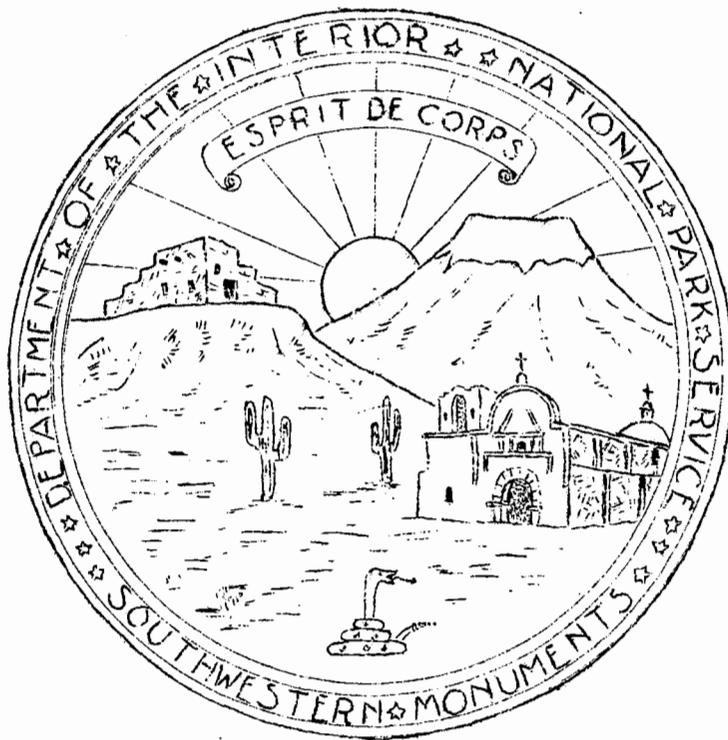




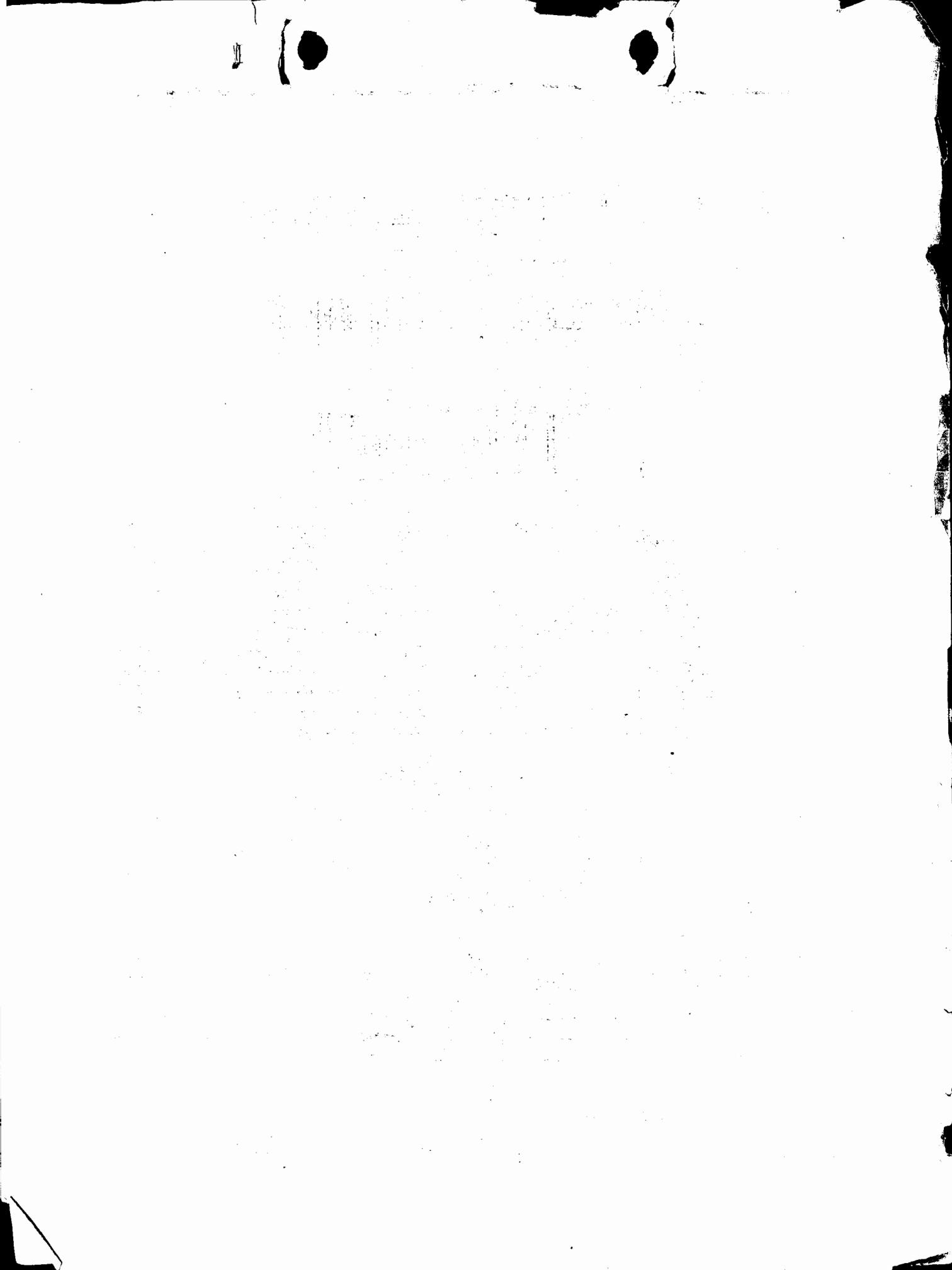
SOUTHWESTERN MONUMENTS MONTHLY REPORT

JUNE 1935



DEPARTMENT OF THE INTERIOR
NATIONAL PARK
SERVICE

CHACO CENTER
NATIONAL PARK SERVICE
P.O. Box 28176
Albuquerque, New Mexico 87125



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SOUTHWESTERN MONUMENTS PERSONNEL

HEADQUARTERS Southwestern Monuments, Coolidge, Arizona: Frank Pinkley, Superintendent. Robert H. Rose, Acting Assistant Superintendent. John H. Diehl, Associate Engineer. Dale S. King, Junior Park Naturalist. Hugh M. Miller, Chief Clerk. Robert Cole, ECW Clerk.

GENERAL FIELD MEN: Charles A. Richey and Harry Langley, Resident Landscape Architects. J.B. Hamilton, Associate Engineer. Andrew Clark, Topographer. J.H. Tovrea, Chief Engineering Aide. A.B. Pinkley, Howard Williams, Walter Smith, C.E. London, Rodmen.

FIELD STATIONS

1. Arches---Moab, Utah. J.J. Turnbow, Custodian.
2. Aztec Ruins---Aztec, New Mexico. Johnwill Faris, Custodian. E.W. Lewis, Temporary Ranger.
3. Bandelier---Box 669, Santa Fe, New Mexico. Earl Jackson, Custodian.
4. Canyon de Chelly---Chin Lee, Arizona. Robert Budlong, Custodian.
5. Capulin Mountain---Capulin, New Mexico. Homer J. Farr, Custodian.
6. Casa Grande Ruins---Coolidge, Arizona. Louis Caywood, Acting Custodian.
7. Chaco Canyon---Crown Point, New Mexico. Thomas C. Miller, Custodian.
