
</tr>
<tr>
<td>Received during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total,</td>
<td>1,066</td>
<td>156.55</td>
</tr>
<tr>
<td>Sold during month,</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>On hand at close of month,</td>
<td>1,066</td>
<td>156.55</td>
</tr>
</tbody>
</table>

| Non-Government Publications: | |
| On hand beginning of month, | |
| Received during month, | |
| Total, | |
| Sold during month, | |
| On hand at close of month, | |

Cash on hand beginning of month, 9.88
Sales during month, 0.00
Total, 9.88
Remitted during month, 0.00
Balance, 9.88
<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10-159</td>
<td>16-159</td>
</tr>
<tr>
<td></td>
<td>10-159</td>
<td>16-159</td>
</tr>
<tr>
<td>Number of employees beginning of month</td>
<td>20 0</td>
<td>14 0</td>
</tr>
<tr>
<td>Number of additions</td>
<td>1 0</td>
<td>1 0</td>
</tr>
<tr>
<td>Total</td>
<td>21 0</td>
<td>15 0</td>
</tr>
<tr>
<td>Number of separations</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Number of employees close of month</td>
<td>21 0</td>
<td>15 0</td>
</tr>
<tr>
<td>Number of promotions during month</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>32 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
<td>1-5 0</td>
<td>6 0</td>
</tr>
<tr>
<td>Aggregate amount of leave without pay</td>
<td>0 0</td>
<td>0 0</td>
</tr>
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</table>
## STATISTICAL REPORT NO. 6
### Finance and Accounts
#### May, 1937

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>APPROPRIATION</th>
<th>ALLOTTED</th>
<th>EXPENDED</th>
<th>BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1471000</td>
<td>National Park Service, 1937</td>
<td>$44,500.00</td>
<td>$43,525.82</td>
<td>$1,174.18</td>
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<tr>
<td>146/71000</td>
<td>National Park Service, 1936-'37</td>
<td>335.00</td>
<td>337.94</td>
<td>.06</td>
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<tr>
<td>14-1010</td>
<td>Roads &amp; Trails, Nat'l Park Service</td>
<td>22,500.00</td>
<td>16,030.07</td>
<td>6,469.93</td>
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<tr>
<td>14-1130</td>
<td>Roads &amp; Trails, National Parks, Emergency Construction</td>
<td>40,870.65</td>
<td>38,776.61</td>
<td>2,094.04</td>
</tr>
<tr>
<td>14--34-0629 W.I.R., Int., Nat'l Parks, Roads &amp; Trails Act June 16, 1933</td>
<td>486,538.47</td>
<td>486,538.47</td>
<td>0.00</td>
<td></td>
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<tr>
<td>14--305/70762 P.W.A., Allotment to Interior, Nat'l Park Service, 1935-37</td>
<td>9,303.00</td>
<td>9,246.02</td>
<td>56.98</td>
<td></td>
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<tr>
<td>14--343/70634 W.I.R. Int., National Park Service 1933-37</td>
<td>24,085.34</td>
<td>11,085.34</td>
<td>13,000.00</td>
<td></td>
</tr>
<tr>
<td>145/61000</td>
<td>National Park Service, 1935-'36</td>
<td>300.00</td>
<td>277.15</td>
<td>22.85</td>
</tr>
<tr>
<td>1451000</td>
<td>National Park Service, 1935</td>
<td>36,040.00</td>
<td>34,785.95</td>
<td>1,254.05</td>
</tr>
</tbody>
</table>
June 5, 1937

Mr. Edward G. Wingate, Superintendent
Hawaii National Park, T.H.


Dear Mr. Wingate:

The weekly reports and crater observations have continued as usual, progress on design and experiment with new seismometers has continued, another step has been taken toward getting additional Mauuna Loa land, and the press indicates that survey of the Hilo lava barrier is contemplated in a bill approved by a committee of Congress.

Volcanic Activity of the Month

The following are the Halemaumau pit data for Kilauea Volcano:

<table>
<thead>
<tr>
<th>Week Ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack Openings</th>
<th>Local Tremors and Quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 9</td>
<td>6.75</td>
<td>1</td>
<td>65.0</td>
<td>22</td>
</tr>
<tr>
<td>16</td>
<td>10.75</td>
<td>2</td>
<td>46.0</td>
<td>31</td>
</tr>
<tr>
<td>23</td>
<td>4.25</td>
<td>3</td>
<td>12.0</td>
<td>13</td>
</tr>
<tr>
<td>30</td>
<td>10.50</td>
<td>1</td>
<td>16.5</td>
<td>29</td>
</tr>
</tbody>
</table>

A crisis of rise-cracking east destroyed a marked measurement locality May 7. Adjacent cracks heated to 64° C. and broke the soil. New measurement marks were established. The opening of eastern cracks thereafter dwindled.

A slight earthquake May 15, was not reported felt and indicated origin 65 miles distant. Another on May 30, indicated distance 29 miles. Of seismograms indicating determinate distances, 17 were from Kilauea, 4 from Mauuna Loa and 1 from greater distance.

Work of the Volcanologist

Mauuna Loa

At the request of Waldemars Kongsfjard, documents on the "Protection of Hilo" were sent the New York Times through the Director's
office on May 1. On May 7, three copies of the map prepared by Superintendent Wingate showing tentative additions of Mauna Loa were left at the offices in Honolulu of Territorial Land Commissioner, Bishop Estate and Parker Ranch. The Land Commissioner replied May 27, sending revised map showing erroneous, and recommending the request for land come from Congress to Governor of Hawaii.

Seismograph Construction

Two more of the table seismographs were prepared in the shop, a new light pen was designed and tested, for smoked-paper registration, and basement tests were run. A note on the new seismological instruments was presented on May 6, to Hawaiian Academy of Science in Honolulu, with lantern slide illustrations. An instrument was exhibited at Hilo County Fair May 27, along with the Table Model for locating earthquakes, and Mr. Waesche’s photographic prints of seismograms.

Optical tests with lenses and small electric light bulbs were made during the month with a view to designing a camera seismograph.

Beginning May 23, a simple office earthquake pendulum was designed, made, and set-up, for experimental test with actual earthquakes, in the seismologist’s office. This is a normal pendulum timed for resonance with ordinary quakes. If started it rings a buzzer and shows by amplitude of swings how big the shock is. Its object is to inform such sedentary persons as telephone operators of the occurrence and size of small quakes. They can then send in the quantitative data on postal cards. This annunciator was set-up May 23. Its simplicity is an improvement over earlier designs.

Classifying records.

The classification of earthquake notices from all over the world is progressing satisfactorily through the labors of S. Sato. An upright file of envelopes is used in 165 drawers for ordinary clippings, in letter-size drawers for whole papers and magazines. This distribution will make the disaster records serviceable for research, as they have never been before, and it will stimulate the accumulation of new records with reference to cycles. The library card catalogue continues to grow.

Organic life and volcanoes.

The volcanologist has been giving some attention to this subject with reference to cooperation by the University. It has been noted that the five principal gases of Kilauea are the constituents of protein. Heat-loving blue-green algae live in steaming cracks and
take root quickly in new vents. The ecology of plant associations
is remarkable at steam cracks. The diagnosis of small percentages
of certain elements may be achieved by organic rates of growth. The
experimental physiology of plant growth controlled at natural vol-
canic vents may lead to chemical discovery.

Lecture

Dr. Jaggar was the invitational speaker at the annual
meeting in Honolulu of Hawaiian Academy of Science May 6, making an
address on "Trends in the Philosophy of Science."

Work of the Seismologist.

Mr. Wasche made contact with large groups of "round the world"
tourists, about 250 of them from SS "Reliance" May 2, and a similar
number SS "Franconia" May 9, both at Halesawmman pit.

On May 10, he took photographs of Crack No. 25 at east rim of
pit with reference to rapid movements and changes there. On May 25,
he photographed the Park display at Kila county fair and assisted
ranger on duty.

During the month, in addition to routine seismological observa-
tion, he completed earthquake location maps both for Kiluan area
and for Island of Hawaii for the year 1938. He plotted earthquake
locations to date also for both maps for 1937, using colored tacks
to compare locations of different months.

New crack-measuring location marks were established at No. 37a
southeast of Halemaumau, and Nos. 50, 51, 52 and 53 on northeast
Halemaumau rim, to replace the lost parts of the edge, this work
being done on May 21.

An inspection trip by horse-back around Kiluan bridle path
was made May 25 with Chief Ranger Christ, and Rangers Moosaw and
Williams.

Miscellaneous Items

H. Yasumaka and L. Okuda continued their work under Volcano
Research Association, Yasumaka as automobile mechanic, outdoor man
and assistant in crater routine, Okuda as carpenter and instrument
maker. Eight instruments are being prepared for telephone stations
on Hawaii to announce earthquakes of small intensity, and measure
amplitude of motion. The shop is improved by the loan of a Delta planer and circular saw from Okuda.

Professor Richtmyer, physicist from Cornell, visited the laboratory May 3.

Very respectfully,

T. A. Jaggar,
Volcanologist
The Superintendent

To the Office Chief Engineer

Hawaiian National Park, Hawaii.

Dear Sir:

The following report of the Haleakula Section for the month of May, 1937 is respectfully submitted:

100 General:

101. Introduction.

Engineer H. W. Dunst is Acting District Engineer relieving District Engineer Peck who is still on vacation. Mr. Peck will arrive on the eve of May 29, 1937. Mr. Dunst will depart for Hilo.

102. General Weather Conditions.

6.65 inches of rain fell at White Hill during the month. The greatest precipitation was 1.05 inches on the 4th. We had six days clear, nine days partly cloudy and thirteen days cloudy, up to the 28th.

100 Administration:

110. All work was kept up during the month.

150. Equipment and Supplies.

One new Stilson wrench was purchased during the month. Two wood stoves and pipe were purchased for shelter cabins in the crater.

200 Maintenance, Improvement and New Construction:

210. Maintenance.

The usual maintenance work on the road was carried on during the month. The center strip consisting of white spots down the center of the road has been completed.
400 Flora, Fauna and Natural Phenomena:

One Silver Sword plant was sent to Ranger Williams for the Museum.

500 Use of Park Facilities by the Public:

510. Increase or Decrease in Travel.
Three hundred and eleven cars entered the Park in May, carrying 1555 persons.

530. Visitors.
Mr. and Mrs. Robertson, Park Engineer from San Francisco and Mr. and Mrs. Jimmie Higashida from Hawaii National Park arrived on the night of May 16th. Mr. Robertson inspected the Park roads and buildings and departed on Wednesday night for Honolulu. Mr. Jimmie Higashida also inspected the park and C.O.O. activity for Superintendent Wingate and departed for Hilo on May 21st.

600 Protection and Police:

Frequent patrols were made during the month with no arrests.

Yours very truly,

Harry W. Drust
Acting District Manager.
REPORT OF THE CAMP DIRECTOR, BOW HAWAI'I NATIONAL PARK TO THE
SUPERINTENDENT, HAWAI'I NATIONAL PARK FOR THE MONTH ENDING MAY
31, 1937.

The labor turn-over for the month was as follows:

**Kilauea Section:**
- To accept permanent employment: 1
- To join family on Maui: 1
- Total: 2

**Haleakala Section:**
- Discharged on account of inability to stand climate: 3
- To accept permanent employment: 2
- Total: 5

The project Superintendent reports work done on all approved projects.
Top wire was strung on the Keauhou side and posts were cut for the Halfway house section. This is a new project and the boys have shown interest and considerable ability in carpentry and construction fundamentals, the stone and concrete work on project 19 & 15. Halemaumau information Shrine was completed on May 26th and the entire project will be finished as soon as necessary material arrives. Seven job applications were sent in for approval.

Baseball, both soft and hard ball has taken the interest of all the enrollees and keen competition has been shown in the games at the Camp. Serious games will start with the H.R.C. League series on June 6th. The recreation room has been furnished with home made tables for cards and checkers.

Mr. Ryer reports a falling off in the shorthand class started last month, but interest in shorthand increasing. The Journalism class made an educational tour of the Tribune Herald plant and later to some of the main factories in the city.

Music is still the main pastime and the boys feel far enough advanced to give an evening entertainment. The music rendered over KREO in support of Acting Park Naturalist E. J. Williams' radio talk was commented on favorably.

A picnic at Kualalau beach was enjoyed by 185 boys. A luau was the center of attraction and Mr. George Campbell kindly donated 2 large pigs. The entire outing was extremely successful.

The health of the Camp has been above average. Only one lost time accident and that only of 4 days duration and no accidents lost or minor
occurred on the work projects.

Respectfully submitted,

Wilkinson J. Stephens,
Camp Director, BOP EMF.
June 3, 1937

The Superintendent  
Hawaii National Park

Dear Mr. Wingate:

There follows the report of the ranger activities for May, 1937.

000 - General

With the exception of the two "round-the-world" ships, and park tours conducted for the benefit of the various clubs visiting on Saturdays and Sundays, the month was comparatively quiet.

020 - General Weather Conditions

Total rainfall at the headquarters area was 8.61 inches, at the CCC camp 6.02 and on Haleakala 6.65. The maximum temperature at headquarters was 72.3 and the minimum 50.3. Snow is not visible on Mauna Loa, but patches can still be seen on Mauna Kea.

100 - Administration

110 - Status of Work

Ranger Ben F. Moomaw, formerly of Colonial, arrived on the 8th, and since he was on leave through the 15th, did not actually go on the Hawaii payroll until the 16th. District Ranger Peck returned from the mainland on the 28th, and Ranger Const, who has been acting in Mr. Peck's place, returned from Maui on the 29th.

All work was current on both islands.

130 - Park Inspections

Routine park inspections were made of all work, also field inspections of the various projects under the regular park appropriation and ECW. I have also started an inspection of the CCC enrollees while they are on hikes through the park, to see that they are properly dressed.

150 - Equipment and Supplies

Two wood stoves and necessary pipes were purchased for installation in the shelters being constructed by the ECW in Haleakala crater.

170 - Plans, Maps and Surveys

Engineer Wong is about 90% completed with the surveying in the Kilauea section.
Associate Engineer W.E. Robertson, who had been here "on loan" from the San Francisco office, left here on the 15th, and stopped off on Maui to make an inspection of the Haleakala section. He left Maui on the 19th and Honolulu on the 21st.

The new boundary line survey taken in the Footprint area is 10% complete.

180 - Circulars, Publicity Bulletins, etc.

The regular weekly radio talks were continued during the month, with Ranger Williams giving two talks, one being with the CCC orchestra as a background. This particular talk was exceptionally well received. On May 11 M. Murakami, representative for the Nippu Jiji (Japanese newspaper) lectured in Japanese, this was a translation from a talk written for him by the superintendent in English, and on May 18, CCC enrollee Sem Malama gave the same talk in Hawaiian.

200 - Maintenance, Improvements and New Construction

210 - Maintenance

At Kilauea the usual maintenance of roads, trails and equipment was carried on.

Ranger Douet reports that the center strip consisting of white spots down the center of the road has been completed.

The resthouse at the 10,000 foot elevation on Mauna Loa has been completely renovated - see Ranger Murray's report attached.

230 - New Construction

The paving of the parking area at headquarters is about 20% complete and the driveway in front of the Volcano House 80% complete.

Senior Foreman George W. Pope has been occupied with the commencing of construction of a trailside shrine at Halemaumau, which is being done under E.C.W.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist and Guide Service

CCC enrollees assisted at the Haleakala observation station as well as at Uwekahuna museum in furnishing information, etc.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

Travel to Kilauea section amounted to persons as compared with 14,227 for May, 1936. At Haleakala travel was 2130 persons.
530 - Visitors

May 1 - Territorial Medical Association, over night.
Fifty four sailors from the USS Idaho

# 2 - Two hundred forty seven tourists from the SS Reliance, on a world cruise

# 9 - Group of girl reserves from Hilo intermediate school
Tourists from another world cruise liner, Franconia

# 15- Group of girl scout leaders for the day

# 16 - Party of girl reserves

# 30 - Girl reserves from Papaikou

# 7 - Mr. and Mrs. David Topping (Airline Judge, onetime movie actress)

600 - Protection

Frequent patrols were made in both sections. At Kilauea it was necessary to reprimand five speeders.

On the evening of June 1, Mr. Joe Foster reported to the chief ranger that a man and three small boys were lost in the Apua section. When questioned Mr. Foster said they were hunting in that area. About 10:30 Sunday, while cleaning four goats they had just killed he told them he was going to the beach to fish, and for the party to return to camp. On his return to camp he found they hadn't showed up and he searched Sunday night and all day Monday. About 6 p.m. Monday he reported the case to the chief ranger, who organized a searching party. We had just started, when ranger Murray picked up the party on the Kehau road. When questioned they said they weren't lost, instead of going to camp they also went to the beach to fish. Mr. Foster was given a good lecture about taking small boys in that area.

620 - Fire Protection

A fire drill was held at the CCC camp, one evening while most of the boys were at the movies at the Army camp. It was not very successful, since they didn't know what to do when the leaders and crews were split. This fault has since been corrected by the camp superintendent.

900 - Miscellaneous

Mr. and Mrs. John Makainoku announced the arrival of a small boy on the 29th, whose name is Junior.

Respectfully submitted

GW

Joseph H. Christ, Chief Ranger
June 2, 1937.

The Superintendent,
Hawaii National Park,
Hawaii.

Dear Sir:

The following is the report of my time by hours for the month of May, 1937.

<table>
<thead>
<tr>
<th>Work performed</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work on cars and trucks</td>
<td>120</td>
</tr>
<tr>
<td>Rep. Grader</td>
<td>11</td>
</tr>
<tr>
<td>Check in gasoline</td>
<td>7</td>
</tr>
<tr>
<td>Rep. Hand tools</td>
<td>6</td>
</tr>
<tr>
<td>Rep. Warrior roller</td>
<td>5</td>
</tr>
<tr>
<td>Fill all batteries twice a month</td>
<td>4</td>
</tr>
<tr>
<td>Rep. Rock crusher</td>
<td>4</td>
</tr>
<tr>
<td>Survey E.U.E. equipment</td>
<td>3</td>
</tr>
<tr>
<td>Rep. Lawn mower</td>
<td>3</td>
</tr>
<tr>
<td>Rep. Wheelbarrows</td>
<td>2</td>
</tr>
<tr>
<td>Rep. Air compressor</td>
<td>2</td>
</tr>
<tr>
<td>Do a car, replace battery, start car, park rear compartment</td>
<td>2</td>
</tr>
<tr>
<td>Lake socket wrench for work on trucks</td>
<td>2</td>
</tr>
<tr>
<td>Check in kerosene</td>
<td>1</td>
</tr>
<tr>
<td>Rep. battery for Observatory</td>
<td>1</td>
</tr>
<tr>
<td>Transfer motor oil to storage tank</td>
<td>1</td>
</tr>
<tr>
<td>Rep. Museum light plant</td>
<td>1</td>
</tr>
<tr>
<td>Rep. Telephone</td>
<td>1</td>
</tr>
<tr>
<td>Rep. Torch for lava tube</td>
<td>1</td>
</tr>
<tr>
<td>Check tools at warehouse</td>
<td>1</td>
</tr>
<tr>
<td>Rep. Air line in warehouse</td>
<td>1</td>
</tr>
<tr>
<td>Check wire for E.U.E.</td>
<td>1</td>
</tr>
</tbody>
</table>

Total 120 Hours.

Report submitted by,

R. F. Fischer,
Mechanic.
MEMORANDUM to Superintendent Edward G. Wingate

The following is a report of work accomplished under my direction during the month of May, 1937.

1. The greater part of the month was spent on jobs 524 and 525. Job 524 - 65% complete. Post Office road 100% complete. Hotel Approach 65% complete.

2. Other work - Inspected crack in road near pit. Made boxes for specimens for Fair.


4. Pumped water to high tank 9 times.

5. Cleaned and polished the five trucks.

6. Completed repairs and painting Qtrs. No. 15.

7. Sharpened picks and bars. (18 picks - 9 bars.)

8. Repaired lock, Qtrs. No. 2.

R. R. Craik
Foreman.
MEMORANDUM to Superintendent E. G. Wingate

SUBJECT - Report on traffic violations.

Sunday May 16, 1937, while on patrol I saw a car travelling toward Kau at a high rate of speed. I chased him as far as the Military Camp before I could stop him. My speedometer registered 72 miles an hour. I took his car license number and asked him his name which he declined to give me. He didn't have his driver's license nor his registration tag on his steering post. I asked him where he lived, he said, Pahala, so I told him to report at Park headquarters Monday at 9:30 am, which he failed to do, so I called the Hilo police to check on him. They found out who he was also that he had license plates belonging to Dr. C. Hayashi who lives at Captain Cook Coffee Co., Kona, on the car he was driving. Yesterday evening May 21, Officer De Mello called up and asked me what I wanted to with him. I told him since using license numbers belonging to another car was a territorial offence for them to handle the case. The minimum fine is $50.00 for such an offence.

Joseph B. Christ,  
Chief Ranger.
Mr. Amaro De Cova
P. O. Box 581
Wailuku, Maui

Dear Sir:

I acknowledge receipt of your letter concerning employment.

We can use you and ten more good men at Hickam Field Water job, as soon as you can get here. This is not a P. W. A. job, so we work eight hours six days per week, which makes a pretty good job for any one that would like to come. We pay 45c per hour up according to ability.

Very truly yours,

E. E. BLACK LIMITED

By __________________

President

Several of the boys are taking advantage of this.
An exchange of rangers between Hawaii National Park and Colonial National Historical Park at Yorktown Virginia, has been recently affected. Benjamin F. Koomaw, Jr., formerly of Colonial has reported for duty at Hawaii and Harry W. Doust, who has been acting district ranger for the past three months in the Haleakula section on Maui, during the absence of District Ranger J.A. Peck, is leaving for Colonial the first week in June. Mr. Doust has been stationed in Hawaii since October, 1935, having been transferred here from Glacier National Park in Montana. Mr. Koomaw graduated from Virginia Polytechnic Institute in 1929, where he majored in geology, and received his Master's degree from the same school in 1932. Before entering the Park Service as ranger at Colonial in November, 1935, he was with the Civil Engineering Department of the Norfolk and Western Railroad, leave inspector with the Memphis District of the Lower Mississippi Flood Control and field geologist with several mining companies.

During the summer season the ranger staff will be augmented by the addition of two temporary rangers and one ranger-naturalist. The rangers are to be Gordon Mackenzie of Hilo, who has served in this capacity very capably for the past two seasons, and Eugene Burns, who is a faculty member of the University of Idaho. Mr. Burns received his Bachelor's degree from the University of Washington, his Master's at Harvard and afterward studied one year at Munich, Germany. He also served as CCC foreman in New Hampshire, on the temporary ranger staff at Grand Canyon National Park, Arizona, and as assistant professor at Albany College, Oregon. Robert Fowler of Colorado Agricultural College, Fort Collins, is to be the ranger-naturalist. Mr. Fowler has previously been on the ranger-naturalist staff at Yellowstone National Park. Both Messrs. Burns and Fowler will report for duty during the first part of June and Mr. Mackenzie about July 1.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Hawaii NATIONAL PARK

MONTHLY REPORT
APRIL, 1937

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge. All files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER, Director.
May 24, 1937

The Director
National Park Service
Washington, D.C.

Dear Mr. Director:

Following is the report of activities for Hawaii National Park for April.

000 - General

020 - General Weather Conditions

Total rainfall at the headquarters area was 7.83 inches, at the 000 Camp 6.45 inches and at Haleakala 7 inches. Maximum temperature at headquarters was 71.3 on the 12th and the minimum 63.6 on the 2nd. Both Manna Loa and Manna Kea, when visible, were noticed to be still covered with snow on the upper elevations, though this was reduced to patches by the end of the month.

100 - Administration

110 - Status of Work

Files which had accumulated while the clerk-stenographer was on leave, were sorted and put away. On April 17, a report was submitted for presentation to the Joint Committee on Printing relative to certain classes of work being done by mimeograph machines and other labor saving devices. Other work was current.

120 - Park Inspections

121 - Superintendent

The Superintendent left for Honolulu on March 31, to attend a meeting of the Tourist Bureau and other matters and returned to headquarters on the 7th. The balance of the month was spent in the Kilauea section, with inspections of projects being undertaken in this area.

124 - Other Interior Department Officers

Forest Dollinger, 000 Educational Advisor of the Keanae, Hana Camp, (Territorial) visited the park on the 3rd.

125 - Other Governmental Officers

O.C. McRidge, entomologist with the Bureau of Plant Industry, Honolulu, visited the park from the 28th to the end of the month, in
connection with insect infestations in the koa trees. He was escorted around the park by the Chief Ranger.

130 - Finance and accounts

A detailed financial report will be found at the back.

140 - Labor Situation

As the W.P.A. office in Hilo had been experiencing some difficulty in keeping up the CCC Camp to full strength, on April 23 a report was requested from the W.P.A. office on the reasons why they had been unable to furnish sufficient enrollees. This information was wanted as I understand Chief Forester Coffman while in Honolulu had been informed that there were more than enough eligible boys to supply all the CCC Camps in the Territory.

150 - Equipment and Supplies

Two telephones for the Kilauea section were all the items of equipment received.

160 - Status of alienated lands.

As stated in our letter of the 15th, advice has been received that Mrs. Alice Campbell-Kirkfield is still negotiating with the Trustees of the Campbell Estate for the purchase of the land of Kahakulea which includes the 1-9 acres at the Thurston Lava Tube for the purpose of presenting the entire tract to the park. Accordingly it has been agreed with the Attorney General of the Territory to withhold condemnation proceedings against the Campbell Estate until the matter of purchase of the entire land by Mrs. Kirkfield has been settled one way or another.

170 - Plans, Maps and Surveys

Engineer Robertson has been busy since his arrival on surveys for relocation of roads and new construction projects.

180 - Circulars, placards, publicity bulletins, radio talks, etc.

One press release, concerning the permanence of the CCC was issued in April, also the February number of the Volcano Letter. Copies of both are attached.

Four radio talks were given over KHBC (Hilo) by the following: Assistant Geologist Wessche, subject "Crack Measurements and Tilt at the Hawaiian Volcano Observatory," April 6; Chief Ranger Christ, subject "The Hawaii National Park and its Ranger Staff," April 20; Ranger Williams gave two broadcasts, on April 13 and 27, subjects "A Trip to the Chain of Craters Area" and "Crater Lake National Park," (the latter had been prepared by Mr. Wessche).
200 - Maintenance, Improvements and New Construction

210 - Maintenance

At Kilauea the usual maintenance of roads, trails and equipment was carried on.

The resthouse at the 10,000 foot level (Puin Ulaula) on Mauna Loa has been cleaned, painted and the stoves and other equipment overhauled.

220 - Improvements

Road project 525, Headquarters Area Roads, Improvements, was 45% complete at the end of the month. This job consists of four separate units with work on the Hilo entrance cut-off road finished and good progress made on the hotel entrance and postoffice roads.

The CCC road maintenance crew has been engaged in rectifying considerable drainage deficiencies on the dirt road between the Tree Mauls and Kipuka Fuulua and repairing drainage and surface damage on the Mauna Loa truck trail.

230 - New Construction

Work on project 824, Residential Area Roads was 65% complete at the end of April. Rough grading had been completed on the parking area and its entrance roads in the rear of the administration building. The remainder of the project was complete.

300 - Activities of Other Agencies in the Park

310 - Public Service Contractors

The annual financial report of the Volcano Photo Studio was finally received and mailed to the Director on April 1.

314 - Complaints

During March a complaint was received from Mr. C.W. Dickey of Honolulu about what he observed to be a most uncleanly condition at both the Haleakala observation station and resthouse premises. Reports were received from both Acting District Ranger Doust and CCC Camp Director Olson which confirmed my opinion that the complaint was almost entirely unfounded. I had only recently inspected the Haleakala section and did not observe any such conditions as were complained of.

316 - Modification of Existing Contracts

Approved copies of the special use permits issued to the Hawaiian Cane Products Company, Mrs. E.N. Holmes and Mrs. Isabelle Jagger, were received and distributed to the permittees. These all cover leases of private cottages in the park, for the period May 1, 1937 through April 30, 1938.
State, County or Municipal Legislation Affecting the Parks

Copy of the Territorial Senate Joint Resolution No. 7, memorializing Congress to confer on the Territorial Public Utilities Commission jurisdiction over the Inter-Island Steam Navigation Company was furnished your office.

Local newspapers carried an item to the effect that Delegate King's bill (No. 1986) for the addition of the Kalapana and Footprint areas to the park passed the House and Mr. King has stated his confident it will pass the Senate without much difficulty.

Flora, Fauna and Natural Phenomena

Rangers were on duty at the observation station at Haleakula and also Uwekahuna museum in the Kilana section to furnish information for visitors. Classification sheets covering proposed upward reclassification of all ranger positions in this park were forwarded in accordance with previous instructions from the Director.

Forms 1-612 recommending the appointments of Gordon MacKenzie as temporary ranger and Dr. Fred Ballard as seasonal ranger-naturalist were forwarded for approval. However, word was received later from Dr. Ballard that he would be unable to accept appointment because of a more definite offer with the University of Michigan, so Robert Fowler, who had previously served as ranger-naturalist in the Yellowstone, was recommended in Dr. Ballard's place.

Special trips were given the men and officers of the three Navy vessels that were in Hilo Harbor on the 27th, 28th, 29th and 30th, and Assistant Geologist Wescott gave a lecture on each of the ships.

Museum Service

Reports from Assistant Park Naturalist Lamb show that he gave three talks during April to a total of 567 persons. A new project of compiling a description of interesting things to be seen on hiking trips, giving distance and time necessary to cover the ground, has been started. This information will be condensed to one sheet, with a map on the reverse side. These information sheets were prepared following a suggestion made by Mr. Lorrin P. Thurston.

Natural Phenomena

A complete report of the activities of the Volcano Observatory under the direction of Dr. Jaggar will be found at the back.
510 - Increase or Decrease in Travel

Travel to the Kilaeua section was 14,051 as compared with 13,356 for the same period last year. Travel to Haleakala amounted to 2895 persons which included approximately 14 truck loads of Navy men.

530 - Visitors

April 1 - Group of Japanese inter-collegiate wrestling champions for the day
- 3 - Girl Scouts from Mountainview
- 14 - Dr. and Mrs. Arthur L. Day of Washington. Dr. Day is connected with the Carnegie Institution. They departed on the 18th. While here they were given special attention by Dr. Jaggar and Acting Park Naturalist Williams. Dr. Jaggar took them around the island before their departure.
- 17 - Group of boys from Maui Vocational School for the day
- 27 - Mr. John Storer, of Waltham, Massachusetts, who had been requested by the National Parks Association to make a survey of the lands of Puna which it is hoped will be added to the park. He was taken to the section near Kalesana, which is in the proposed addition, by the superintendent. He expressed personal interest in the project and approval of the condition and administration of the park.

620 - Fire Protection

Three lectures on the subject of fighting forest fires and the use of fire tools were given the enrollees and foremen at the CCC camp, also one fire-drill was held at night to accustom the enrollees to leaving the bunkhouses with the least possible confusion.

On the 20th a small fire started in the drying room of the CCC camp, but did no damage beyond burning up some of the enrollee government-issued clothing, amounting to $4.79. Cause: clothes had been hung too close to the stove.

900 - Miscellaneous

During his visit to Honolulu the superintendent attended a meeting of the Hawaii Tourist Bureau Committee of the Honolulu Chamber of Commerce and at the luncheon following talked to the group on recent improvements in the park. He also attended several sessions of the Territorial legislature and conferred with various members on legislation affecting the park.
Also, while in Honolulu, an agreement was made with Field Supervisor E.H. Felted, whereby the 26 enrollees in the Haleakala camp would be turned over to the Territory of Hawaii for work in the Enala forest preserve during the six months' winter period beginning October 1.

Respectfully submitted

Edward G. Weyse
Superintendent
Group of visiting Japanese University students - They were wrestling champions of their various schools and classes - The young lady is not one of the group. She is Miss Whitney, N.P.S.

Beginning of work on Haleakulani Information Shrine, N.C.W. Project.
Picture No. 3

Picture No's. 1, 2, and 3. - Three views showing rough grading, base course, and finished surface. - Residential Area Road.
Residential Area Roads - Six views showing Picture No's 4 and 4a, Entrance to Administration Building Parking Area, Picture No's. 5 and 5a, Portion of Parking Area, Picture No's 6 and 6a, Entrance from Rim Road. - Rough grading in progress
May 5, 1937

Mr. Edward G. Wingate, Superintendent
Hawaii National Park, T.H.

Subject: Report of the Hawaiian Volcano Observatory for April, 1937.

Dear Mr. Wingate:

Routine has been as usual, the weekly reports have been issued, and the Volcano Letter for February 1937 was off the press at the end of April. The several projects outlined in the March Report have been continued, and to them has been added work on a plan for systematic research in seismology at the Yellowstone group of parks.

Volcanic activity of the month

The following are the Halemaumau pit data for Kilauea Volcano:

<table>
<thead>
<tr>
<th>Week ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack openings</th>
<th>Local tremors</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 4</td>
<td>25.00</td>
<td>1</td>
<td>25.0 mm.</td>
<td>75</td>
</tr>
<tr>
<td># 11</td>
<td>30.75</td>
<td>5</td>
<td>34.0</td>
<td>89</td>
</tr>
<tr>
<td># 18</td>
<td>11.25</td>
<td>5</td>
<td>26.0</td>
<td>41</td>
</tr>
<tr>
<td># 25</td>
<td>12.00</td>
<td>5</td>
<td>44.5</td>
<td>42</td>
</tr>
</tbody>
</table>

A feeble shock April 1, 5:31 p.m. was felt in Kona and Hilo and indicated origin distance from Kilauea 32 miles. Another the same day at 6:50 p.m. indicated distance 7 miles. Another April 4, 1:52 a.m. was 3 miles away. A moderate shock felt at Kilauea, and dismantling one pan of the seismograph occurred April 19, 7:50 a.m., origin distance 15 miles. A feeble shock April 11, 2:52 a.m. indicated distance 15 miles. Another April 16, 4:10 a.m. originated 51 miles away, was generally felt on the island but especially in the northwest portion. A feeble shock April 19, 5:59 a.m. was 2 miles away and felt at Kilauea. From seismograms showing determinate distance 16 were from Mauna Loa or beyond, 39 from Kilauea.

Work of the Volcanologist

Dr. Jaggar was engaged in (1) the Mauna Loa project (2) the Yellowstone project (3) seismograph construction (4) superintending records (5) making circuit of island with Dr. A. L. Day.

Mauna Loa

On April 2, in Honolulu, Mr. Alfred Carter, Trustee of the Parker Ranch authorized us to prepare a map outlining the land desired
on Mauna Loa, and such a map has since been prepared in Superintendant Wingate's office. The same day Mr. Whitehouse, Land Commissioner for the Territory of Hawaii agreed to the same project, the map in blueprint to be brought back to Honolulu for further consideration.

On April 26, Mr. A.M. Brown, manager of Keahou Ranch, went with Messrs. Wingate and Jaggar to inspect the terminus of the road on Mauna Loa. Mr. Brown's ranch is on Bishop Estate land. Responding to a letter about the proposed ceding of land to the National Park, which he had received from the Bishop Estate, Mr. Brown indicated that there was no land of use to his ranch above 7,000 feet, and within the proposed boundary of the Park addition.

Yellowstone project

A letter from Dr. Bryant in Washington received April 3, suggested that Dr. Jaggar prepare a project whereby a limited group of parks, the Yellowstone among them, should enter upon local research involving seismographs. Dr. Jaggar during the month prepared such a project entitled "Program for Natural History of Local Ground Movement" in the form of a letter to the Director of date April 4. This included a plan to include Grant Teton, Yellowstone and Glacier, to cost $16,720 in 1939, justified as a whole and by 11 items, and suggesting and justifying a proposed personnel. Copies of this document are in Dr. Bryant's office and in the office of the Superintendant and of the Volcanologist, Hawaii National Park. It was mailed to Washington, April 20.

Seismograph construction

On an instrument which had been prepared, experiments were made during the month running the clock and testing various kinds of pens and ink. The results were not successful as compared with automatic writing on smoked paper. It was decided that for volunteer observers the operation of smoked paper dials would be entirely possible, if the dials are prepared in headquarters laboratory and returned in special containers.

With this in view a special smoking machine was built by the mechanic of the Hawaiian Volcano Research Association, A. Okuda, and the test of smoking dials appeared to be a success. There is enormous difference in the diminished friction on the smoked dials compared with inked pens.

Classifying records

S. Sato of the Research Association and the University has continued his work of classifying clippings and tending the library, and great improvement is manifest in the headway that has been accomplished in these matters.
Visit of Dr. A.L. Day

Dr. A.L. Day arrived April 14, from New Zealand and remained until April 18. Dr. Day is retired Director of Geophysical Laboratory of the Carnegie Institution of Washington, and he and his men have been collaborators at the Hawaiian Volcano Observatory several times in the past. Dr. Day is the author of a monograph on Yellowstone Hot Springs, and he has been studying New Zealand hot springs by comparison. I went around the island with him and with Mrs. Day, showed him the new road up Kīlauea Crater, outlined our projects, and gave him publications. He was interested in my work of 1936 on Montserrat, where I met his Associate, Frank A. Perrot.

Lectures

Dr. Jaggar lectured on the subject of Mauna Loa to officers of the Hawaiian Department U.S. Army at Fort Shafter the afternoon of April 1. That evening he gave a radio talk on the same subject over KGU in Honolulu.

E. H. Yaeche, Assistant Geologist, gave a radio talk "On ground tilt and Rim Crack Measurement at Kīlauea" over Station KHBC, Hilo, on April 6. He gave lectures April 28, 29, and 30, respectively on U.S.S. Idaho, U.S.S. Fortland, and U.S.S. Mississippi, dealing with volcanoes and earthquakes, and showing pictures to about 300 men and officers on each ship.

Work of the seismologist

Mr. Yaeche completed printing photographically and mounting in a frame a series of type seismograms for exhibit. He overhauled the earthquake annunciator making it more positive in action. The precise level, which had been giving trouble, was returned to San Francisco for repair.

Along with Chief Ranger Christ, Mr. Yaeche experimented on extending the electrical connections of the earthquake annunciator so that it would ring a bell in other houses of the Park. Results are not yet completely satisfactory. He took photographs of the three new model seismographs in the shop. The earthquakes of 1936 were plotted on a map of Hawaii.

On April 27 and 28 he assisted in explanation to large numbers of sailors from the warships at Halemaumau pit.

H. Yasumake, in addition to his usual duties of operating seismographs around Kīlauea Crater and caring for outdoor work, repaired and repainted the rain gauge at the Observatory under Mr. Yaeche's direction, and also repainted the instrument shelters of both pit and
the Observatory in accordance with the standards of U.S. Weather Bureau.

A. Okuda under Dr. Jaggar's direction installed new machine tools, and repaired old ones along with a new motor, in the instrument shop. These tools are a grinder, a drill, and a jig-saw, and the jeweler's lathe was greatly improved.

Leaks were discovered April 13, in a check valve leading from the large water tank and these were repaired. The pipe system, like everything else in the old Observatory building, is in very bad condition. The congestion in the building is getting worse and worse, and there is no place for new pieces of furniture even when they are obtained. The mails make hundreds of additions to the valuable pamphlet collection of the library, and in the Volcanologist's office there is hardly room for the occupants.

Visits from Mr. W. E. Robertson, Engineer of the Park Service were of great value in furnishing advice concerning the Mauna Loa projects and the proposals concerning the Yellowstone and other volcanic parks.

Very respectfully,

F. A. Jaggar,
Volcanologist.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HAWAII NATIONAL PARK
HAWAII
Wailuku, Maui, April 30th, 1937.

The Superintendent
Thru the Office Chief Ranger
Hawaii National Park, Hawaii

Dear Sir:

The following report of the Haleakala Section for the month of April, 1937 is respectfully submitted:

000 General:

010. Introduction.
Ranger H. W. Doust is Acting District Ranger relieving District Ranger Peck who is still on vacation.

020. General Weather Conditions.
7.00 inches of rain fell at White Hill during the month. The greatest precipitation was 2.00 inches on the 27th. We had eighteen days clear, seven days cloudy and five days partly cloudy.

100 Administrative:

110. All work was kept up during the month.

150. Equipment and Supplies.
Three paint brushes received from Hilo by mail.

200 Maintenance, Improvement and New Construction:

210. Maintenance.
The usual maintenance work on the road was carried on during the month. The center strip consisting of white spots was started from the parking area at the Observation Station down the roadway and about one-half of the work has been completed to date. When finished there will be a white line of spots extending the entire length of the Park roadway (within the park boundaries). This line of white spots will help considerably when driving through fog and at night. This will also be a great improvement.

400 Flora, Fauna and Natural Phenomena:

The Ranger in charge was on duty at the Office and Observation station at times of heaviest travel, whenever possible, to give information and other service.
410.(continued)
A package of Silverword seed was sent to Mr. Judd, Territorial
Forester at Honolulu as per instructions of Mr. Wingate.

500 Use of Park Facilities by the Public:

510. Increase or Decrease in Travel:
Check of travel shows 125 private cars carrying 625 persons
entered the park the last week of the month. Due to the fact that the
Navy was at Lahaina this travel was increased by 14 additional trucks
carrying sailors and officers, which swelled the total to 1045 persons
entering the park for the week. Giving a total for the week of
507 cars and 2885 persons which is an increase over last month.