8. Chiricahua---Willcox, Arizona. Charlie Powell, Acting Custodian.
9. El Morro---Ramah, New Mexico. E.Z. Vogt, Custodian. Alfred Peterson, Temporary Ranger.
10. Gila Cliff Dwellings---Cliff, New Mexico. No custodian.
11. Gran Quivira---Gran Quivira, New Mexico. W.H. Smith, Custodian.
12. Hovenweep---Cortez, Colorado. No custodian.
13. Montezuma Castle---Camp Verde, Arizona. Martin L. Jackson, Custodian. Frank Fish, Park Ranger.
14. Natural Bridges---Blanding, Utah. Zeke Johnson, Custodian.
15. Navajo---Kayenta, Arizona. John Wetherill, Custodian. Milton Wetherill, Acting Ranger.
16. Pipe Spring---Moccasin, Arizona. Leonard Heaton, Acting Custodian.
17. Rainbow Bridge---Rainbow Lodge, Arizona. No custodian.
18. Saguaro---Tucson, Arizona. No custodian.
19. Sunset Crater---Flagstaff, Arizona. J.W. Brewer, In Charge.
20. Tonto Cliff Ruins---Roosevelt, Arizona. Charlie R. Steen, Acting Custodian.
21. Tumacacori---Box 2225, Tucson, Arizona. George L. Boundey, Custodian. Martin Evanstad, Park Ranger.
22. Walnut Canyon---Flagstaff, Arizona. Paul Beaubien, Acting Custodian.
23. White Sands---Alamogordo, New Mexico. Tom Charles, Custodian.
24. Wupatki---Flagstaff, Arizona. J.W. Brewer, Acting Custodian.
25. Yucca House---Cortez, Colorado. No custodian.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
SOUTHWESTERN MONUMENTS