530. Visitors.
The United States Navy visited the park and we had everything
from the lowly (Gobs) to gold braid and brass buttons of the high ranking
Officers of the Navy. They all enjoyed their trip except one sailor who
managed to fall into the crater severely cutting a gash in his head. He
was taken by an Officer of the fleet to Kulu Sanitarium for first aid
treatment where I directed him. It was nothing serious.

600. Protection and Police:
Frequent patrols are made during the month with no arrests.
An order was issued by the Project Superintendent Olson of the C.C. Camp
with my concurrence ordering the removal of all dogs and fire arms from
within the boundaries of the Park. This order was issued due to the fact
that several stray dogs have been taken in by the boys of the C.C. Camp
and were becoming a nuisance. Mr. Olson also informed me that one of
the carpenters on H.O. W. Construction in the crater had a rifle which
he had been using to hunt outside of the Park boundary on Sundays. He
was not using the gun in the Park.

Yours very truly,

Harry W. Doust
Acting District Ranger.
REPORT OF CAMP DIRECTOR
W. J. STEPHENS NOW EXP TO THE SUPERINTENDENT
HAWAII NATIONAL PARK, HAWAII, T.H. FOR THE
MONTH ENDING APRIL 30, 1937

The labor turn over for the month was as follows:

Kileama Section

To accept permanent employment 2
To continue education 1
Expiration term of service 1
Dishonorable discharge 1
Administrative discharge A.W.O.L. 1

Kalaakala Section

None

The camp was quarantined until the 10th of April on account of the development of several cases of measles. This delayed the end of period leave for the purpose of cleaning and sanitizing the camp, washing and sterilizing bedding and blankets, and for necessary minor repairs to buildings. On the 13th of the month a case of measles developed and the camp was again restricted.

A dance and basketball game had been arranged for April 10th and the lifting of the quarantine at the last moment made this possible of accomplishment. The dance was sponsored jointly by the National Park CCC and the Territorial Camp at Waimanalo, and proved both enjoyable, and profitable to the Camps' exchanges at both stations.

The Project Superintendent Mr. Eyrort reports satisfactory progress on projects. A total of 3005 man days being reported as turned over to the superintendant, for work. Mr. Olsen, reports considerable work done on the shelters in the crater and East House improvements are completed. Kileama section worked on Fencing park boundary and stringing top wire on the Hapu side to within 1/2 mile of the beach using 220 man days. Eradication of exotics especially Jerusalem cherry occupied the time of 338 men.

Road and trail maintenance was extensive with 1771 men and three foremen working on this project. The Haleakula Information Shrine was started April 19, 1937 and made slow progress as was to be expected, as this is the first project of this kind undertaken and even with a semi-skilled workmen to assist, the enrolles at the end of the month were just beginning to show any competence. More projects of this type are awaiting final approval and with a few boys showing a distinct aptitude for this work will be completed with more speed.

The Senior Foreman, Landscape Architect, Mr. Pope reports several plans prepared.

1. A plan for the planting and landscaping of the front area of Kileama Military Camp.
2. A plan was prepared for a garage in the rear of the Administration Building.
3. A sketch prepared for a lunch room on Haleakalā.
4. A sketch of the proposed Mauna Loa Park Addition.
5. A sketch for a proposed moving picture booth for the OGG Camp was completed.
6. Job applications for six new jobs were finished, these being, Landscaping Kilauea Military Camp, Telephone Line Maintenance, Educational Guide and Contact Work, Tool boxes AGW and Garage.

Bills of material were prepared for five projects.

Mr. Pope made two inspections of the camp and appeared to find it in good condition but suggested many changes and improvements which should be made if money becomes available and the camp is made permanent.

The teacher, Mr. Hyer, reports that starting of a shorthand class, 19 boys attending and all the classes previously mentioned continuing. In addition to the magazines purchased, a considerable gift of used magazines were received. The books in the travelling library have been changed. Outside speakers were asked to postpone their visits because of the camp's quarantine.

The Recreational Officer, Mr. Makimakih, with the start of the baseball season has arranged several inter-crew games, and outside games have been played with scratch teams from Kilauea Military Camp. The interest in athletics has gone a long way to alleviate the prolonged confinement.

The Camp is essaying a moving picture show of its own early in May and though experimental, with the cooperation of all concerned would be successful and profitable.

The weather was fair during the month, light rains making the camp and men uncomfortable, but were not heavy enough to let them interrupt the work progress.

Respectfully submitted,

Wilkinson J. Stephens
Camp Director, OGG
<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>APPROPRIATION</th>
<th>ALLOCATED</th>
<th>OBLIGATED</th>
<th>BALANCE</th>
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<td>$44,200.00</td>
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<td>335.00</td>
<td>116.72</td>
<td>221.28</td>
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<td>22,500.00</td>
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<td>2,514.30</td>
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<td>11440629</td>
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<td>114405/70752</td>
<td>P.I.A., Allotment to Interior, Nat'l Park Service, 1935-37</td>
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<td>115681000</td>
<td>National Park Service, 1935-36</td>
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<td>283.18</td>
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<td>National Park Service, 1935</td>
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</table>
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  

TRAVEL REPORT  

Hawaii National Park for the month of April, 1937  

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Year</th>
<th>Last Month</th>
<th>Last Year</th>
<th>Decrease for Travel Year</th>
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<tbody>
<tr>
<td>PRIVATE TRANSPORTATION:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles.</td>
<td>13,510</td>
<td>69,967</td>
<td>12,557</td>
<td>99,443</td>
<td>9,476 .09</td>
</tr>
<tr>
<td>Persons entering via motor vehicles.</td>
<td>13,510</td>
<td>69,967</td>
<td>12,557</td>
<td>99,443</td>
<td>9,476 .09</td>
</tr>
<tr>
<td>Persons entering via other private transportation.</td>
<td>17</td>
<td>1,516</td>
<td>357</td>
<td>2,184</td>
<td>668 .306</td>
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<tr>
<td>Total persons entering via private transportation.</td>
<td>13,527</td>
<td>69,967</td>
<td>12,557</td>
<td>99,443</td>
<td>9,476 .09</td>
</tr>
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<td>OTHER TRANSPORTATION:</td>
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<tr>
<td>Persons entering via cars.</td>
<td>511</td>
<td>3,101</td>
<td>799</td>
<td>4,034</td>
<td>933 .231</td>
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<tr>
<td>Persons entering via trains.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation.</td>
<td>511</td>
<td>3,101</td>
<td>799</td>
<td>4,034</td>
<td>933 .231</td>
</tr>
<tr>
<td>GRAND TOTAL ALL VISITORS.</td>
<td>14,051</td>
<td>93,068</td>
<td>13,356</td>
<td>103,477</td>
<td>10,409 .10</td>
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</table>

Automobiles in public camps during month.  
Campers in public camps during month.
<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Year</th>
<th>Last Month</th>
<th>Last Year</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
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<tr>
<td>Cars reentry,</td>
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<tr>
<td>Motorcycles,</td>
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<td>Total motor vehicles,</td>
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<tr>
<td>Persons entering via motor</td>
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<td>2,685</td>
<td></td>
<td>12,235</td>
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<tr>
<td>vehicles,</td>
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<td></td>
<td></td>
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<tr>
<td>Persons entering via other</td>
<td></td>
<td>2,685</td>
<td></td>
<td>12,235</td>
<td></td>
</tr>
<tr>
<td>private transportation,</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via</td>
<td></td>
<td>2,685</td>
<td></td>
<td>12,235</td>
<td></td>
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<tr>
<td>private transportation,</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td><strong>OTHER TRANSPORTATION:</strong></td>
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<td></td>
</tr>
<tr>
<td>Persons entering via stages,</td>
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<td></td>
</tr>
<tr>
<td>Persons entering via trains,</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Persons entering otherwise,</td>
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<tr>
<td>Total other transportation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL ALL VISITORS,</strong></td>
<td></td>
<td>2,685</td>
<td></td>
<td>12,235</td>
<td></td>
</tr>
</tbody>
</table>

|                                | This Year | Last Year | Increase |
|                                |           |           | Number   |
| Automobiles in public camps    |           |           |          |
| during month,                  |           |           |          |
| Campers in public camps during |           |           |          |
| month,                         |           |           |          |
**UNITED STATES**
**DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**

**STATUS OF AUTHORIZED PROJECTS**

<table>
<thead>
<tr>
<th>Description of projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>520.1 Haleakala Road, Post Construction (F.A.)</td>
<td>62</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>523 Uwekahuna-Bird Park Road, surfg, treatment, 1.75</td>
<td>99</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>524 Residential Area Roads, completion 3/4 mile drlg, sng, surfg (F.A.)</td>
<td>65</td>
<td>25</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>525 Headquarters Area Roads, Improvements (F.A.)</td>
<td>45</td>
<td>25</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>FP 677.14 For the erection of one observation station &amp; toilets; one office and checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleakala</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>FP 677.14 Employee's Residence and connecting service lines for newly appointed U.S. Commissioner</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Hawaii National Park for the month of April, 1937**
# REPORT OF PARK REVENUES

**Hawaii National Park for the Month of April, 1937**

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received, ^ (Mr. G. F. Allen, Chief Disbursing Officer)</td>
<td>1,033.32</td>
<td>0.00</td>
</tr>
<tr>
<td>Total.</td>
<td>1,033.32</td>
<td>0.00</td>
</tr>
<tr>
<td>Remitted, * (O/P #1876, Misc. Rec. by Mr. G. F. Allen, Chief Disbursing Officer)</td>
<td>1,033.32</td>
<td>0.00</td>
</tr>
<tr>
<td>On hand close of month.</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Note: Year to Date**

- Park revenues received this year to date, 1,468.82
- Park revenues received last year to date, 350.00
- Increase, 1,118.82
- Per cent of increase, 3.20

**Notes:** * See Service Letter dated April 19, 1937
<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th></th>
<th>This Month Last Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
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UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

REPORT OF SALES OF PUBLICATIONS

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| **NON-GOVERNMENT PUBLICATIONS:** |        |       |
| On hand beginning of month,     |         |       |
| Received during month,           |         |       |
| **Total**,                       |         |       |
| Sold during month,               |         |       |
| On hand at close of month,       |         |       |

Cash on hand beginning of month, 9.48
Sales during month, .40
**Total**, 9.88
Remitted during month, 0.00
Balance, 9.88
When interviewed today concerning the proposal to make the Civilian Conservation Corps a permanent government organization, Superintendent Wingate of Hawaii National Park stated emphatically that on the record of achievement established by the CCC in three years of continuous activity in Hawaii's parks he was convinced that the organization could fill a permanent place in the governmental structure.

He said that the Civilian Conservation Corps should be considered a community social service organization as well as a work unit. "The accomplishments of the CCC are not to be judged solely upon the amount and quality of useful public work done but also upon the effect of the program as a whole in the community. It must not be forgotten that the enrollees are selected by the welfare agencies in the Territory from their lists of needy families and that it is the families of the enrollees who receive the bulk of the enrollees' pay. The average enrollee, with the exception of leaders and assistant leaders, who are paid $45 and $36 a month, receives $30. Of this amount about $25 each is allotted to his family, who may not hold this money for the boy, but are required to make use of it for their own benefit. This has meant better food, clothes and medical attention for many of these families. Old bills have been paid and homes repaired.

"Idle boys have been put to work and removed from the streets and pool halls and beer parlors. Educational opportunities are offered them in the Camp and practical training in the field. Their religious training is provided for through camp services both Protestant and Roman Catholic. Outstanding men in the community have met with the boys and discussed problems of life with them. The YMCA and the Hawaii Welfare Bureau have been particularly helpful. Healthful recreation has been arranged."

Continuing, Superintendent Wingate said, "But, I know you newspaper people are of necessity thick-skinned and skeptical. You are realists and you want to know, regardless of achievements or the benefits to the community, what the cost has been. And you are right. That is the only practical yardstick to measure these things by. And it is because I believe the figures bear me out that I made my first statement. The work has been done and its results are on the ground for you to see. The total cost of all phases of the program since its commencement in January, 1934 until March 31 this year was $562,598. This figure includes every item of expenditure. It includes enrollees pay, cost of camp construction, pay of supervising personnel, purchase of tools, equipment, and clothing; gasoline, oil and repairs; fence wire, cement, dynamite, etc.; medical attention and hospitalization, office equipment; recreational supplies and every expense incidental to the operation of the camp.
"During this period there has been a total of 211,044 enrollee man days to account for. This means that it has cost just $2.67 a day per enrollee to operate the camp and conduct all the field work. Looked at alone in the light of work accomplished I believe that figure of $2.67 a day has justified the program.

"Incidentally of that total figure $210,233 is enrollees pay of which $175,700 has gone to the enrollees families through allotment checks. Six hundred and forty-five different boys have been enrolled in the camp at one time or another. The percentage of overhead cost has obviously been low."
May 10, 1937

The Superintendent
Hawaii National Park

Dear Mr. Wingate:

There follows the report of activities of the ranger force for the
month of April.

000 - General

Work consisted mainly of the usual routine patrolling, repairing of
telephone lines, etc.

With the exception of park tours conducted for the benefit of the sailors
and officers of the USS Portland, Mississippi and Idaho on the 27th, 28th
and 29th the month was comparatively quiet.

020 - General Weather Conditions

Total rainfall at the headquarters area was 7.83 inches, at the CCC
camp 6.48 inches and at Haleakala 7 inches. Maximum temperature at head­
quar ters was 71.8 on the 12th and 49.6 on the 2nd.

100 - Administration

110 - Status of Work

All work was kept current both in Kilaeua and Haleakala sections.
Senior Landscape Foreman George W. Pope has been kept busy with plans and
maps for ECW projects.

120 - Park Inspections By:

Routine park inspections were made of all work, also field inspections
of the various projects under the regular park appropriation and ECW. Every­
ting was found to be progressing smoothly. I have also noticed that since
Mr. Eyre has taken charge that the foremen seem to be taking more respon­
sibility especially in connection with the tools and the appearance of the
boys working under them.

The superintendent, who left for Honolulu on the 31st of March to attend
a meeting of the Tourist Bureau and other matters, returned to headquarters on
the 7th.

125 - Other Governmental Officers

C.C. McBridge, Entomologist with the Bureau of Plant Industry,
Honolulu, visited the park from the 28th to the end of the month, in connection
with insect infestations in the koa trees.
150 - Equipment and Supplies

Two telephones were received for the Kilauea section.

170 - Plans, Maps and Surveys

Engineer Robertson has been busy since his arrival on relocation of roads and new construction projects.

180 - Circulars, Publicity Bulletins, Radio Talks, etc.

One press release, concerning the permanence of the CCC was issued in April, also the February issue of the Volcano Letter. Copies of both are attached.

Three radio talks were given over KHBC (Hilo) by the following: Assistant Geologist Waesch, subject "Crack Measurements and Tilt at the Hawaiian Volcano Observatory," April 6; Chief Ranger Christ, subject "The Hawaii National Park and Its Ranger Staff," April 20; Ranger Williams, Crater Lake National Park, April 27.

200 - Maintenance, Improvements and New Construction

210 - Maintenance

At Kilauea the usual maintenance of roads, trails and equipment was carried on.

At Haleakula Active District Ranger Doust reported that the center strip of white spots on the road from the parking area at the observation dome on the road was about half done. When completed this line of white spots will be of considerable assistance for drivers coming to the park at night or during foggy weather.

The resthouse at the 10,000 foot level on Mauna Loa has been cleaned and the stoves and other equipment overhauled.

220 - Improvements

Resurfacing of the cutoff road at the park entrance was completed, as was also the grading of the shoulders and filling of washes along the Uwakalma road.

All fire tools were sharpened and oiled.

230 - New Construction

Work was started on the parking area at headquarters and remodeling the driveway in front of the Volcano House.
400 - Flora, Fauna & Natural Phenomena

410 - Ranger, Naturalist and Guide Service

Rangers were on duty at the observation station at Haleakala and also Uwekakama museum in the Kilauea section, to furnish information for visitors.

Special trips were given the men and officers of the three Navy vessels that were in Hilo harbor on the 27th, 28th and 29th, and Assistant Geologist Waseche gave a lecture on each of the ships.

500 - Use of Park Facilities by the Public

510 - Travel to the Kilauea section was 14,051 as compared with 13,366 for the same period last year. Weekend travel to Haleakala was 2885, which included approximately 14 truck loads of sailors.

530 - Visitors

April 1 - Group of Japanese wrestling champions for the day
   # 3 - Girl scouts from Mountain View.
   # 17 - Group of boys from Maui Vocational School for the day
   # 14 - Dr. and Mrs. Arthur L. Day of Washington DC. Dr. Day is connected with the Carnegie Institution. They departed on the 18th, after being taken around the island by Dr. Jagger.

600 - Protection

610 - Police Protection

Frequent patrols were made in both sections. At Haleakala Acting District Ranger Douet found it necessary to issue an order for the removal of all dogs and firearms from the CCC camp.

620 - Fire Protection

Three lectures on the subject of fighting forest fires and the use of fire tools were given the enrollees and foremen at the CCC camp, also one fire drill was held at night at the camp to accustom the enrollees to leaving camp with the least possible confusion.

Respectfully submitted

[Signature]
Chief Ranger
Joseph H. Christ  
Chief Ranger  
Hawaii National Park  
Hawaii  

Dear Mr. Christ:

April 22, 1937.

It is my duty to report that on April 20th, 1937 at 10:30 A.M. a small blaze was discovered in the Camp Drying House, after it had about burnt itself out.

Upon questioning the two enrollees who first discovered the blaze, combined with my own survey, shows that wires strung over head in this room for the purpose of hanging clothes to dry, had been moved too close to the stove pipe, resulting in the following Government property being destroyed.

- 3 Pairs of Denim Pants valued at $ 1.80
- 1 " of Inspection Pants valued at .92
- 2 Sweat Shirts valued at 1.53
- 3 Towels valued at .54

Total....$ 4.79

No other damage was done.

The above mentioned hazard has been corrected and a vivid picture will be painted to all the enrollees this afternoon at a fire lecture and drill, as to what could have happened to our camp, due to this little carelessness.

Very truly yours,

W. H. Everett  
Project Superintendent  
Camp Fire Chief  
ECW HNP
MEMORANDUM TO SUPERINTENDENT EDWARD G. WIGGERS.

The following is a report of work accomplished under my direction during the month of April, 1937.

1. Largest part of month spent on new roads - Jobs No. 524 and 525. Jobs 65% complete.
2. Pumped water to high tank 12 times - 8 hrs.
3. Rebuilt back porch, Qtrs. #6.
4. Sharpened bars and picks.
5. Installed 200 feet of 2" pipe to Office building.
6. Laid 60' of 1/2" pipe for fire line near office.
7. Cleaned Toilets, Uwekahuna and Pit.
   (Fresh water and chemicals in same.)
8. Hauled materials from Hilo. 8 trips.
9. Repaired electric plugs, Qtrs #6.

Robert R. Craik
Foreman, HNP
The Superintendent,
Hawaii National Park,
Hawaii.

Dear Sir:

The following is the report of my time by hours
For the month of April 1937.

Work on cars and trucks 139 Hours
Check in gasoline 8 "
Repair hand tools 6 "
Portable forge 5 "
Fill all car batteries 4 "
Repair fire pump 4 "
Warrior road roller 4 "
Air drills 3 "
Lawn roller 3 "
Check in kerosene 2 "
Transfer gasoline to storage tank 2 "
Repair museum light plant 2 "
Steel cots for Mauna Loa 1 "
1 1/2 inch water hose 1 "
Clean lower garage 1 "
Warehouse 1 "
Extra spark plugs 1 "
Check tools in warehouse 1 "
Construct telephone tester for office exchange 1 "
Clean and oil surveyors chain 1 "
Repair air compressor 1 "

Total 139 Hours.

Submitted by,

F. F. Fischer,
Mechanic.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Havasu National Park

MONTHLY REPORT
MARCH, 1937

IMPORTANT

This file constitutes a part of the official records of the
National Park Service and should not be separated or papers
withdrawn without express authority of the official in charge.
All files should be returned promptly to the File Room.
Officials and employees will be held responsible for failure
to observe these rules, which are necessary to protect the
integrity of the official records.

ARNO B. CAMMERER,
Director.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HAWAII NATIONAL PARK
HAWAII

OFFICE OF THE SUPERINTENDENT

April 7, 1937

The Director
National Park Service
Washington, DC

Dear Mr. Director:

Following is the report of activities for Hawaii National Park for March.

000 - General

Of considerable interest to the park as well as residents of the islands and visitors to them is the struggle now going on in both houses of the Territorial legislature to have an investigation made of the prevailing Inter-Island rates, both passenger and freight. Several different bills and resolutions have been introduced on the general subject which are being watched with interest by this office. Copies or news clippings of these bills have been sent the Director's office.

020 - General Weather Conditions

Rainfall at headquarters totaled 13.4 inches, at the CCC camp 12.22 inches and at Haleakula 22.6 inches. The last week of March was unusually bright and sunny, though during a 12-hour period on the 20th there was 45 inches of rain and Ranger Doust reports that 7 inches fell at Haleakula on the 22nd. Maximum temperature at Kilauea was 73.2° and minimum 48.1°. Both Mauna Loa and Mauna Kea were snow covered throughout the month and several skiing parties enjoyed the sport on Mauna Kea.

100 - Administration

110 - Status of Work

With the exception of a few minor details the inventory and checking of equipment records requested by Special Agents Hollins and Vanden-Huevel is almost complete. Other office work is current.

Senior Landscape Foreman George W. Pope, ECW, who was transferred from the ECW project at American Island State Park, South Dakota, entered on duty on the 8th.

Former Project Superintendent W.J. Stephens, of our CCC camp, received his promotion to Camp Director and entered on duty in his new position March 19.
Mr. Walter Rycroft of Honolulu, who was appointed to fill the vacancy left by Mr. Stephens' promotion, entered on duty as Project Superintendent on the 24th.

120 - Park inspections by:

121 - Superintendent

March 1 - In company with Chief Forester Coffman the superintendent made inspection of Kipuka Pumulu, park auto campground and picnic grounds, golf course area and in the afternoon they were joined by Field Supervisor R.E. Tillett and Chief Ranger Christ on inspection of the Chain-of-Craters area and bridle paths.

March 2-3 - Conducted Mr. Coffman and party on a trip to the source of the 1935 Mauna Loa lava flow.

March 7 - Went to Mani with Mr. Coffman and Mr. Tillett for inspection of park and EOW projects in the Haleakala section, returning to Kilana on the 13th.

March 14 - The superintendent inspected the Mauna Loa truck trail with Associate Engineer W.E. Robertson of the San Francisco office.

March 17 - Accompanied by Chief Ranger Christ, Landscape Foreman Pope, Engineer Robertson, Messers. Pasche and Williams went to the crater to locate site for Halemanu information building and ranger shelter.

March 29 - Inspection was made of work being done on repairs to cracked road surface at the Halemanu parking area, and of the section of the park boundary running through the golf course.

122 - Special Representatives of the National Park Service

Chief Forester John D. Coffman, who had been on the island approximately 10 days, completed his inspection of the park and Territorial CCC camps and left by steamer on the 7th. On March 2 and 3 he and Mr. Tillett were conducted by the superintendent and Dr. Jaggar on a trip to the 1935 Mauna Loa eruption source. Enroute the EOW fencing project, truck trail and exotic plant removal were examined. The various contemplated Mauna Loa projects were discussed on the ground. Besides those mentioned the party included Chief Ranger J. H. Christ, EOW Project Superintendent, W.J. Stephens, and Henry Kini, packer. Snow in patches was encountered below the 12,000 foot level and the 1935 cones were brilliant with yellow sulphur.

Messrs. Coffman and Tillett, on the 3rd for an inspection of Territorial EOW projects and camps in company with Territorial Forester L.W. Bryan
On the 5th Samuel P. Spencer, Chairman of the Hawaii Board of Supervisors, gave a luau in Hilo in honor of Mr. Coffman. It was attended by many local officials and was a particularly well prepared and delightful affair.

On his way to Honolulu Mr. Coffman stopped off at Maui, where he made an inspection of the various CCC projects on that island. He was accompanied on this trip by Field Supervisor Tillett and the superintendent. There follows an itemized account of the trip. Monday, March 8, spent night at old Haleakala reathouse with CCC boys; Tuesday, 9th, night at Pa liku, which is located inside the crater of Haleakula, at the east end; Wednesday, 10th to Kiamo and Kipahulu by horse, thence by car to Keanae CCC camp, (Territorial); Thursday, 11th, inspected Keanae CCC camp forestry projects and back to Maui; Friday, 12th, Messrs. Coffman and Tillett took the plane to Molokai and the superintendent returned to this island by steamer.

123 - National Park Service Officers

Associate Engineer W. P. Robertson of the San Francisco office, who has been detailed to this park for about two months, arrived on the 13th. He was accompanied by Mrs. Robertson.

130 - Finance and Accounts

A detailed financial statement will be found at the back.

150 - Equipment and Supplies

Two office chairs and four tires and tubes for the Haleakula section were received.

At the request of the superintendent of Lassen National Park, three electric meters, which were surplus to our needs were transferred to that park.

160 - Status of Alienated Lands

On March 26 the Commissioner of Public Lands was requested by letter to advise this office regarding the status of the condemnation suit against the Campbell Estate, in the matter of acquiring 1.9 acres of land at the Thurston Lava Tube.

170 - Plans, Maps and Surveys

Mr. Robertson has been busy since his arrival locating the driveway at the Volcano House, the parking area behind the administration building, (projects 526 and 524 respectively) and studying the fire protection water system.
Three radio talks were given over KHBC during March by the following persons: Dr. Jaggar on the 9th, subject "Mauna Loa"; Mr. Pope on the 18th on State Park Work and Ranger Munro on the 20th, subject "National Parks." On the 31st Dr. Jaggar also delivered a talk before the Visitors Club of the Tourist Bureau in Honolulu.

Special Office Orders Nos. 15 and 16 were issued – the first prohibiting further hauling of sand from the public campground at Nanakuli Palao and the second stating that no parties were to be granted permission to use the resthouses at Puu Haluhulu until certain repairs had been made by the Army. Copies are attached.

On March 21 an article on Hawaii National Park was prepared by the superintendent and forwarded Mr. George Mellen in Honolulu for use in his monthly trade magazine, The Sales Builder.

200 - Maintenance, Improvements and New Construction

210 - Maintenance

The wooden floor in the oil house at Haleakala was removed and gravel substituted. At Kilauea the usual maintenance of roads, trails and equipment was carried on. Thirty-six telephone poles on the line leading to the CCC camp had to be renewed. Due to No. 46 crack at Haleakulani opening, that part which crosses the road leading to the parking area split and it was necessary to dig out around it, lay a thin steel plate and place a concrete slab over that, followed by resurfacing.

On March 6 the Director was requested by letter for an emergency allotment for making repairs to the administration building and one set of quarters. Also, on this same date, plans for the observation building and scientific instrument shelter, to be constructed under ECW, were concurred in and forwarded the Director.

220 - Improvements

The guard fence at the Haleakulani tourist lookout was repainted and the surface of the lookout area repaired by filling the numerous holes left after recent heavy rains.

230 - New Construction

Project 524, clearing, grading and surfacing of 3/4 mile residential area roads, was 40% complete at the end of March and project 525, improvements, headquarters area roads, 20% complete.

Camp Director Ojima, of the Haleakala CCC camp reports one shelter completed in that section.

In compliance with memorandum from the Director’s office dated February 24, recommendations for three minor road projects, were mailed on the 31st.
Activities of Other Agencies in the Park

Public Service

The clubroom at the Volcano House was remodeled in March, the work consisting of tearing out the partition between the main room and porch, thereby enlarging it considerably and rendering it vastly more convenient.

Schedules of Rates

Approved $60 monthly rate for park employees at the Volcano House and the 1937 schedule of rates of the Photo Studio were received in March.

Complaints

A letter, dated March 26, was received from C.W. Dickey, a very prominent Honolulu architect, complaining about the condition of the old resthouse and all comfort stations at Haleakala. Instructions have been issued to both Acting District Ranger Doust and KOW Camp Director Olson to do whatever is necessary to remedy this situation.

Cooperating Governmental Agencies

On March 28 a recommendation was addressed to your office by letter, that the name of the local postoffice be changed from Hawaii National Park to Volcano Postoffice. This was made in order to relieve the existing confusion arising from the park being composed of two sections and located on different islands.

County, State or Municipal Legislation Affecting the Park

Information has been received that Representative J.W. Robinson of Utah has proposed an amendment to the Hawaii National Park act to permit the federal district court of Hawaii to appoint a special commissioner whenever necessary to hear cases of law violation within the park. This also provides that the court may act whenever the regular position is vacant or the commissioner is unable to act.

On March 5 a letter was addressed to Territorial Senator Joseph L. Sylva, author of a bill exempting post exchanges and ships' service stores from Territorial excise taxes. As there had been introduced in the Congress of the U.S. SB29 by US Senator Schwartz empowering states and territories to levy such taxes on operators in national parks and other federal reservations the letter suggested that an amendment to Senator Sylva's bill be made which would include public service operators in this park.

A resolution was introduced in the Territorial Senate by Senator Joseph L. Sylva to have federal legislation enacted to remove the Inter-Island Steam Navigation Company from the Inter-State Commerce Commission and placing it under the Territorial Public Utilities Commission. Representative J.B. Fernandes also introduced a bill ( HB33) calling on
Delegate King to report what action had been taken on this matter in Washington. Mr. King has reported that he has introduced such a bill before Congress, but doubted any success, as such a bill had been introduced by him before and he had been unable to secure a hearing before the proper committee.

Approximately March 16 Senator Charles A. Rice introduced a resolution in the Senate calling on the Secretary of the Interior to have an investigation made of the Inter-Island Company's rates.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist and Guide Service

Copies of the announcement of the proposed park ranger examination to be given in the near future were received.

420 - Museum Service

The increased attendance at Uwakahuna museum is apparently due to an experiment made during the latter part of the month of keeping the museum open on certain week days to see if many people availed themselves of the opportunity thus presented. The results, even without advance publicity, were gratifying. Observations showed that many people, local residents as well as visitors, came to the museum during the week. This program will be followed during the summer.

480 - Natural Phenomena

A detailed report of the Volcano Observatory will be found at the back.

After an inspection of the Thurston Lava Tube by Dr. Jaggar, Engineer Robertson, Chief Ranger Christ and Ranger Williams, it was decided that on the recommendation of Dr. Jaggar and Mr. Robertson that the tube would be re-opened to the public, with a sign at the entrance to the effect that visitors would proceed at their own risk. It had been closed sometime back because of dangerous looking cracks in the ceiling.

The Territorial legislature received a communication from the Hilo Chamber of Commerce requesting the legislature to adopt a resolution calling on the federal government to undertake a survey for the proposed Hilo lava embankments to protect the city and harbor from possible lava flows.

On March 6 a joint luncheon was held of the Hilo Chamber of Commerce and Rotary Club committees to discuss the matter of Dr. Jaggar's suggestions for lava embankments to protect Hilo. This was attended by Dr. Jaggar, Wears, Coffman and Pillett and the superintendent. The general discussion was very favorable.
500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

Travel to the Kilauea section was 16,227 persons for March of this year as compared with 14,816 for March, 1936. Travel to Haleakalā amounted to 1,800 people.

530 - Visitors

March 5 - Major-General and Mrs. C. T. Brigham
7 - Cadets from the merchant marine training ship California State
11-12 - Mr. and Mrs. DeHoffe. Mr. DeHoffe is District Governor of the Rotary International.
13 - Hilo High School Girl Reserves

500 - Protection

510 - Police Protection

Frequent patrols were made of both sections. At Kilauea it was necessary to reprimand three motorists for excessive speeding.

520 - Fire Protection

The usual quarterly fire inspection of buildings in the park was made in March.

530 - Accidents

On the 13th a CCC station wagon collided with a private car some four miles outside the park on the Hilo road, the driver of the CCC truck stating that the private car was too far on his side of the road and also that his lights were blinding. After due investigation by the superintendent it was agreed that both parties would assume their respective damages, the station wagon had the left running, left rear fender and hind portion of left front fender smashed, also the left rear door and the two left tires punctured. Damage to the private car consisted of smashed left front wheel, left front fender and left and right lamps broken in addition to a cracked windshield.

On the 21st an Army bus from the Military Camp met with a rather serious accident just below the park entrance. Ranger Williams, who was detailed to make an inspection, reports that it had apparently been traveling at an excessive rate of speed, the right wheels had gone on to the shoulder, the driver pulling rather suddenly, causing it to swerve completely around until the back of the bus hit the opposite side of the road and turned on its right side. The driver and two of the passengers were injured, though not very seriously, and taken to the camp hospital.
In both CCC camps a total of 3415 man days were absorbed by approved projects. In the Kilaeua camp 18 enrollees were discharged at the end of the term which was March 31 and at the Maalekaiaa camp 2 were discharged because of desertion and one was a dishonorable discharge.

The Kilaeua camp was quarantined during the latter part of the month because of an outbreak of measles, all contacts were immunized and at the end of the month there were no new cases. In the event no new cases are reported this restriction will be lifted about April 7.

In the Kilaeua section work was continued on the boundary fence and the coast was reached at Na Pum O Na Eleakule. Crews and equipment returned to the main camp March 30.

Ten large pyramidal tents were purchased from the Quartermaster, two of which were forwarded to the Haleakula camp.

Gardner Hyer, the educational advisor reports that some interest is still being shown in typing and instruction is being started in elementary arithmetic. However music is still the chief interest and amusement of the boys.

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On the 26th Mrs. Bernard Waltjen, wife of one of the park laborers, passed away at the Hilo Memorial Hospital. A greater part of the park force attended her funeral which was held in Hilo the next day.

Miss Verna Eoe of the Yellowstone was a visitor at the park from the 17th to 24th.

The entire staff was shocked to hear of the sudden death of Colonel C.G. Thomson, superintendent of Yosemite.

The usual monthly dance was held at the Volcano House on the 20th. However, due to unusually heavy rain (4½ inches falling between 10 o’clock that night and 10 the next morning) the attendance was very small.

Respectfully submitted

Edward G. Wingate
Superintendent
June 29, 1934

March 22, 1937

Group of four pictures showing development of crack across road at Halenaunau parking area necessitating placing of steel sheet and concrete slab over crack. A hole 8" across had appeared in road surface as the first indication that filling done over a year ago had gradually sifted down into the crack. This crack has been slowly widening for several years at a rate of about $\frac{1}{2}$ millimeter a week.
Showing crack at Haleemaum parking area being excavated and ready for placing of steel sheet and concrete slab.
Project 525 - Force Account. Base course of crushed rock laid on Hilo cutoff road.
### Statistical Report No. 5

**Finance and Accounts**

**March, 1937**

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<td>Roads &amp; Trails, Nat'l Park Service</td>
<td>22,500.00</td>
<td>12,666.75</td>
</tr>
<tr>
<td>14-1130</td>
<td>Roads &amp; Trails, National Parks, Emergency Construction</td>
<td>40,670.65</td>
<td>38,173.69</td>
</tr>
<tr>
<td>14-2007</td>
<td>Roads &amp; Trails, Nat'l Parks, Emergency Construction Act 6/19/34</td>
<td>25,775.00</td>
<td>25,624.67</td>
</tr>
<tr>
<td>14-440629</td>
<td>H.I.R., Int., Nat'l Parks, Roads &amp; Trails Act June 16, 1933</td>
<td>495,536.47</td>
<td>495,493.29</td>
</tr>
<tr>
<td>14-405/70762</td>
<td>P.W.A., Allotment to Interior, Nat'l Park Service, 1935-1937</td>
<td>9,303.00</td>
<td>9,083.36</td>
</tr>
<tr>
<td>14-405/70534</td>
<td>H.I.R., Int., National Park Service 1933-1937</td>
<td>21,085.34</td>
<td>21,085.34</td>
</tr>
<tr>
<td>1451000</td>
<td>National Park Service, 1936</td>
<td>45,001.00</td>
<td>44,773.40</td>
</tr>
<tr>
<td>145/60000</td>
<td>National Park Service, 1935-1936</td>
<td>300.00</td>
<td>283.18</td>
</tr>
<tr>
<td>1451000</td>
<td>National Park Service, 1935</td>
<td>36,040.00</td>
<td>34,785.95</td>
</tr>
</tbody>
</table>
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Hawaii National Park for the month of March, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total motor vehicles</td>
<td>14,756</td>
<td>76,427</td>
<td>14,067</td>
<td>-10,131</td>
</tr>
<tr>
<td>Persons entering via motor vehicles,</td>
<td>14,532</td>
<td>74,926</td>
<td>14,067</td>
<td>85,099</td>
</tr>
<tr>
<td>Persons entering via other private transportation,</td>
<td>224</td>
<td>1,429</td>
<td>219</td>
<td>1,827</td>
</tr>
<tr>
<td>Total persons entering via private transportation,</td>
<td>14,756</td>
<td>76,427</td>
<td>14,286</td>
<td>86,926</td>
</tr>
</tbody>
</table>

OTHER TRANSPORTATION:

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons entering via hotels</td>
<td>471</td>
<td>2,530</td>
<td>2,060</td>
</tr>
<tr>
<td>Persons entering via trains,</td>
<td>530</td>
<td>3,235</td>
<td></td>
</tr>
<tr>
<td>Total other transportation,</td>
<td>471</td>
<td>2,530</td>
<td>2,060</td>
</tr>
<tr>
<td>GRAND TOTAL ALL VISITORS,</td>
<td>15,227</td>
<td>73,017</td>
<td>14,816</td>
</tr>
</tbody>
</table>

Automobiles in public camps during month,          
Campers in public camps during month,
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Haleakala Section, Hawaii
National Park for the month of March, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>Last Month</th>
<th>Last Travel Year</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles,</td>
<td>260</td>
<td>1845</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>1300</td>
<td>9350</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via other private transportation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via private transportation,</td>
<td>1300</td>
<td>9350</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OTHER TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via stages,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL ALL VISITORS,</strong></td>
<td>1300</td>
<td>9350</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Status of Authorized Projects

**Hawaii - National Park for the month of March 1937**

<table>
<thead>
<tr>
<th>Description of projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>520.1 Haleakala Road, Post Construction (P.A.)</td>
<td>57</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>523 Uwekahuna-Bird Park Road, surf.g. treatment, 1.75</td>
<td>99</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>524 Residential Area Roads, Completion 3/4 mile clrg. grdg. &amp; surf (P.A.)</td>
<td>40</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>525 Headquarters Area Roads, Improvements (P.A.)</td>
<td>20</td>
<td>20</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**FP 633.14**
For the erection of one observation station & toilets; 1 office and checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleakala 100

**FP 677.14** Employee's Residences and connecting service lines for newly appointed U.S. Commissioner 0
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATUS OF PERSONNEL

Hawaii National Park for the Month of March 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th></th>
<th></th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
<td>Appointed</td>
<td>Non-Appointed</td>
</tr>
<tr>
<td>Number of employees beginning of month</td>
<td>20</td>
<td>0</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Number of separations</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number of employees close of month</td>
<td>20</td>
<td>0</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Number of promotions during month</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aggregate amount of leave without pay</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
**DEPARTMENT OF THE INTERIOR**

**NATIONAL PARK SERVICE**

**REPORT OF PARK REVENUES**

---

**Hawaii National Park** for the Month of **March, 1937**

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received</td>
<td>100.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Remitted</td>
<td>100.00</td>
<td>25.00</td>
</tr>
<tr>
<td>On hand close of month</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

---

Park revenues received this year to date: **435.50**

Park revenues received last year to date: **350.00**

Increase: **85.50**

Per cent of increase: **24.4**

---
# Report of Sales of Publications

**March, 1937**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government Publications:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On hand beginning of month</td>
<td>950</td>
<td>145.90</td>
</tr>
<tr>
<td>Received during month</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>950</td>
<td>145.90</td>
</tr>
<tr>
<td>Sold during month</td>
<td>5</td>
<td>1.45</td>
</tr>
<tr>
<td>On hand at close of month</td>
<td>945</td>
<td>144.45</td>
</tr>
</tbody>
</table>

|                              |        |         |
| **Non-Government Publications:** |   |   |
| On hand beginning of month   |        |         |
| Received during month        |        |         |
| Total                        |        |         |
| Sold during month            |        |         |
| On hand at close of month    |        |         |

| Cash on hand beginning of month | 9.28 |
| Sales during month              | 1.45 |
| Total                           | 10.73 |
| Remitted during month           | 1.25 |
| Balance                         | 9.48 |
April 10, 1937

Edward G. Wingate, Superintendent Hawaii National Park.


Dear Mr. Wingate:

Small earthquakes have been numerous and the outside world as usual at the time of the spring equinox March 20 has reported earthquakes and volcanic eruptions.

The weekly reports have been issued, and the Volcano Letter for January 1937 was off the press at the end of March. The work at the Observatory has included progress on the plan for acquiring Mauna Loa lands and building lava barriers, preparation of special seismographs for study of Mauna Loa, and the barrier plan has made headway in Hilo.

Volcanic Activity of the Month.

The northeast rift of Mauna Loa was inspected March 2, the upper cones of 1935 were steaming mildly and one of them was stained with sulphur.