Coolidge, Ariz., July 1, 1935

The Director
National Park Service
Washington, D.C.

Dear Mr. Director:

The general report on Southwestern Monuments activities for June:

Weather and Travel

June has been a month of generally warm and dry weather contrasted with variable climatic conditions reported for May. Little or no precipitation in desert valleys while some summer showers have occurred in mountains and plateaus to the north and east. Some high winds and sandstorms have occurred as usual at this time of year.

Unique climatic conditions in southern Arizona have prevailed according to reports from the U.S. Weather Bureau. Average relative humidity at 6 p.m. for the month was 8, which is a record low that has not prevailed for some 35 years. Thus, June has been comparatively comfortable despite the fact that this June has been the hottest for 17 years.

Travel for practically all Monuments shows increases of around 10% over June last year. Decreases for Aztec Ruins and Montezuma Castle, however, and reason seems to lie in local road conditions.

Field Trips

Junior Park Naturalist Dale King returned to Headquarters June 24 from Field Division of Education laboratories in Berkeley where he has been on special assignment since April 24.

Engineer Diehl has spent a considerable part of the month visiting the district and getting first hand knowledge of problems.

Park Naturalist Robert H. Rose devoted the last eight days of the month to an investigation of proposed National Monument areas in southern and western Arizona. Report is being prepared for early submission.

Engineering Activities

Early in the month Engineer Attwell was busy getting all work in shape preparatory to leaving for his new assignment at Sequoia National Park. Park Engineer Diehl since arrival here has maintained close supervision of all going projects of this district.

CONDENSED REPORT (CONT.)

In the Office following maps have been completed: Ruins Survey for Tumacacori, Proposed Boundary Extension at Montezuma, Fence Improvements at Pipe Spring, Boundary Extension at Tonto, Boundary Extension for Wupatki, and Proposed Water System at Tumacacori.

Engineer Hamilton reports the following progress for those Monuments comprising a part of his district: (1) Final completion of Ruins Repair construction report for Aztec; (2) Study of disintegrating trail steps at El Morro; (3) staked out location of residence and other improvements at Camyon de Chelly; (4) inspection of stream and revetment work at de Chelly; and (5) made an inspection trip to Yucca House. See p. 305 for account.

ECW Activities

Items here have been taken from reports of Project Superintendents at Bandelier and Chiricahua. Consult index for complete reports.

BANDELIER

1. Headquarters office building completed and occupied June 30.
2. 200 feet of entrance road guard rail completed, and 96 additional feet of footing constructed.
3. Campground extension and landscaping have progressed.
4. Campground table project completed.
5. About one mile of old woods roads in canyon obliterated.
6. Headquarters comfort station footings poured and construction proper started.
7. Crews have worked continuously quarrying rock needed in current construction projects.
8. Construction of utility area started and well under way.
9. Considerable work done in establishing side camp.