The following are the Halemaumau pit data for Kilauea Volcano:

<table>
<thead>
<tr>
<th>Week ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack openings</th>
<th>Local tremors and quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 7</td>
<td>11.25</td>
<td>0</td>
<td>23.0</td>
<td>37</td>
</tr>
<tr>
<td>March 14</td>
<td>9.50</td>
<td>0</td>
<td>23.5</td>
<td>20</td>
</tr>
<tr>
<td>March 21</td>
<td>26.25</td>
<td>5</td>
<td>16.5</td>
<td>69</td>
</tr>
<tr>
<td>March 28</td>
<td>13.00</td>
<td>0</td>
<td>14.5</td>
<td>39</td>
</tr>
</tbody>
</table>

A feeble shock March 11, 7:10 pm was felt on Kilauea Mountain with indicated origin distance 15 miles. Somewhat stronger earthquakes classified as 'lighthouse' were March 17, 12:29 pm, and March 19, 8:39 am both at Kilauea. Two other feeble shocks, perceptible on Kilauea Mountain, were March 15, 12:51 pm, and March 20, 12:15 pm. Three other shocks which might have been felt by persons at rest were March 22, 10:50 am and 11:12 am and March 26, 8:19 am, all of Kilauea origin. Most of the earthquakes registered for the month were of Kilauea origin; three showing Mauna Loa distances were March 10, 10:10 pm and March 24, 7:12 pm and 9:35 pm. An earthquake at 12:10 pm March 18 indicated distance of origin at Kilauea Volcano and was reported felt strongly at Kailua, Kona.

Work of the Volcanologist.

Dr. Jaggar was directing four main projects of 1937 during the month. These are (1) The proposal to add Park land on Mauna Loa (2) The Barrier plan on Mauna Loa (3) Seismograph construction (4) Cataloging and classifying of records.
Land Acquisition.

The project of Hawaiian Volcano Research Association to acquire for the Park all the upper part of Mauna Loa Volcano led to approval of conferences at the end of March and early in April by the Land Commissioner, the Bishop Estate, and the Parker Ranch. The Volcanologist accompanied by Hon. W.P. Frear attended a meeting of the Trustees of the Bishop Estate in Honolulu on March 30, wherein it appeared that the President of the Trustees strongly approves transferring all their upper waste lands to the Park. A map is being prepared in the Park offices to exhibit the proposed boundaries. Similar progress is being made with the question of the Territorial Lands, and with the Parker Ranch lands, and the same map will exhibit boundaries suitable for conveyance to the Park by way of the Research association as intermediate.

The Barrier plan on Mauna Loa.

On March 1 and 2 Superintendent Wingate led an expedition including Mr. Coffman, Chief Forester of the Park Service, and Mr. Tillett, Superintendent of Territorial Emergency Conservation Work, on horseback beyond the end of the new Mauna Loa road to the Red Hill on the northeast rift of Mauna Loa. The night was spent at the resthouse there and in the party were the chief Ranger, the Volcanologist, and the Director of the Park CCC Camp. The party walked west and studied the long Hamanu slope which appeared relatively smooth for construction of the proposed upper barrier; the questions of extension of the road, acquisition of Bishop Estate lands and use of CCC labor with a suitable barracks were all examined. The next evening a ride for six hours brought us to the 1935 upper cone and the return was made to headquarters in the afternoon.

The Delegate to Congress Samuel W. King of Hawaii about the first of March expressed approval of the barrier plan in a published communication. This to be the subject of one of the requests for the Territory for Federal Aid. Mr. Ralph Clark, of the Home Insurance Co. of Hawaii and otherwise prominent in territorial affairs, called at the Observatory March 7 to investigate the aspects of Hilo risks from a business and insurance point of view.

The Volcanologist, by direction of the Superintendent made a broadcast address on Mauna Loa the afternoon of March 9 at Station KIBC in Hilo. A copy of this address has been filed with the Superintendent; its purpose was to describe the expedition of March 1 to the northeast rift, the action of the proposed barriers in case of a dangerous lava flow, and the insurance aspect with reference to eruptions, earthquakes, fires, and marine damage that would be involved in a Hilo lava flow.

Mr. Larrin F. Thurston, manager of the Honolulu Advertiser, came to the Observatory March 17, investigated the barrier project, has since handled the subject with much skill in his newspaper, and advised the use of his broadcasting station KGO and of a lecture to Army Officers in April.

Mr. Jim Marshall a writer for Colliers Magazine, who had visited the Observatory October 17 last, published in Colliers Magazine on March 27 an article on the Hawaiian Volcanoes, which calls attention to the menace from lava flow that hangs over Hilo, in a manner that is timely.
On March 29 the volcanologist went to Honolulu and addressed the Visitor's Club of the Tourist Bureau, and also the annual meeting of the Hawaiian Volcano Research Association developing the theme of protection of property by research in volcano science, the great importance of the physical differences between rough and smooth lavas, the possibilities of experimental work by melting these lavas, the historical lessons concerning Hilo and the progress being made by numerous organizations in approval of building embankments to deflect coming lava flows.

The directors of the Research Association elected for 1937 were as follows:

Frank C. Atherton, president of the Board of Directors of Castle & Cooke Ltd. and the Watson Navigation Co.

Richard A. Cooke, president of C. Brewer Co. Ltd. and director of C. M. and A. Cooke Trust.

David L. Crawford, president of the University of Hawaii.

Arthur L. Dean, past President of the University of Hawaii and Manager of Pineapple Branch of Alexander and Baldwin Ltd.

Walter P. Dillingham, president of Cahu Railway and manager of numerous companies under E. F. Dillingham Co.

Senator Joseph B. Farrington, general manager of Honolulu Star-Bulletin, Hilo Tribune Herald and stations KMB and AHBC.

Hon. Walter F. Frear, former Governor of Hawaii, Chairman of the Board of Bishop Trust Co.

L. Tenney Peck, of the Bishop National Bank, the Castle Trust, and the Honolulu Rapid Transit Co.

Hon. Wade F. Ewain Thing, former Secretary of the Territory and former president of International Trust Co., and attorney.

Larrin P. Thurston, general manager of Honolulu Advertiser and Station KGU.

This Board is enlarged from eight to ten members by the addition of the two newspaper and publicity men.

On March 29, the Board of Directors of the Hilo Chamber of Commerce adopted a resolution requesting the Rivers and Harbors committee of the Congress to provide for a survey under the United States Engineer Corps in Hilo, and in the interest of the preservation of Hilo Harbor, to be made with the least possible delay to determine the feasibility of the barrier proposal at Hilo City. A copy of this resolution is appended.
This action of the Chamber of Commerce was brought about by special action of Hilo Rotary Club February 26, appointing a committee under Mr. Cyril Hooga, Vice-President of the Bank of Hawaii which held a luncheon meeting March 5 that called together Messrs Wingate, Jaggar and Coffman of National Park Service, Mr. Tillet of NOV, the Forrester and County and City Engineers of the Island of Hawaii and several leading members of the Chamber of Commerce. The consensus of opinion was that a barrier survey should be made.

(3) Seismograph Construction.

Building of the first instrument was started March 4 and a second instrument was started March 5. During the month cheap clocks were secured and various materials with the aid of Research Association funds. Sensitive, magnification, methods of calibration, and various inks and pens with which to make the seismographs record were studied during the month.

(4) Cataloging and Classifying of Records.

Satejuro Sato acting as assistant and librarian to the Volcanologist under the University and the Research Association, has now completed much of the card cataloging and systematic filing of the pamphlets and books in the library of the Observatory.

During the month a new filing case was secured through the Park Service to care for the great need of transfer of letters and papers.

Toward the end of the month the large collection of newspaper records and newspaper cuttings, that have accumulated during the twenty-five years, was investigated and its assortment under a filing system was begun.

It is proposed to file all of these clippings vertically in four by six inch index card drawers with the aid of special envelopes. The collections are of great importance for the Observatory because of the records obtained by an international press-cutting bureau of earthquakes and eruptions all over the world. These have a bearing on the Hawaiian work because of the registration of distant earthquakes, the occurrence in Hawaii of tidal waves from them, and the occurrence of cycles whereby Hawaiian and distant eruptions may coincide.

Work of Seismologist.

Mr. H. H. Waesche assistant Geologist completed a short article on a recent trip to the 1923 Flow in Kau desert. He has been making direct photographic prints of typical seismograms for various uses including exhibition or publication, and the need for critical study of past earthquake records in connection with the building of the new instrument for the use of volunteers.

On March 17 he assisted at selecting the location of a new building at Halemaumau pit to be used as an Information Bureau for visitors.
Visitors to Observatory.

Mr. Armitage, head of Hawaii Tourist Bureau accompanied by Mr. Herbert of the "March of Time", visited the Observatory March 3 with a view to the possible featuring of Hawaiian volcanoes at some time in the future in the "March of Time".

On March 10 Dr. and Mrs. Kenneth Mess, accompanied by Mr. Hermann of Kodak, Ltd. visited the Observatory. The volcanologist was glad to escort Dr. Mess about the Volcano. Dr. Mess is the distinguished physical chemist of the Eastman Kodak Co. who developed the famous panchromatic plates which have become of great importance for all kinds of scientific photography.

Other important visitors were Mr. Larrin P. Thurston, and Messrs. Coffman, Tillet and Robertson of Government services.

Very respectfully,

T. A. Jaggar
Volcanologist
RESOLUTION

WHEREAS, Dr. Thomas A. Jaggar, Volcanologist on the staff of the Hawaii National Park, has made a careful study of volcanic eruption during the past twenty-five years and, as a result of that study, he has become convinced that future lava flows from volcanic eruptions will flow toward the City of Hilo; and

WHEREAS, This conclusion was justified by the action of the 1935-1936 lava flow, known as the Humuula Flow, which actually entered the area known as the Hilo Waterhead area and, prior to being stopped by bombing, threatened to advance on the City of Hilo; and

WHEREAS, A lava flow from a volcanic eruption would do great financial damage to the City of Hilo and would flow into Hilo harbor and completely fill that area, rendering it useless for harbor purposes thus making it imperative for the Federal and Territorial Governments to construct another harbor in the immediate vicinity to take care of the great volume of imports and exports annually going over the wharves of this City; and

WHEREAS, A lava flow entering into Hilo harbor would render useless a $1,700,000.00 Federal breakwater, a $3,445,000.00 completed Federal dredging project, and a $2,265,000.00 Territorial wharf system, and would also cause great economic loss to Hawaii's most important industry, the sugar industry, as well as cause great financial loss to the established businesses of the City of Hilo; and
WHEREAS, The said Dr. Thomas A. Jaggar, by and with the advice and counsel of engineers and other informed parties, has demonstrated on charts that a series of lava barriers, comprising rock walls of various heights and thicknesses, will tend to divert the above mentioned lava flows from the vicinity of the City of Hilo, and Hilo harbor and to empty them into the sea at points where comparatively little financial or other damage will be done; and

WHEREAS, It is desirable that a competent survey be made with the least possible delay to determine the feasibility of this proposal; and

WHEREAS, This is properly a function of the United States Engineer Corps because of its interest in the preservation of Hilo Harbor;

NOW, THEREFORE, BE IT RESOLVED BY the Board of Directors of the Chamber of Commerce of Hilo, in regular meeting assembled this twenty-third day of March 1937, A.D., acting by and for the people of the City of Hilo and County of Hawaii, that the Rivers and Harbors Committee of the Congress of the United States be asked to recommend that a provision be made in the 1937 Rivers and Harbors Bill for such a survey; and

BE IT FURTHER RESOLVED, That the Senate and House of Representatives of the Nineteenth Territorial Legislature, at present in session in Honolulu, and the Board of Supervisors of the County of Hawaii, be asked to adopt a Concurrent Resolution of this same effect and forward certified copies thereof to the said Committee and to our Delegate in Congress.

Dated this twenty-second day of March, 1937, at Hilo, Hawaii.

Introduced by ________________ (Signed)  
J.N. Brown

Seconded by ___________________ (Signed)  
H.K. Kellner
SPECIAL OFFICE ORDER NO. 16

March 6, 1937

Until such time as the necessary repairs have been made by the Army to the resthouse at Pau Huluhulu on Mauna Loa, no parties are to be granted permission to use this resthouse.

Edward G. Wingate
Superintendent
SPECIAL OFFICE ORDER NO. 15

Because of the unsightly condition created by excavation, under no condition is permission to be granted anyone to haul sand from the vicinity of the public auto campground at the old prison campsite (Namakani Paio), unless it is desired to use quarry waste, in which case such waste may be hauled at the regular approved rate of 75¢ per cubic yard.

Edward G. Wingate
Superintendent
MONTHLY REPORT—MARCH
HAWAII NATIONAL PARK, EGN, CCC

by Gardner O. Hyer, Educational Advisor

At the offset of this month's report for the camp on Education and Recreation I will state, as an explanation, that I was in Honolulu from the middle of the month until near the end thereof. During my absence my assistant admirably handled the duties connected with this work.

I have a number of boys who have developed into pretty fair typists; many more who are still in the elementary stages of learning, that if they had access to a machine more often would soon become fairly efficient. Typing has a wide educational range; taking in spelling, correct form, industrial habits, and a bettering of English knowledge.

Instruction is starting in Arithmetic. Already this course has received its first aspirants.

Radio is being studied by a number of boys. Recently our radio went out of commission and, with my major assistance, the boys adequately repaired it. Also closing in the exposed parts thus, making it impossible for ignorant hands to impair its usefulness.

I have held group discussions on "Ethics of Religion"

(continued)
continued:

and conditions of World Work Problems as applicable to Hawaiian Plantations, involving CCC Enrollees.

I made it possible for a group of string musicians to work up a thirty minute program and present it at the K.M.C. theater. These same boys held a dance class, here in camp, for the enrollees desirous of acquiring a working foundation of dancing principals.

I have, with the cooperation of the Waimea Educational Advisor and Camp Director, worked up a basketball game and dance, between the Waimea Camp and ours, which will be held in Hilo on the night of April 10, 1937. This dance is to sponsor better mutual feelings between the two camps as well as to get money for Recreational Activities.

We have played three baseball games and three basketball games this month. We also have boxing, horse shoes, golf, and Ping Pong.

Respectfully submitted,

Gardner O. Hyer

Gardner O. Hyer,
Educational Advisor
REPORT OF THE CAMP DIRECTOR C.G.W. HAWAII NATIONAL PARK TO THE
PARK SUPERINTENDENT, HAWAII NATIONAL PARK FOR THE MONTH ENDING
MARCH 31, 1937.

The labor turnover for the month was as follows:

Hawaii: Discharged as per expiration term of service, 18

Maui: Desertion 2
Dishonorable discharge 1

Changes and additions to the Camp Personnel were made as follows:

W. J. Stephens from Camp Superintendent and acting Camp
Director promoted to Camp Director. March 19, 1937.
Mr. Walter S. Hycroft appointed Project Superintendent.
March 24, 1937.
Mr. George W. Pope appointed Senior Foreman (Landscape
Architect). March 6, 1937.

Mr. Pope is a welcome addition as there has been no one attached to
the Camp or Park acquainted with Landscape Technique since Mr. Merel S.
Sager left for the mainland.

Plans completed during the month are:

1. Garage for administration building.
2. Improvements at Volcano House Hotel.

Plans are in preparation for:

1. Development of a landscape scheme for Kilauea Military
Camp, including a road, entrance posts and extensive planting.
2. A lunch room at the Haleakala observation station.

Construction work is ready to start on:

1. Halemaumau Information Shrine.
2. Trailside Shriners (4 units).
3. Information Pointers.

All this work will be started early in April.

Camp Director Olson reports 1 shelter in the Haleakala section
completed, with 367 man-days used on this project during March. 99 man-
days were expended on maintenance work on horse trails in the crater of
Haleakala.

In both camps a total of 3415 man-days were absorbed by approved
projects.
In the Kilauea Section work was continued on the boundary fence and the coast was reached at Ha pum o an Eleanakule and crews and equipment returned to the main camp March 30, 1937. The weather during March was extremely wet weather heavy winds and all the canvas so worn that it is unserviceable for further use and will be surveyed.

Ten large pyramidal tents were purchased from the Quartermaster, two of which have been forwarded to the Maui Section.

1233 man days were used on fence work,
940 " " highway maintenance,
46 " contact station, Maui,
675 " eradication of exotics.

Mr. Gardner O. Hyer, Camp Teacher reports that some interest is still being shown in typewriting and instruction is being started in elementary arithmetic. Music is still the chief interest and amusement of the enrolled personnel.

The camp was quarantined during the latter part of the month for an outbreak of measles, all contacts were immunized and the end of the month saw no new cases. The restriction should be removed about April 7th if no new cases develop outside of this outbreak which has been Island wide, the general health has been good, 1 lost time accident and only minor.

Respectfully submitted,

Wilkinson J. Stephens,
Camp Director, ECW-RMP.
April 4, 1937

The Superintendent
Hawaii National Park

Dear Mr. Wingate:

There follows the report of activities of the ranger department for March.

000 - General:

The usual routine of patrolling, repairing telephone lines, etc., was carried on.

020 - General Weather Conditions

Rainfall at headquarters totaled 13.40 inches, at the ECC camp 12.22 inches and at Haleakala 22.8 inches. The last week of March was unusually bright and sunny, though during a 12-hour period on the 20th there was 4.8 inches of rain, and Ranger Douat reports that 7 inches fell at Haleakala on the 22nd.

100 - Administration

110 - Status of Work

All office and other work was current. Senior Landscape Foreman George W. Pope, ECW, who was transferred from the ECW project at American Island State Park, South Dakota, entered on duty on the 6th.

120 - Park Inspections by:

Routine park inspections were made of all work in progress, also field inspections of the various projects under way.

122 - Special Representatives of the Natl. Park Service

Chief Forester John D. Coffman, who had been in the park approximately 10 days, completed his inspection of the park and Territorial CCC camps and left on the 7th. On his way to Honolulu he stopped off at Maui, where he made an inspection of the various CCC projects on that island. He was accompanied on this trip by Field Supervisor E.S. Tillett and Superintendent Wingate.
A •

123 - National Park Service Officers

Associate Engineer W.P. Robertson of the San Francisco, who has been
detailed to this park for about two months, arrived on the 13th. He was
accompanied by Mrs. Robertson

150 - Equipment and Supplies

Two office chairs and four tires and tubes were received at the
Haleakula section

170 - Plans, Maps and Surveys

Mr. Robertson has been busy since his arrival locating the driveway
in front of the Volcano House, the parking area behind the administration
building, etc.

180 - Circulars, Publicity Bulletins, etc.

Three radio talks were given over KHBC during March by the following
persons, Dr. Jaggar on the 9th, subject, "Mauna Loa;" Mr. Pope on the 16th
and Ranger Murray on the 20th, subject, "National Parks."

200 - Maintenance, Improvements and New Construction

210 - Maintenance

The wooden floor in the oil house was removed and gravel substituted,
at Haleakula. At Kilauea the usual maintenance of roads, trails, and
equipment was carried on. Thirty six telephone poles on the line leading
to the CCC camp had to be renewed. Due to No. 46 crack at Halemaumau opening,
that part which crosses the road leading to the parking area split and it
was necessary to dig out around it, lay a thin steel plate and a concrete
slab over it

220 - Improvements

Resurfacing of the cutoff road from the park entrance was 90% complete
and the grading of shoulders and filling of washes along the Uwekahuna road
60% complete by the end of the month. The telephone box at Famaehi crater
was removed and installed at the junction of Kilauea Pali and Devils Throat
road.

230 - New Construction

Road construction in the utility area was 75% complete at the end of
the month.
300 - Activities of Other Agencies in the Park

310 - Public Service contractors

The clubroom at the Volcano House was remodeled in March, the work consisting of tearing out the partition between the main room and porch, thereby enlarging it considerably and providing much more room.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist and Guide Service

Rangers were on duty at the observation station on Haleakula and at Waiakuma museum in the Kilauea Section whenever possible to give information, etc., to the visiting public.

500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

Travel to the Kilauea section was persons for March of this year as compared with 14,816 for March 1936. Weekend travel to Haleakula amounted to 1300 people.

530 - Visitors

March 7 - Cadets from the merchant marine training ship "California State"

* 12- Dr. Arthur B. Hammond
* 13- Hilo High School Girl Reserves

600 - Protection

610 - Police Protection

Frequent patrols were made of both sections. At Kilauea it was necessary to reprimand three motorists for excessive speed.

620 - Fire Protection

The usual quarterly fire inspection of buildings in the park was made during the month.

630 - Accidents

On the 21st, an Army bus from the Military Camp met with a rather serious accident just below the park entrance. Ranger Williams who was detailed to make an inspection report that it had apparently been traveling at an excessive rate of speed, the right wheels had gotten onto the shoulder, the driver pulling rather suddenly, causing it to swerve completely until the back of the bus hit the opposite side of the road and turned on its right side. The driver and two of the passengers were injured, though not very seriously and taken to the camp hospital.
ECW

On the 24th Walter Eycroft of Honolulu, entered on duty as project superintendent, vice W.J. Stephens, who received his promotion to the position of camp director.

On the 29th Mrs. Bernard Waltjen, wife of one of the park laborers, passed away at the Hilo Memorial Hospital. A greater part of the park force attended her funeral which was held in Hilo the next day.

Respectfully submitted

Joseph H. Christ
Chief Ranger

GW
# TRAVEL REPORT

**Haleakala Section, Hawaii National Park** for the month of **March 31, 1937**

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>Last Month</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
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<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
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<tr>
<td>Cars first entry</td>
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<td>Cars reentry</td>
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<tr>
<td>Motorcycles</td>
<td></td>
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<tr>
<td><strong>Total motor vehicles</strong></td>
<td><strong>260</strong></td>
<td><strong>1845</strong></td>
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<tr>
<td>Persons entering via motor vehicles</td>
<td><strong>1300</strong></td>
<td><strong>9350</strong></td>
<td></td>
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<tr>
<td>Persons entering via other private transportation</td>
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<td></td>
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<tr>
<td><strong>Total persons entering via private transportation</strong></td>
<td><strong>1300</strong></td>
<td><strong>9350</strong></td>
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<tr>
<td><strong>OTHER TRANSPORTATION:</strong></td>
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<tr>
<td>Persons entering via stages</td>
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<tr>
<td>Persons entering via trains</td>
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<tr>
<td>Persons entering otherwise</td>
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<tr>
<td><strong>Total other transportation</strong></td>
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<tr>
<td><strong>GRAND TOTAL ALL VISITORS</strong></td>
<td><strong>1300</strong></td>
<td><strong>9350</strong></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automobiles in public camps during month</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Campers in public camps during month</strong></td>
<td></td>
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</tbody>
</table>
MEMORANDUM TO SUPERINTENDENT E.G. WINGATE:

The following is a report of work accomplished under my direction during the Month of March 1937.

1. Finished laying crushed rock. New quarters road job 75% completed.

2. Graded and laid crushed rock. Cut-off road job 90% completed.

3. Renewed sills joint, studio floor joist, and window casing, kitchen and bath room quarters #13. Also repainted interior walls of same.

4. Opened up crack in road near pit. Laid concrete slab over two thirds of road way.

5. Repaired office building window.

6. Painted interior quarters #15.

Robert Craig
Foreman
April 3, 1937.

The Superintendent,
Hawaii National Park,
Hawaii.

Dear Sir:
The following is a report of my time by hours for the month of March 1937.

<table>
<thead>
<tr>
<th>Task</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work on cars and trucks</td>
<td>92</td>
</tr>
<tr>
<td>Repair rock crusher</td>
<td>20</td>
</tr>
<tr>
<td>Repair air hammers</td>
<td>15</td>
</tr>
<tr>
<td>Pump water as follows:</td>
<td></td>
</tr>
<tr>
<td>High Tank</td>
<td>28,000 gal.</td>
</tr>
<tr>
<td>K.C.W. Kau camp</td>
<td>6,000 gal.</td>
</tr>
<tr>
<td>Lava Tube</td>
<td>600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>34,600 gal.</td>
</tr>
<tr>
<td>Check in gasoline</td>
<td>7</td>
</tr>
<tr>
<td>Repair Air compressor</td>
<td>6</td>
</tr>
<tr>
<td>Repair hand tools</td>
<td>5</td>
</tr>
<tr>
<td>Repair Blasting magneto</td>
<td>4</td>
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<tr>
<td>Repair Museum light plant</td>
<td>4</td>
</tr>
<tr>
<td>Repair and mark Wheelbarrows</td>
<td>4</td>
</tr>
<tr>
<td>Check in kerosene</td>
<td>3</td>
</tr>
<tr>
<td>Transfer motor oil to storage tank</td>
<td></td>
</tr>
<tr>
<td>Survey E.C.W. Equipment</td>
<td>2</td>
</tr>
<tr>
<td>Repair and paint Fertilizer spreader</td>
<td>2</td>
</tr>
<tr>
<td>Repair and paint trail measurer for Maui shipment</td>
<td>2</td>
</tr>
<tr>
<td>Repair old batteries</td>
<td>2</td>
</tr>
<tr>
<td>Fill all car batteries twice a month</td>
<td>2</td>
</tr>
<tr>
<td>Repair fire hose</td>
<td>2</td>
</tr>
<tr>
<td>Repair Telephones</td>
<td>2</td>
</tr>
<tr>
<td>Patch tubes</td>
<td>1</td>
</tr>
<tr>
<td>Sharpen lawn mower</td>
<td>1</td>
</tr>
<tr>
<td>Refill two soda and acid fire extinguishers</td>
<td>1</td>
</tr>
<tr>
<td>Repair Warrior road roller</td>
<td>1</td>
</tr>
<tr>
<td>Transfer gasoline to storage tank</td>
<td>1</td>
</tr>
<tr>
<td>Repair Gravely mowing machine</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>196</td>
</tr>
</tbody>
</table>

Report Submitted by,
F. F. Fischer,
Mechanic.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Hawaii NATIONAL PARK

FILE NO.

MONTHLY REPORT
FEBRUARY, 1937

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge. All files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER,
Director.
Dear Mr. Director:

There follows the report of activities for Hawaii National Park during February, 1937.

000 - General

The return to work on February 5 of the maritime strikers was, of course, of prime importance to the islands as well as the park. After 98 days of comparative isolation it was with considerable relief that news that ships would soon start running on a regular schedule was received. Because of the fact that the Islands are completely dependent on water transportation a greater handicap was suffered here probably than the coast, where there is also overland transportation.

050 - General Weather Conditions

Total rainfall at headquarters was 20.46 inches, at Haleakala 15.86 inches and at the CCC camp 16.52 inches. At Kilauea the maximum temperature was 70° on the 20th and 43.4° minimum on the 12th. Ranger Doust reports one inch of snow on Haleakala on the 12th, with heavy frosts the first part of the month and an unusually heavy one on the 15th and 16th. Both Mauna Loa and Mauna Kea on this island were snow covered above the 11,000 elevation throughout the month.

100 - Administration
110 - Status of Work

With the return of Foreman Craik and Clerk-stenographer Whitney from the mainland on the 17th and 20th respectively, where they had been on leave, their work which had necessarily been shifted to the remaining members of the staff, was turned over to them, thereby relieving the others somewhat of the extra burdens.

120 - Park Inspections by:
121 - Superintendent

Only routine inspections in the vicinity of headquarters and the CCC camp
were made as office work demanded constant attention. Upon the arrival
of Chief Forester John Coffman, accompanied by Field Supervisor E.E.  
Tillett inspection trips were made over the CCC fencing project, CCC
camp, proposed Kalapana addition, Kipuka Puuulu and Chain of Craters area,  
Halape and Hilina Pali, and the southwest corner of the park at the great
1868 crack and to Hana Iki.

123 - National Park Service Officers

Chief Forester John D. Coffman arrived in the park on the 24th
to be here for approximately 10 days. He was accompanied by Field Super­
visor Tillett. While here they expect to make inspection trips of all
CCC and regular park projects, as well as the contemplated projects.

130 - Finance and Accounts

A complete report regarding certain discrepancies found in our records
as a result of an inspection by Special Agents VandenHeuvel and Collin, was
submitted on February 6 to your office.

A detailed financial statement will be found at the back of this re­
port.

150 - Equipment and Supplies

One electrically operated mimeograph and two steel filing cabinets were
received in February.

180 - Circulars, Publicity Bulletins, etc.

Four radio talks were given over the local station, KHBC, during the
month, by the following staff members: Superintendent, February 1, at the
request of the Hilo Chamber of Commerce on the proposed Kalapana addition
to the park; Ranger Williams, February 9, on the general subject "Know your
National Park;" Ranger Murray, February 16, "Southwest National Parks and
Monuments;" Assistant Geologist Wessche, February 23, "Earthquakes."

At the request of the editor of the Colorado Forester, a magazine is­
sued by the Forestry Department of the Colorado State College at Fort
Collins, the superintendent submitted an article on Hawaii National Park,
February 24.

On February 12, Dr. Stanley S. Ballard of the Department of Physics,
University of Hawaii, and recently appointed Research Associate in Geo­
physics in the Park Service, talked before the Engineering Association of
Hawaii at Honolulu; his subject being "The Role of the Spectroscope in
Volcanology."
200 - Maintenance, Improvements and New Construction

210 - Maintenance

The district ranger at Haleakala reports it was necessary to move a large amount of material from the Haleakala road, which had fallen from the banks, due to alternate freezing and thawing.

At Kiliana the usual maintenance of roads, trails, equipment, etc., was carried on.

220 - Improvements

All old tree stumps in front of the Volcano Photo Studio were removed by the CCC crew, thereby improving the general appearance in that locality.

300 - Activities of Other Agencies in the Park

310 - Public Service Contractors

Nick Lycourgas, assistant manager of the Volcano House, left for the mainland during the first part of the month.

With the termination of the seamen's strike tourist travel to the park has increased somewhat, though the number of guests at the Volcano House is still very small.

In conformity with Office Order 333 and Regulations of hours of wages and labor for park operators employees an inspection was made by the chief clerk of the park office of the books and records of the Volcano House. As a result it was found that certain employees underpaid slight amounts and also some were working in excess of the required number of hours. A letter was addressed to the manager of the Volcano House, on February 20, calling his attention to these discrepancies and requesting an early reply.

313 - Schedules of Rates

Notice has been received that on February 9 the Assistant Secretary of the Interior approved a special rate of $50 per month for regular Park Service employees of this park who are forced to live at the hotel because of lack of government quarters.

316 - Modification of Existing Contracts

Requests were received from Mrs. E.H. Holmes (lease No. I-6p-21) and Mrs. Isabelle Jaggar (No. I-6p-20) to have their leases extended on an annual basis for a period of five years in the same manner as that approved for the lease of the Hawaiian Dredging Company cottage (I-6p-23). Copies of special use permits covering these extensions have been forwarded your office for approval.
Advice was received from your office that the request made by the commanding officer of Kilauea Military Camp to construct a machine gun range at the camp should be handled by the Secretary of War through the Secretary of the Interior, and Major Collins, commanding the camp, was accordingly notified.

A resolution was introduced in the Territorial Legislature by Senator Clarenee Crozier of the island of Maui, calling on the President, Congress, Secretary of the Interior and Secretaries of War and Navy, to establish purchasing depots on the various islands, for the purchase of food stuffs, etc., and asserting that the freight rates of the Inter-Island Steam Navigation Company were 16 times higher per mile than those on the mainland.

Representative August Costa Jr., of this island introduced a bill in the Territorial House of Representatives (HB 76) amending section 1, chapter 54 of the revised laws of Hawaii, 1935 to the effect that "no sale or exchange of shore lands within 200 feet of high water mark of the ocean shall be made". This would vitally affect the proposed Kalapana addition to the park, making it entirely unsuitable for national park purposes. Mr. Costa has suggested that this office offer an amendment to the bill, through one of the senators of this island, though we believe more satisfactory results could be obtained by having Delegate King handle any necessary amendment.

Rangers were on duty at White Hill, on Haleakula, and at Jekabuna Museum whenever possible to give information and other services.

Ranger Donut left on February 3 for the Haleakula section, where he is to be stationed while District Ranger Peck, who left for the mainland on the 7th, is on leave for approximately 90 days.

With some assistance from the one ranger on duty at Kilauea, the acting park naturalist succeeded in keeping the museum open to the public each Sunday and conducting special groups, in addition to his regularly scheduled trips.

A total of 29 man-days were devoted by CCC enrollees in keeping the Haleakula observation station open to the public.
Moving the office of the park naturalist (an ECW project) to a spot adjoining the Uwekahuna Museum has been delayed because of the proximity of a seismograph which, it is feared, would be affected by the vibrations of the electric light plant.

Assistant Park Naturalist Lamb reports from Berkeley that he had a most successful and beneficial time while on this detail. To quote: "The total effect of the trip includes concrete benefits to Hawaii National Park in way of museum exhibits and property, consultations to explain Hawaii's problems in many lines of endeavor. . . . All together they add up to make the trip extremely worthwhile from the standpoint of the park and the Service."

460 - Birds

With the gradual blossoming of the ohia-lehua (Metrosideros collina) many of the native birds are descending the slopes of Mauna Loa to feed on the nectar of their favorite flower.

500 - Use of Park Facilities by the Public

610 - Increase or Decrease in Travel

The district ranger at Haleakala reports that a total of 412 cars and 2060 people visited that section during February.

At Kilauea travel amounted to 11,734 as compared with 13,619 for February, 1936.

The anticipated influx of mainland visitors following settlement of the maritime strike has not as yet materialized, at least as far as the park is concerned. Although every ship arriving in Honolulu has been reported as filled to capacity, very few have found their way to this island so far.

530 - Visitors

Feb. 7 - Kohala High School Boy Scout Troop 14, for the day
15-16 - Japanese Consul General, T. Pakuma, from Honolulu
20 - Party consisting of Mrs. W.L. Lyle, Mr. Urban Allen of the Maui News and Mr. Lyle visited the Haleakala section and made a trip through the crater.
21 - Kohala High School Boy Scout Troop 14, for the day
24 - Officers and men from the USS Cushing and USS Perkins for several hours
25 - Subaru Girl Show Troupe from Japan, for the day
28 - Mr. and Mrs. Charles W. Herbert, Mr. Fred Olson and Mr. George Armitage. Mr. Herbert is the cameraman for the "March of Time" and intends spending several days in and around the park for the purpose of making newsreel shots
for the March of Time. Mr. Armitage is executive secretary of the Hawaii Tourist Bureau.

Feb. 28 - Group of 25 YWCA Girl Reserves from Naalehu for the day.

600 - Protection

610 - Police Protection

Form 1-618 recommending the re-establishment of the position of US Commissioner in this park was forwarded your office on February 5.

620 - Fire Protection

Two fire drills were held during February, one being at the CCC camp and the other at headquarters.

630 - Accidents

There was one automobile accident during the month. At Haleakala, a Chevrolet coupe, license 30-170, 1936, ran off the road just below the parking area of the resthouse and turned over. There was very little damage and no injuries, though the driver was somewhat bruised and the other two occupants, women, were only frightened. The car was righted, put back on the road and proceeded under its own power.

900 - Miscellaneous

Two enrollees were discharged in order to accept permanent employment and one enrollee from the Haleakala section deserted.

On the fencing project the camp superintendent reports considerable preliminary work being done, such as moving camp, packing material, etc., as the completed fence nears the beach on the southeast boundary.

Exotic plants have been removed as far as possible on the Kama Loa track trail to the 7000 foot elevation.

The construction of the shelter cabins in the crater of Haleakala has been continued and Camp Director Olson of that unit, reports satisfactory progress and in fact somewhat ahead of schedule.

The horse trail in Haleakala had been badly damaged by the weather and it was necessary to detail a foreman and small crew to do necessary repair work. The camp director reports satisfactory progress on this also and that the trail should be in good condition for summer use.

The whole park staff, as well as their numerous friends and acquaintances on this island and Maui, as well as Honolulu, were greatly shocked to hear of Mrs. Leavitt's death and Mr. Leavitt's injury.
The Hawaiian laborers employed in the park gave a luau at Kapana on February 27 in honor of Chief Forester John D. Coffman.

The superintendent attended the dinner given on February 4 by the Chamber of Commerce in honor of the legislators from this island who were departing for the opening of the Territorial Legislature in Honolulu.

The superintendent also attended the annual meeting of the County of Hawaii YMCA on the 17th.

He was one of the three guest speakers at the annual banquet of the Society of American Citizens of Japanese Ancestry which is held every year on the eve of Washington's Birthday and in the honor of the first president.

Park Service and CCC personnel in Hawaii National Park contributed $57 to Red Cross Flood Relief, exclusive of personal donations by two employees, amounting to $75.

Skiing has become almost as popular on this island as on the mainland, with the slopes of Mauna Kea providing the setting for numerous expeditions. One that drew the most attention was that organized in order that Mr. G.W. Herbert, March of Time cameraman might get some shots of skiing in tropical Hawaii. The members included Mr. Charles Martin of Honolulu, a ski enthusiast, Richard Black, Dept. of the Interior representative in the islands, and former assistant to Adm. Byrd, George Armidge, executive secretary of the Hawaii Tourist Bureau, E.W. Bryan, associate territorial forester on this island and a great many other local people.

As an experiment, three one-day horseback trips into the crater of Haleakala were planned over the three-day holiday occasioned by Washington's Birthday. These were under the supervision of Mr. E.J. Welsh, manager of the Grand Hotel, Wailuku Maui, who has the saddle-horse concession in this section of the park.

Very respectfully,

Edward G. Wingate
Superintendent

GW
Edward G. Wingate Superintendent
Hawaii National Park

Subject: Report of Hawaiian Volcano Observatory
for February, 1937

Dear Mr. Wingate:

Personnel and routine has continued as usual at the Hawaiian Volcano Observatory. Weekly reports have been issued, and the Volcano Letter for December, 1936, was published February 26.

Volcanic Activity of the Month

The weather has been very cold and rainy, the moisture making much vapor at Halemaumau pit of Kilauea volcano. For the last three months the rainfall has been:

December, 18.93 inches, maximum day December 30, producing 5.12"
January, 22.01 inches, maximum day, January 14, producing 6.12"
February, 20.46 inches, maximum day, February 18, producing 4.87"

Total 61.40 inches

The following are the Halemaumau pit data for Kilauea Volcano:

<table>
<thead>
<tr>
<th>Week Ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack Openings (ft)</th>
<th>Local Tremors</th>
<th>Quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 7</td>
<td>7.75</td>
<td>3</td>
<td>16.5</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>* 14</td>
<td>9.00</td>
<td>0</td>
<td>28.5</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>* 21</td>
<td>10.26</td>
<td>2</td>
<td>12.5</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>* 28</td>
<td>5.80</td>
<td>3</td>
<td>16.0</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

A slight shock was felt at Kilauea and Hilo on February 26, located eight miles deep under the Kau desert. The location of most of the very feeble shocks was near Kilauea, only five having been at possible Mauna Loa distances.
Work of the Volcanologist

Dr. Jaggar was in Honolulu until February 5 attending the Budget meeting of the Directors of the Hawaiian Volcano Research Association. The Board of Directors authorized an investigation of the possibility of acquiring the private lands of upper Mauna Loa mountain with a view to transfer to the national park for roads and trails and lava barriers. Letters were subsequently sent out to the owners of these lands, to the Territorial Land Commissioner, to the Commanding General, and to the Director of the Park Service outlining the proposal of the Research Association.

The Association Directors, at their meeting of February 5, tentatively approved a budget for 1937 of $9,740, of which $1,740 for printing delayed publications is contingent upon the raising of sufficient funds.

Much work was done during the month in designing and starting construction on a new model shock recorder, with the aid of A. Okuda, mechanic.

Dr. Jaggar returned to Honolulu for two days, February 25-26, to assist the Finance Committee of the Research Association.

Work of Seismologist

Mr. H.H. Waesche, Assistant Geologist, completed earthquake maps of distribution of epicenters for the last two years, covering both Hawaii Island in general and Kilauea Crater for localized shocks.

He was occupied in rearrangement of cases for stationery, maps and charts with Okuda's assistance.

On the 26th Mr. Waesche made a trip to the 1823 lava flow and its remarkable source crack, as well as to Manna Ici and obtained good photographs all of this being in the party of the superintendent and Chief Forester John D. Coffman.

Lectures

Dr. Jaggar lectured to the Teacher's Institute of Hawaii County, in Kealakekua, Kona, on February 19, subject "Protection of Hilo from Lava Flows."

Mr. Waesche lectured over the radio at KHBC, Hilo, February 23, subject "Earthquakes."

Very respectfully

[Signature]

T.A. Jaggar
Volcanologist

No. 2. Group of visiting Japanese show troupes including a number of child actors. Entrance to Thurston Lava Tube.
No. 3. Chief Forester Coffman at the Great Crack of 1868 in Kau.

No. 4. Shoreline at Halepa beneath Puu Aupu Aupu.  
Chief Forester Coffman.  
ECW Project Supt.  
Stephens, Field Supervisor Tillet and Supt Ningalae.
No. 5. Kipuka Pualulu (Bird Park). Large Koa and young growth of Kopiko. Chief Forest Engineer Coffman.