CHIRICAHUA

1. Rock slides along the road from the Ranger Station to Massai Point have made road maintenance a major task.
2. Excavation for water development at spring area completed and work on construction of dam started.
3. Pipe line to the 10,000 gallon reservoir completed and excavation for reservoir ready for forms.
4. 800 feet of Echo Canyon horse trail completed; total, 1800 ft.
5. Public campground facilities nearing completion.
6. Headquarters comfort station 30% complete.
7. Sugar Loaf Lookout House complete.

Personnel

Following is a summary of personnel changes that have been effected during the month of June:

1. For some time Park Naturalist Robert H. Rose has also carried the

CONDENSED REPORT (CONT.)

designation of Acting Assistant Superintendent. The start of the new fiscal year July 1st, however, provides for a second Junior Park Naturalist position, several new positions of temporary ranger, and filling of old positions that have been vacant for some weeks.

Filling of these positions, together with the fact that time is ripe for organization of naturalist activities into a consolidated Naturalist Division, has increased responsibilities along lines of museum and naturalist work. Hereafter, Mr. Rose's designation of Acting Assistant Superintendent is discontinued and as Park Naturalist he will devote time to organizing and maintaining the activities of the Naturalist Division.

2. Concurrent with the above change, Chief Clerk Hugh M. Miller is designated as Acting Assistant Superintendent which is in line with increased office responsibilities in administration of the Monuments system.

3. Temporary Ranger Charles E. Powell, formerly at Saguaro National Monument, has been re-assigned to Chiricahua National Monument for the summer season.

4. E.W. Lewis has gone on duty as Temporary Ranger at Aztec Ruins National Monument.

5. Alfred Peterson has been on his old post as Temporary Ranger at El Morro National Monument since the first of June.

Visiting Park Service Officials

Mr. Herbert Evison, State Parks Supervisor, was a Headquarters visitor on June 29 in connection with inspection work on proposed new Monuments areas. See the Report of the Naturalist Division for a more complete account of this work.

Photographer George Grant has been at the office several times during the month in connection with his assignment in this district.

Assistant Landscape Architect Keeling of Chiricahua and Assistant Wildlife Technician Grater of Grand Canyon were visitors on June 29 in connection with the inspections of proposed Monuments areas.

Cordially,

Frank Pinkley, Supt. SW Monuments

CANYON DE CHELLY

Robert R. Budlong, Custodian

The month of June brought our long-awaited increase in visitor travel, though we didn't get as many visitors as we had expected. Total number of visitors to this Monument for the month of June, 179. Of these, 88 drove to the rim of the canyon, and 38 of these descended the trail to White House. Seventy one persons drove into the canyons by car, and 20 rode into the canyons on horseback, muleback, burroback---and there was one other beast of burden used, resembling both horse, mule, burro, and jackrabbit, which I have been unable, as yet, to classify properly. One of the local Navajos rented it to a tourist, during a shortage of horses. It had a head, tail, four legs, and wore a saddle, but the technique it employed in throwing its rider every few minutes made it envied by every other saddle animal on the entire Navajo reservation.

Visitors arrived in 52 cars, and we had the following states represented: Arizona, California, Colorado, Georgia, Kentucky, Michigan, New Mexico, New York, Pennsylvania, Utah, and Wisconsin.

On the 15th of June I erected a weather bureau substation here, and in the future we'll include weather data at this Monument in these reports. Maximum temperature to date, 96, on the 20th; Minimum, 41, on the 18th. Quite a number of sandstorms, two thundershowers, and some high winds. During the afternoon of the 12th, while with a visitor on the canyon rim, we had a light flurry of snow. I admit the weather was very warm, but nevertheless we had some snow, and I have one witness who can substantiate my statement, though everyone else here insists I was probably suffering from the heat.

The canyons were passable for cars equipped with ordinary tires for a period of only about a week. Soon the sun and high winds did their work, and the canyons became too dry and sandy for travel by cars equipped with other than "jumbo" or "airwheel" tires. At this writing, even cars with the large "jumbo" tires find travel in the canyons very difficult. Unless we get some rain in the near future, visitors will be unable to drive within the canyons.