No. 6. Fern District. Hawaii along road to Kalapana. Note dense jungle growth of ia-ia (Freyacenia arborea). Forester Coffman.
<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>APPROPRIATION</th>
<th>ALLOCATED</th>
<th>OBLIGATED</th>
<th>BALANCED</th>
</tr>
</thead>
<tbody>
<tr>
<td>144/1000</td>
<td>National Park Service, 1937</td>
<td>$464,500.00</td>
<td>$42,425.75</td>
<td>$2,074.22</td>
</tr>
<tr>
<td>146/1000</td>
<td>National Park Service, 1936-37</td>
<td>338.00</td>
<td>71.63</td>
<td>266.37</td>
</tr>
<tr>
<td>14-110:00</td>
<td>Roads &amp; Trails, Nat'l Park Service</td>
<td>22,500.00</td>
<td>10,693.91</td>
<td>11,606.09</td>
</tr>
<tr>
<td>14-1130</td>
<td>Roads &amp; Trails, National Parks, Emergency Construction</td>
<td>40,870.65</td>
<td>37,833.80</td>
<td>3,036.85</td>
</tr>
<tr>
<td>14-1007</td>
<td>Roads &amp; Trails, Nat. Parks, Emergency Construction Act 6/30/34</td>
<td>25,775.00</td>
<td>25,624.67</td>
<td>150.33</td>
</tr>
<tr>
<td>14-405/7062</td>
<td>P.W.A., Allotment to Interior, Nat'l Park Service, 1935-37</td>
<td>9,303.00</td>
<td>9,076.30</td>
<td>226.70</td>
</tr>
<tr>
<td>14-443/70634</td>
<td>N.I.R., Int., National Park Service, 1933-37</td>
<td>21,085.34</td>
<td>21,085.34</td>
<td>0.00</td>
</tr>
<tr>
<td>146/1000</td>
<td>National Park Service, 1936</td>
<td>45,001.00</td>
<td>44,777.40</td>
<td>227.60</td>
</tr>
<tr>
<td>145/61000</td>
<td>National Park Service, 1935-36</td>
<td>300.00</td>
<td>283.18</td>
<td>16.82</td>
</tr>
<tr>
<td>1451000</td>
<td>National Park Service, 1935</td>
<td>36,040.00</td>
<td>34,785.95</td>
<td>1,254.05</td>
</tr>
</tbody>
</table>
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Yosemite National Park for the month of February, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Year To Date</th>
<th>Last Year To Date</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Transportation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>11,155</td>
<td>61,572</td>
<td>12,747</td>
<td>70,992</td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td>197</td>
<td>1,275</td>
<td>238</td>
<td>1,608</td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>11,353</td>
<td>62,847</td>
<td>12,985</td>
<td>72,600</td>
</tr>
<tr>
<td>Other Transportation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via trains</td>
<td>312</td>
<td>2,119</td>
<td>654</td>
<td>2,705</td>
</tr>
<tr>
<td>Persons entering otherwise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation</td>
<td>312</td>
<td>2,119</td>
<td>654</td>
<td>2,705</td>
</tr>
<tr>
<td>Grand Total All Visitors</td>
<td>11,768</td>
<td>64,760</td>
<td>13,640</td>
<td>75,305</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobiles in public camps during month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10-157
(Dec. 1933)

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Haleakala Section, Hawaii National Park for the month of February, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year</th>
<th>This Month To Date</th>
<th>Last Travel Year To Date</th>
<th>Increase For Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIVATE TRANSPORTATION:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles,</td>
<td>142</td>
<td>1,588</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles,</td>
<td>2,060</td>
<td>8,090</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via other private transportation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via private transportation,</td>
<td>2,060</td>
<td>8,090</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHER TRANSPORTATION:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via stages,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL ALL VISITORS,</td>
<td>2,060</td>
<td>8,090</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description of projects</td>
<td>Percent constructed to date</td>
<td>Percent constructed this month</td>
<td>Percent constructed last month</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>----------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>520.1 Haleakula Road, Post Construction (P.A.)</td>
<td>52</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>523 Uwakakuna-Bird Park Road, surfg. treatment, 1.75</td>
<td>99</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>524 Residential Area Roads, Completion 3/4 mile, dirc. grdg. &amp; surfg (P.A.)</td>
<td>35</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>525 Headquarters Area Roads, Improvements (P.A.)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FP 673.14 For the erection of one observation station &amp; toilets; 1 office and checking station; including the purchase of one wood heating stove and miscellaneous furniture, Haleakula</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FP 677.14 Employee's residences and connecting service lines for newly appointed U.S. Commissioner</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATUS OF PERSONNEL

Hawaii National Park for the Month of February, 1931

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
</tr>
<tr>
<td>Number of employees beginning of month</td>
<td>20 0</td>
<td>11 0</td>
</tr>
<tr>
<td>Number of additions</td>
<td>0 0</td>
<td>4 0</td>
</tr>
<tr>
<td>Total</td>
<td>20 0</td>
<td>15 0</td>
</tr>
<tr>
<td>Number of separations</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Number of employees close of month</td>
<td>20 0</td>
<td>15 0</td>
</tr>
<tr>
<td>Number of promotions during month</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>61 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Aggregate amount of leave without pay</td>
<td>0 0</td>
<td>0 0</td>
</tr>
</tbody>
</table>
### Report of Park Revenues

**Hawaiian National Park for the Month of February, 1937**

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received,</td>
<td>12.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Total,</td>
<td>12.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Remitted,</td>
<td>12.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Park revenues received this year to date,</td>
<td>335.50</td>
<td></td>
</tr>
<tr>
<td>Park revenues received last year to date,</td>
<td>325.00</td>
<td></td>
</tr>
<tr>
<td>Increase,</td>
<td>10.50</td>
<td></td>
</tr>
<tr>
<td>Per cent of increase,</td>
<td>3.2%</td>
<td></td>
</tr>
</tbody>
</table>
**UNITED STATES**
**DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**

**REPORT OF SALES OF PUBLICATIONS**

**HAWAII NATIONAL PARK, HAWAII**

February, 1937

<table>
<thead>
<tr>
<th>Government Publications:</th>
</tr>
</thead>
<tbody>
<tr>
<td>On hand beginning of month,</td>
</tr>
<tr>
<td>Received during month,</td>
</tr>
<tr>
<td>Total,</td>
</tr>
<tr>
<td>Sold during month,</td>
</tr>
<tr>
<td>On hand at close of month,</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Government Publications:</th>
</tr>
</thead>
<tbody>
<tr>
<td>On hand beginning of month,</td>
</tr>
<tr>
<td>Received during month,</td>
</tr>
<tr>
<td>Total,</td>
</tr>
<tr>
<td>Sold during month,</td>
</tr>
<tr>
<td>On hand at close of month,</td>
</tr>
</tbody>
</table>

Cash on hand beginning of month, 9.28
Sales during month, 0.00
Total, 9.28
Remitted during month, 0.00
Balance, 9.28
The Superintendent,
Hawaii National Park,
Hawaii.

Dear Sir:
The following is the report of my time by hours for the month of Feb. 1937.

<table>
<thead>
<tr>
<th>Work on cars and trucks</th>
<th>63 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair tools in warehouse</td>
<td>12 &quot;</td>
</tr>
<tr>
<td>Taking stock in warehouse</td>
<td>9 &quot;</td>
</tr>
<tr>
<td>Pump water as follows: High tank 17,500 Gal. B.C. W. Fence camp 8,500 Gal.</td>
<td>Total 21,100 Gal 8 &quot;</td>
</tr>
<tr>
<td>Check and repair fire equipment</td>
<td>8 &quot;</td>
</tr>
<tr>
<td>Check in gasoline</td>
<td>5 &quot;</td>
</tr>
<tr>
<td>Repair rock crusher</td>
<td>5 &quot;</td>
</tr>
<tr>
<td>Assemble and repair wheelbarrows</td>
<td>5 &quot;</td>
</tr>
<tr>
<td>Fill all car batteries</td>
<td>4 &quot;</td>
</tr>
<tr>
<td>Repair galion road roller</td>
<td>4 &quot;</td>
</tr>
<tr>
<td>Check in kerosene</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Solder kerosene cans 5 Gal.</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Repair fire pump</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Repair bituminal pump</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Sharpen grass sickles for B.C.W.</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Clean lower garage</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Sharpen lawn mower</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Repair siren</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Mark new warehouse equipment</td>
<td>2 &quot;</td>
</tr>
<tr>
<td>Transfer motor oil to storage tank</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>Repair tire tubes</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>Repair water hose</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>Repair toilet R7a. #16</td>
<td>1 &quot;</td>
</tr>
<tr>
<td>Clean area around warehouse</td>
<td>1 &quot;</td>
</tr>
</tbody>
</table>

Total 168 Hours.

Report submitted by,

F. F. Fischer,
Mechanic.
March 4, 1937

The Superintendent
Hawaii National Park

Dear Mr. Wingate:

There follows the report of activities of the ranger department for
the month of February.

000 - General

The usual routine of patrolling, conducting tours, repairing of telephone
lines, etc., was carried on.

Foreman R.R. Craft and Clerk Constance Whitney both returned from leave
during the latter part of the month. Ranger Douet left on the 3rd for the
Haleakala section, where he is to be stationed while District Ranger Peck is
on leave, for approximately 3 months.

020 - General Weather Conditions

Total rainfall at headquarters was 20.46 inches, at Haleakala 15.86
inches and at the CCC camp, Ranger Douet reports that on February 12 there
was one inch of snow on Haleakala.

100 - Administration

110 - Status of Work

All work was current in both sections, and the road construction in the
utility area is progressing as rapidly as weather will permit. At the end of
the month it was approximately 35% completed.

120 - Park Inspections By:

Routine park inspections were made of all work in progress, also field
inspections in company with Chief Forester Coffman, Field Supervisor Tillett
and the superintendent.

123 - National Park Service Officers

Chief Forester John D. Coffman arrived in the park on the 24th to be
here for approximately 10 days. He was accompanied by Field Supervisor Tillett.
150 - Equipment and Supplies

One electrically operated mimeograph and two steel filing cabinets were received in February.

180 - Circulars, Publicity Bulletins, etc.

Three radio talks were given over the local station, KHBC during the month by the following staff members: Ranger Williams, February 9, "A Trip to Mauna Loa"; Ranger William Murray, February 16, "Southwest National Parks and Monuments"; Assistant Geologist Waesche, February 23, "Earthquakes".

200 - Maintenance, Improvements and New Construction

The district ranger at Haleakala reports it was necessary to move a large amount of material from the Haleakala road, which had fallen from the banks, due to alternate freezing and thawing.

At Kilauea the usual maintenance of roads, trails, equipment, etc., was carried on.

220 - Improvements

All old tree stumps in front of the photo studio were removed by the CCC crew; thereby improving the general appearance in that locality.

300 - Activities of Other Agencies in the Park

310 - Public Service Contractors

Nick Lycurgus, assistant manager of the Volcano House left for the mainland during the first part of the month.

With the termination of the seamen's strike travel to the park has increased, though the number of guests at the Volcano House is still very small.

315 - Schedules of Rates

Notice has been received that on February 9 the Assistant Secretary of the Interior approved a special rate of $50 per month for regular gov't. employees of this park who are forced to live at the hotel because of lack of quarters.

400 - Flora, Fauna and Natural Phenomena

410 - Ranger, Naturalist and Guide Service

Rangers were on duty at White Hill, on Haleakala, and at Uwekahuna museum whenever possible to give information and other services.
500 - Use of Park Facilities by the Public

510 - Increase or Decrease in Travel

The district ranger at Haleakala reports that a total of 412 cars and 2050 people visited the Haleakala section during February.

At Kilaeua travel amounted to as compared with 13,619 for February 1936

530 - Visitors

February 7 - Manila Variety Show Troupe for the day
- 21- Kahala High School Boy Scout troop 14, for the day
- 20- Party consisting of Mrs. W. L. Lytle, Mr. Urban Allen of the Maui News and Mr. Lyle visited the Haleakala section and made a trip through the crater
- 28- Subaru Girl Show Troupe from Japan for the day
- 24- Officers and men from the USS Oahu and USS Perkins for several hours
- 28- Mr. and Mrs. Charles W. Herbert, Mr. Fred Oleson and Mr. George Armitage, Mr. Herbert being the cameraman for the "March of Time" intenion spending several days in and around the park for the purpose of making newsreel shots for the March of Time.
- 28- Group of 25 YWCA Girl Reserves from Manaloha for the day

600 - Protection

Frequent patrols were made in both sections, no arrests being necessary, though at Haleakala it was necessary to reprimand several motorists for too fast driving

630 - Fire Protection

Two fire drills were had during February, one being at the CCC camp and the other at headquarters.

630 - Accidents

There was one automobile accident during the Month. At Haleakala a Chevrolet coupe, license 30-170, 1936, ran off the road just below the parking area of the resthouse and turned over. There was very little damage and no injuries. The occupants, two women, being somewhat frightened only. The car was righted and put back on the road and proceeded under its own power.

Respectfully submitted

Joseph H. Christ, Chief Ranger
REPORT OF THE ACTING CAMP DIRECTOR TO THE
PARK SUPERINTENDENT, HAWAII NATIONAL PARK
FOR THE MONTH ENDING FEBRUARY 28, 1937.

The labor turnover for the month follows:

1. To accept permanent employment. Kilauea Section.
2. Desertion. Maui Unit.

During the month the following number of mandays were worked on approved projects:

<table>
<thead>
<tr>
<th>Project</th>
<th>Mandays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fencing Park Boundary</td>
<td>1240</td>
</tr>
<tr>
<td>Removing Exotics</td>
<td>427</td>
</tr>
<tr>
<td>Road and Trail Maintenance</td>
<td>346</td>
</tr>
<tr>
<td>Education Guide Contact Work</td>
<td>38</td>
</tr>
<tr>
<td>Shelter Cabins (Haleakula)</td>
<td>366</td>
</tr>
<tr>
<td>Trails, Horse (Maintenance)</td>
<td>60</td>
</tr>
</tbody>
</table>

Total Mandays: 3007

On the fencing project considerable preliminary work was done, such as moving camp, packing in the material necessary for the furtherance of the project. As the fence nears the beach on the South East Boundary, it becomes increasingly necessary to take care of the feeding and watering of the animals and the servicing of the camp. 28 men with one foreman and cook are under canvas. Additional tentage will be necessary during the ensuing period with a consequent outlay of funds. This should be kept in mind in the arrangement for any further projects as the tentage already procured, has been reduced to a minimum.

About one mile has been completed and considerable preliminary clearing and levelling done towards the beach for a distance of 2 miles.

Exotics have been removed as far as possible in the vicinity of the truck trail to 7000 ft. This area will have to be done over again as the majority of the exotics being removed are prolific in seed and unless the young growing plants are removed no progress will be made in the ultimate eradication of those pests.

Necessary work has been done on the maintenance of both highways and trails which work is necessarily continuous, owing to the inadequate shoulders and surface.

The contact station established at Haleakula has received favorable comment, and will be continued as a necessary project.

The work on the shelter cabins has been continued and Camp Director Olson, of the Maui Unit reports progress is very satisfactory and well ahead of schedule.
The horse trail in the Crater of Haleakala has been badly damaged by the weather. Mr. Olson has detailed Foreman Alu to this work. The month's report gives satisfactory evidence that the work is proceeding rapidly and that the trail will be in good condition for the summer.

The weather during the month has been fairly satisfactory and there is no shortage of water for domestic purposes and fire reserves.

Respectfully submitted,

W. J. Stephens,
Acting Camp Director,
ESW HNP.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HAWAII NATIONAL PARK

FILE NO.

MONTHLY REPORT
FOR
JANUARY, 1937

IMPORTANT
This file constitutes a part of the official records of the National Park Service and should not be separated or papers withdrawn without express authority of the official in charge. All files should be returned promptly to the File Room. Officials and employees will be held responsible for failure to observe these rules, which are necessary to protect the integrity of the official records.

ARNO B. CAMMERER, Director.
February 9, 1937

Dear Mr. Director:

There follows the report of activities of Hawaii National Park for the month of January.

OOO - General

On January 7, local newspapers carried a Washington dispatch stating that Delegate King had reintroduced his bill to add the Kalaupuna and footprint areas to this park.

Upon Dr. T.A. Jaggar's return from Honolulu early in January, he informed me that as the result of various conversations during the past year with prominent members, the Hawaiian Volcano Research Association was prepared to acquire by purchase all privately owned land, approximately above the 7,000 foot contour, on Mauna Loa and donate the area to the park. The Association had already secured the concurrence of the Land Commissioner in a proposal that the Territory of Hawaii likewise donate Territorial Government lands similarly situated. The total area so involved is about 340 sq. miles, of which the Government owns one half. The purpose of proposing the transfer of this large area to the park is to provide a means whereby the scientific work of the Volcano Observatory could be more effectively enlarged in scope. The local community realizes the importance of extending scientific study and research to Mauna Loa. This work cannot be effectively undertaken within the irregular small strip of land now belonging to the park on this mountain. Over and above the volcanologic argument for the addition is the argument that it would provide a worthwhile sanctuary for certain species of rapidly disappearing native birdlife which normally inhabit the lower elevations of the area. Interest in this proposal was greatly stimulated when Dr. Jaggar made his important address at the annual meeting of the Hilo Chamber of Commerce on "Protection of Hilo From Coming Lava Flows" and at the request of the Association through Dr. Jaggar, you were advised by radio and letter on January 22, concerning the general proposal.

The maritime strike continued throughout the month and food prices remained at high levels despite heavy imports from foreign countries. No real hardship has resulted, though for a time it appeared that the CCC fencing
pro~tat 1101114 have to be called off on account of lack of grain and hay for the pack animals. At the end of the month it appeared that the strike would be settled within a few days.

020 - General Weather Conditions

Though there was not a single day during the month without some rainfall and the total of 32.01 inches exceeded that for December by 3.08 inches the month was generally very pleasant. There were only ten days without sunshine during daylight hours. Rainfall at Haleakalā totaled 9.70 inches of which 2 inches fell between January 1 and 2. On January 13-14, 6.12 inches fell at Kilaea. This was the heaviest rainfall in many years here.

Maximum temperature at Kilaea was 69.6º and the minimum 45.4º. The means were 63.3º and 53.8º.

Kona storms at the end of December left beautiful blankets of snow above the 11,000 foot contour on both Mauna Loa and Mauna Kea which remained until the end of the month, and were increased by other heavy falls on January 14-15 and 28.

There were nine days with heavy fog either in the morning or late afternoon at Kilaea.

100 - Administration

110 - Status of Work

The continuance of the maritime strike which prevented the return to duty of Clerk-Translator Whitney and Foreman Craig, as well as the absence of Naturalist Jane and the illness of Ranger Murray continued to place considerable extra work on the remaining staff. Office work with the exception of filing was, however, kept up to date. January correspondence was the heaviest of any month so far for this park and the Superintendent wishes here to express his appreciation for the faithful work of Earle Lee Gabriel and Herman Ah Yo.

120 - Park Inspections

121 - Superintendent

Due to the necessity of remaining close to headquarters, only routine inspections were made in its vicinity as follows: At the Rock Quarry Crushing Plant, Hilo; Paulina, Haleakalā, Headquarters Area road job and Public Facilities along the road to Haleakalā.

125 - Other Government Officers

The Haleakalā Road by Principal Hy-Engr. Jack Moskowitz on January 21.

130 - Finance and Accounts
A detailed financial statement is attached.

140 – Labor Situation

Receipt on January 6, of the 6-ton gasoline roller via the Isthmian Steamship Lines enabled a resumption of force account road jobs. Laborers previously laid off were rehired and several new men employed.

180 – Equipment

The following equipment items were received during the month:

1 each, Vadum Pump and High Frequency Coil (Scientific Equip.)
1 Telescopic Allidade "Lister" (Scientific Equip.)
1 Gallon, 6-ton Warrior Roller (Road Construction)
2 Special gas-collecting flasks, Ballard design (Scientific Equip.)
Miscellaneous small items

190 – Plans, Maps, Surveys

Corrections for the 1937 Master Plan were forwarded to the Branch of Plans and Design on January 12, after giving up hope of ever getting a revised sheet of the Military Camp area from the army.

On January 22, a map on which was shown the tentative boundaries of the proposed Hanaa Loa addition to the park was forwarded with a letter to your office.

190 – Circulars, Placeards, Publicity Bulletins, etc.

The usual weekly press release on the activities of the volcanoes was sent out, also the routine 000 enrollee employment notice.

All local papers and radio stations gave full publicity to Dr. T.A. Jaggar’s address at the annual meeting of the Hilo Chamber of Commerce.

230 – Maintenance, Improvements and New Construction

270 – Maintenance

Only routine maintenance at Hilo was carried on, while at Huleakala the severe storm on January 1-2 did much considerable damage to the road that a request was made of Mr. Jack Hockinotiz of the Bureau of Public Roads to inspect the damage and advise the District Ranger concerning repairs.

230 – New Construction

Work was resumed on the job, Residential Area Road, under force account which at the end of the month was 35% complete. The "Day" portable rock crusher powered by the McCormick-Dering tractor was set up at the rock quarry and is giving excellent service.
The gasoline service station at the Volcano House garage area was completed which together with the painting to park colors of the hideous garage and general clean-up of the premises has made a genuine improvement to the Headquarters Area.

300 - Activities of Other Agencies in the Park

315 - New Contracts

Contract No. I-6p-9-HOW for Telephone and Wireless service, with the Maui Telephone System was forwarded your office for approval on January 5.

316 - Modification of Existing Contracts

Special Use Permits covering extension and modification of leases 1-6p-22 to Mrs. E.M.R. Smith and 1-6p-19 to the Hawaiian Cane Products Company were forwarded with recommendations for approval on January 16 and 19.

320 - Cooperating Governmental Agencies

Pertinent to instructions received from the Commanding General Hawaiian Department, that the personnel of the Kilauea Military Camp (rest camp) fire range practice with rifle and machine gun, the Commanding Officer of the camp requested permission to construct a small machine gun range on the camp premises. This request was referred to your office by radiogram on January 26 and reply received that the request should be submitted through the War Department.

The painting of the camp buildings to conform to park colors progressed nicely during the month. On the other hand the camp as part of its water system constructed a high metal tank on the bluff just outside of the park behind the camp. Though outside our jurisdiction, the Commanding Officer agreed not to use bright aluminum paint on the tank roof as had been planned. This was intended to serve as a guide to lost soldiers and as a guide to airplanes. The whole has been painted green which is better, though the tank is still quite a conspicuous object in the landscape.

Though engineers have been studying the camp layout for some months, the army is yet unable to submit any revised building plan for the area. The Master Plan was therefore sent on to San Francisco without any revision of the camp sheet.

The local representative of the Department of Agriculture Extension Service asked the Superintendent to serve on an island of Hawaii agricultural advisory committee. A meeting was held January 7, in the Hilo Federal Building at which several plantation managers, school principals and County Officers were present. In relation to food conditions locally as influenced by the maritime strike, considerable interesting discussion developed.

-4-
With the Chief Ranger devoting most of his time to the force accounting duties, Ranger Donut was the only ranger on duty at Kilauea until January 16 when Ranger Murray returned to duty following extended sick leave. Daily patrols through the most frequently travelled sections of the park were made.

Due to constant heavy fog and mist making driving extremely hazardous the District Ranger at Haleakala was instructed to center line with white paint the entire length of the Haleakala Road.

Birds

Following receipt of suggestions from Associate Director Demarey and Assistant Director Johnston correspondence was begun with Mr. George Munro and Field Supervisor Sillitoe relative to the appointment of two CCC student enrollees for the coming summer to continue studies initiated by Mr. Munro of the remaining native birdlife on the island of Hawaii.

Miscellaneous

On January 19, Dr. T.A. Jaggar, Volcanologist, made an important address before the Hilo Chamber of Commerce and local citizens advising the construction of three strategically placed embankments so constructed as to divert into less valuable land lava flows which might threaten the city of Hilo and its valuable harbor.

With both mountains blanketed with snow throughout the month many parties made the climb, particularly of Mauna Kea, where skiing has now become a fairly easy indulgence in sport since the Territory of Hawaii CCC has erected a shelter and improved the trails. The summit region on Mauna Kea, now designated a Territorial forest reserve might well be made a Territorial Park. Such a designation would not affect the region's usefulness as a forest reserve and would assist in developing its recreational possibilities.

Use of Park Facilities by the Public

Travel to the Kilauea Section was 11,909. For the corresponding month last year 14,586 persons visited this section. The maritime strike and absence of volcanic activity were the apparent causes of the decrease. At Haleakala there were 2,120 visitors in 426 cars, a considerable increase over the previous month. The District Ranger reports that this increase is probably due to the Observation Station now being kept open at all times by CCC enrollees who also keep a warm fire going which adds no little comfort.
600 - Protection

610 - Police Protection

Following a report on investigation made by Sr. Foreman Olson of the Haleakala Unit CCC, the Superintendent ordered the District Ranger to arrest enrollee John P. Silva for breaking into a government building and theft of government property. He was turned over to a U.S. Marshal sent over by the U.S. District Court and taken to Honolulu on January 12, where he was convicted and sentenced to three years in Oahu prison. At the same time the Marshal took Mr. Louis de Ponte, arrested on August 6, 1935 by the District Ranger for hunting in the park to Honolulu where he was placed on 12 months probation. You will note that 5 months expired before the offender in the latter case was brought to trial.

900 - Miscellaneous

Severe storms early in the month destroyed most of tentage of the Haleakala Camp, CCC, and on January 8 approval was requested of the construction of a frame bunkhouse.

On January 25, a Hilo Federal-Territorial Employees, Federal Credit Union was organized. The Superintendent was asked to serve on the Board of Directors and Chief Clerk Higashida on the Supervising Committee.

The regular monthly dance was held at the Volcano House on January 16 and a special Roosevelt Birthday Ball was held on January 30 in conjunction with similar dances in other parts of the islands and the continental United States.

Foreman Robert Craik appeared beet by the same evil genius which has followed Chief Forester John Coffman in his attempts to visit Hawaii. It was not enough that his return to Hawaii was delayed by the maritime strike so the Ohio valley floods took a hand and marooned him in Frankfort, Kentucky.

The maritime strike also prevented the arrival of Mr. George W. Pope, Sr. Foreman (Landscape Architect) CCC whose transfer to Hawaii from Region II had been approved early in the month.

Respectfully submitted,

Edward C. Wingate
Superintendent
Before picture: Hotel garage area showing row of exotic eucalyptus trees and disreputable garage building with rusty faded red roof.

After picture: Hotel garage area after removal of row of trees permitting ECP screen planting to attain proper growth and following construction of new gasoline filling station and painting to park colors of garage.
Near view of completed gasoline station

Approach to gasoline filling station from Hilo side
Rock crushing plant at quarry in operation
Job Headquarters Area Road - Force Account

Near view of set-up of "Day" portable rock crusher and screens. Power is supplied by McCormick-Deering tractor out of picture to left.
Steam rising from floor of
Halesamman following heavy rain.
Edward G. Wingate, Superintendent
Hawaii National Park


Dear Mr. Wingate:

Personnel and routine have continued as usual at the Hawaiian Volcano Observatory. Weekly reports have been issued and the Volcano Letter to November, 1936 inclusive is published.

Volcanic Activity of the Month

Sato and Okuda of the University and Research Association staff here went into the snow on the upper Kilauea Loa trail January 2, and report sulphur coatings, steam and blue fume at the 1935 cones about 12000 feet. The old steam crack east of the upper trail was vaporizing.

The following are the Halemaumau pit data for Kilauea Volcano:

<table>
<thead>
<tr>
<th>Week Ending</th>
<th>Seismicity</th>
<th>Slides</th>
<th>Crack Openings (mm)</th>
<th>Local Tremors and Quakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 10</td>
<td>7.25</td>
<td>3</td>
<td>2.5</td>
<td>11</td>
</tr>
<tr>
<td>Jan. 17</td>
<td>2.75</td>
<td>4</td>
<td>3.0</td>
<td>9</td>
</tr>
<tr>
<td>Jan. 24</td>
<td>3.00</td>
<td>3</td>
<td>6.0</td>
<td>6</td>
</tr>
<tr>
<td>Jan. 31</td>
<td>7.00</td>
<td>0</td>
<td>3.0</td>
<td>14</td>
</tr>
</tbody>
</table>

These are all low values showing very quiet condition. Local earthquakes gave Kilauea distance of origin for 8, Mauna Loa distance (or farther) for 6; felt Kilauea shocks, occurred January 2, 10, and 28; and January 31 produced a felt shock at Waiakea northwest of Mauna Loa.

Work of Volcanologists

January 1 to 5 Dr. Jaggar was in Honolulu. The Commander of the Hawaiian Department U.S.A. General Drum took him over the extensive construction fields of the Army at Kokekole pass, the inclined well, and the ammunition deposit. General Drum will use airplanes photography to survey Hilo side of Mauna Loa.
January 10 Dr. Jaggar addressed the C.C.C. boys on "Protecting Property from Volcanoes and Earthquakes". The first half of January was spent in research on a carefully prepared address, "Protection of Hilo from Coming Lava Flows", delivered at the Annual Meeting of Hilo Chamber of Commerce on January 19. The project for three lava barriers was launched, the Washington office expressed interest in using the C.C.C. for the purpose January 27, and the Hilo Rotary Club endorsed the project and appointed a committee for action January 29. A second address on the subject was made before the Ocala Civic Association January 22, and another at the Social Science Association of Honolulu February 1.

This second trip to Honolulu began January 27 and extended into February for the annual budget meeting of the Volcano Research Association. Conferences were held with Dr. Ballard and Mr. Miyake of the University of Hawaii on progress in spectroscopy of volcanic gas, and electric condenser design for shock recorders.

Incidentally the Volcanologist gave sometime in Honolulu to a study of design for a new shock recorder to be assembled in quantity at the Observatory. This instrument is intended for ranches, offices and plantations. It is to register numerically on a wall annunciator the amplitude and direction of the initial motion. - An annunciator for occurrence and amplitude of maximum motion of small shocks has been in use at the Observatory for years. A new model will be constructed starting in February. It embodies a combination of the Jaggar Shock Recorder and the Annunciator, with entirely new electrical features based on an attempt to narrow down seismometric measurement to a single most significant motion. Mr. L.E. Clark of the Mutual Telephone Co. was helpful with suggestions about materials and standard telephone equipment adaptable to the design.

**Work of Seismologist**

Mr. H.H. Wasche reports he determined the collimation constant of the new Lietz level and adjusted for same, and made proper corrections for previous runs. Adjustment of the level continues, as it shows aberrations.

He sorted out and prepared for filing all seismograms of dates preceding January 1, 1937, and with the help of assistants the engineering and seismological drafting-room cases of maps, specimens, and drawings were rearranged so as to make space for accessions, notably for the Spalding gift of a Collection of Hawaiian Minerals.

Mr. Wasche made new charts for 1937 graphs of the accruing data on tilt, horizontal crater angles, crack-measurements, levelling and other variables to be measured in the Observatory routine.

He installed a new relay on the automatic radio time receiver for seismographs. This is now in successful daily use imprinting delayed Washington time signals on the smoked paper records of each seismograph.
Other Work

Okuda painted the indoor instrument shop and chemical laboratory, and repaired all window panes. Shelf ladders were built for high cases in the laboratories. Sato continued to catalog the library.

Reprints were obtained from Hilo Tribune-Herald of address by T. A. Jaggar "Protection of Hilo from Coming Lava Flows."

Very respectfully

T.A. Jaggar
Volcanologist
The Superintendent,
Hawaii National Park, Hawaii

Dear Sir:

The following report of the Haleakala Section for the month of January, 1937 is respectfully submitted:

General.

The increase in normal travel this month, in spite of prevailing bad weather, is largely due to the fact that the Observation Station has been available for the public.

General Weather Conditions.

9.70 inches of rain fell at White Hill during the month. The prevailing wind direction was from the northeast. There were 4 clear days during the month.

Administrative.

Status of Work.

All work was kept up to date during the month.

Park Inspections by.

Other Governmental Officers.

The road in the Haleakala Section was inspected by Jack Moskowitz, Principal Highway Engineer, Bureau of Public Roads, on January 21.

Maintenance, Improvements and New Construction.

Maintenance.

Much more work on the road was necessary due to damage by storms. Patches of new surfacing were laid and drainways made larger and lined with stone.

Improvements.

A larger overflow pipe has been put on the tank in the Observation Station and the seams in the outside walls of the building were recemented in an attempt to keep moisture out.
400 Flora, Fungi and Natural Phenomena.

410 Ranger, Naturalist and Guide Service.
The Ranger in charge was on duty at White Hill whenever possible, to give information and other service.

500 Use of Park Facilities by the Public.

510 Increase or Decrease in Travel.
Check of travel shows 426 cars and 2,128 people were in the Haleakala Section during the month of January, 1937; an increase of 70% over the record for last month.

600 Police Protection.

610 Police Protection.
On January 3, John V. Silva was arrested for breaking into a government building and petty theft. He was convicted and sentenced to 3 years in prison.
Louis de Ponte, arrested August 8, 1936 for hunting in the park, was put on 18 months probation this month.

Very respectfully,

J.A. Peck,
District Ranger.
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HAWAII NATIONAL PARK
HAWAII

OFFICE OF THE SUPERINTENDENT

REPORT OF ACTING CAMP DIRECTOR, W. J. STEPHENS
TO THE
PARK SUPERINTENDENT, HAWAII NATIONAL PARK, FOR
THE MONTH ENDING JANUARY 31ST, 1937.

The labor turnover for the month was as follows:

Kiliman Section:
- To accept permanent employment . . . . 2
- Personal misconduct ........................................... 3
- Desertion ......................................................... 1
- Persistent A.W.O.L. ........................................... 1

Maalema Section:
- To accept permanent employment . . . . 1
- Desertion ......................................................... 2

Total ............................................................. 10

During the month a total of 3,097 men were worked on the approved projects. A camp of 25 men, 1 Foreman and 1 cook was again established on the fence line on the southern boundary. Trunk trails had to be made for a distance of 5 miles to facilitate the transportation of food, water and necessary material.

Considerable pioneer work was accomplished and approximately one mile of that side was completed.

Weather conditions were adverse. Heavy rains and strong winds making the camp extremely uncomfortable, but no complaints were made and the whole personnel are to be congratulated on their cheerful acceptance of a bad situation.

Another crew is working on the same line but though uneconomical it is still within trucking distance of the camp, and with the small amount to be completed by then the purchase of additional tentage seems wasteful. This crew completed 1½ miles of fence.

Maintenance work on the highways was necessary as the heavy rains in the vicinity of the Kiliman Crater caused several of the ditches to be filled up and rip-rap undermined. This work was replaced on the few dry days experienced during the month. The ditches on the Mauna Loa Trail were widened and deepened after a 6 inch rain fall had proved that they were inadequate. Dry wall drains were enlarged and two new ones in vital places were built.
Religious services were held in camp on the usual schedule.

The Camp Teacher has continued his work with classes in journalism, and English. The issuing of the Camp Paper has also given him the opportunity to train several of the boys in the techniques of the mimeograph machine. Mr. Hyer is deeply interested in athletics and has voluntarily come the assistant of the Camp Recreation Officer and the Acting Director in arranging basket-ball schedules and has acted as both instructor and coach. He has finally persuaded even the most lethargic of the enrollees that work in spare time done on the improvement of the athletic field has its rewards, and considerable work has been accomplished towards the making of a good field. Basket-ball has been handicapped as there is no covered place to practice nearer than 25 miles from the camp, but baseball can be played on our own field or that of the Kilama Military Camp, the personnel of which will furnish us with sufficient competition to make outside games unnecessary.

A few more colds than usual, one appendectomy and 2 tonsilec-
tomies, the latter performed in camp without Hospitalisation were the only cases that made up the sick report. General health was above average.

Rain slowed up but did not stop the work on approved projects. The rainfall for the month being 21.33 inches, 1 day with 5.20 inches, 2 with 3.80 inches, 3.20 inches respectively and only 3 days where zero showed on the record.

Respectfully submitted,

W. J. Stephens,
Acting Camp Director, EXW HNP.
### STATISTICAL REPORT NO. 8
#### FINANCE AND ACCOUNTS
##### JANUARY, 1937

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</tr>
<tr>
<td>145/61000</td>
<td>National Park Service, 1935-36</td>
<td>300.00</td>
<td>283.18</td>
<td>16.82</td>
</tr>
<tr>
<td>1451000</td>
<td>National Park Service, 1935</td>
<td>36,040.00</td>
<td>34,785.95</td>
<td>1,254.05</td>
</tr>
</tbody>
</table>
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

TRAVEL REPORT

Hawa'i National Park for the month of January, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATE TRANSPORTATION:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles,</td>
<td>21,185</td>
<td>19,240</td>
<td>13,779</td>
<td>56,245</td>
</tr>
<tr>
<td>Persons entering via other private transportation,</td>
<td>374</td>
<td>1,738</td>
<td>512</td>
<td>2,071</td>
</tr>
<tr>
<td>Total persons entering via private transportation,</td>
<td>21,559</td>
<td>52,318</td>
<td>14,291</td>
<td>59,515</td>
</tr>
</tbody>
</table>

| **OTHER TRANSPORTATION:** |           |                          |                          |                          |
| Persons entering via trains, | 374 | 1,738 | 512 | 2,071 | 333 | .16% |
| Persons entering otherwise, |           |                          |                          |                          |
| Total other transportation, | 374 | 1,738 | 512 | 2,071 | 333 | .16% |

| **GRAND TOTAL ALL VISITORS:** | 21,939 | 52,095 | 14,296 | 61,685 | 9,650 | .156% |

<table>
<thead>
<tr>
<th></th>
<th>This Year</th>
<th>Last Year</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month,</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
United States
Department of the Interior
National Park Service

Travel Report

Haleakala Section National Park for the month of January, 1937

<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th>This Travel Year To Date</th>
<th>Last Travel Year To Date</th>
<th>Increase for Travel Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Private Transportation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars first entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars reentry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total motor vehicles</td>
<td>2,126</td>
<td>1,176</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via motor vehicles</td>
<td>2,126</td>
<td>5,990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via other private transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total persons entering via private transportation</td>
<td>2,126</td>
<td>5,990</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Transportation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via stages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering via trains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons entering otherwise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total other transportation</td>
<td>2,126</td>
<td>5,990</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total All Visitors:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automobiles in public camps during month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campers in public camps during month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Status of Authorized Projects

#### Hawaii

<table>
<thead>
<tr>
<th>Description of Projects</th>
<th>Percent constructed to date</th>
<th>Percent constructed this month</th>
<th>Percent constructed last month</th>
<th>Probable date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>520.1 Haleakula Road, Post Construction (F.A.)</td>
<td>≤ 47%</td>
<td>5%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>523 Waakahuna-Bird Park Road, surf., treatment, 1.75</td>
<td>99%</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>534 Residential Area Roads, Completion 3/4 mile, surf., grdg. &amp; surf., (F.A.)</td>
<td>≤ 30%</td>
<td>9%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>525 Headquarters Area Roads, Improvements (F.A.)</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

F.P. 633.14 For the erection of one observation station and toilets; one office and checking station, including the purchase of one wood heating stove and miscellaneous furniture, Haleakula.

F.P. 677.14 Employee's Residences and connecting service lines for newly appointed U.S. Commissioner

---

**United States Department of the Interior**

**National Park Service**
<table>
<thead>
<tr>
<th></th>
<th>This Month</th>
<th></th>
<th>This Month Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appointed</td>
<td>Non-Appointed</td>
<td>Appointed</td>
</tr>
<tr>
<td></td>
<td>Reg. FW</td>
<td>Reg. PT</td>
<td>Reg. FW</td>
</tr>
<tr>
<td>Number of employees beginning of month</td>
<td>20</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Number of additions</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Number of separations</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of employees close of month</td>
<td>20</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Number of promotions during month</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Aggregate amount of annual leave taken</td>
<td>44</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aggregate amount of sick leave taken</td>
<td>28</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Aggregate amount of leave without pay</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Hawaii National Park for the Month of January, 1931**
**Report of Park Revenues**

**Hawaii National Park for the Month of January, 1937**

<table>
<thead>
<tr>
<th>Description</th>
<th>This Year</th>
<th>Last Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park revenue on hand beginning of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Received,</td>
<td>25.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Total,</td>
<td>25.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Remitted,</td>
<td>25.00</td>
<td>25.00</td>
</tr>
<tr>
<td>On hand close of month,</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Park revenues received this year to date,</td>
<td>323.50</td>
<td></td>
</tr>
<tr>
<td>Park revenues received last year to date,</td>
<td>275.00</td>
<td></td>
</tr>
<tr>
<td>Increase,</td>
<td>48.50</td>
<td></td>
</tr>
<tr>
<td>Per cent of increase,</td>
<td>.176</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Value</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>959</td>
<td>147.55</td>
<td></td>
</tr>
</tbody>
</table>

**Govt. Publications:**

- On hand beginning of month: 959, Value: 147.55
- Received during month: 0, Value: 0.00
- Total: 959, Value: 147.55
- Sold during month: 9, Value: 1.65
- On hand at close of month: 950, Value: 145.90

**Non-Govt. Publications:**

- On hand beginning of month:...
- Received during month:...
- Total:...
- Sold during month:...
- On hand at close of month:...

- Cash on hand beginning of month: 9.98
- Sales during month: 1.65
- Total: 11.63
- Remitted during month: 2.35
- Balance: 9.28