Indians living in the canyons have cut the first crop of alfalfa, and many fields are being cultivated and planted in the side canyons.

Landscape Architect Thomas C. Carpenter, and Resident Landscape Architect-Church Richey were here June 2, 3, and 4. A stake was set to mark one corner of the future custodian's residence, and floor grade was marked.

On June 10 we had the pleasure of receiving Dr. E.P. Meinecke, of the Department of Agriculture, accompanied by Chief Ranger C.R. Markley of Mesa Verde National Park, as visitors to this Monument. Using the pickup truck (which runs occasionally) we managed to drive up del Muerte as far as Twin Trails, and up de Chelly to White House.

On June 16 and 17, Mrs. Eleanor B. Pack, her father and daughter, and a
SOUTHWESTERN MONUMENTS 278 MONTHLY REPORT FOR JUNE, 1935

CANYON DE CHELLY (CONT.)

party of four, visited this Monument.

Mrs. White Mountain Smith, her sister Miss Brown, Mr. and Mrs. C.M. Bell, Miss Henning, Mr. Plant, and Ranger and Mrs. C.G. Harkins, of Petrified Forest National Monument and Holbrook, Arizona, visited here June 16.

As I write this report, Ranger Alberts of Petrified Forest is visiting us. We enjoy these visits of the personnel of other Monuments and government services, and hope for more of them.

Bids have been advertised for the construction of the Custodian's residence which we hope may be built at this Monument. At present we are living in a single room in the boy's dormitory at the Indian School here. Mr. McCurtain, principal of the school, has furnished us with quarters ever since I was detailed here, and his many kindnesses, courtesies, and fine cooperation have been tremendously appreciated by us. We hope the Custodian's residence may yet be built before winter sets in. On the 20th of June one contractor checked over the ground here, preparatory to bidding on the construction of the house, and we are almost hopeful that we yet get that house built. Bids were advertised for the construction of the water and sewer systems, but apparently none was received, and it may be necessary to build these systems under force account.

The Honorary Custodian Without Pay, who is also Ranger Without Pay, does Ranger work here in a way that brings a faint tinge of green to the eyes of this Custodian. We still hope to get a Ranger here some day, but until that time comes, unless bigamy should become legal and the H.C.W.P. should approve (highly improbable), the two of us will continue to take care of all visitors, and run ourselves ragged hiking up and down that long, long trail a-winding to the canyon floor, accompanying horseback parties, accompanying cars, writing reports, attending to correspondence, etc.

We haven't a single complaint to make, we'll live in a tent if we can't get a house built, we'll carry water if the water system isn't constructed, and I'll pay bills for the re-soling of boots every other week, and do it all cheerfully---but if that Ranger ever should get here, you may be sure that we'll both appreciate it immensely.

CHIRICAHUA

By Charlie Powell, Acting Custodian

When I left Saguaro, I wrote a note stating where I was going, and stuck it on the inside of the glass door, together with a picture of Cochise Head. I do not know whether or not this has had any effect on our visitors, but we have had many more from Tucson this year than last, altho the season has scarcely begun.

We have had more than 700 visitors at the present writing, and these came from 19 states, and from Canada and Mexico. We hope to have all states represented this summer.

CHIRICAHUA NATIONAL MONUMENT (CONT).

Arrived here on the 29th. Erected a tent at the entrance to the new campground, with the aid of a crew loaned by Mr. French. We will be busy all summer making the area surrounding this tent a continuous nature exhibit ---with the use of dead leaves, water, flowers, pine cones, and mistletoe.

Three CCC men are on duty five days per week each---which gives us two men each week day and three on Sunday. Each of these boys wear O.D.s, black ties, and have purchased a light tan straw helmet of the "Elephant Hunter" type, giving them an uniform neat appearance. This is not boasting, because we are asked if they are brothers, frequently.

Some of our studies, which we are starting again this year, should rate some mention in this report. We have reviewed our file on the geology of this Monument, which includes articles written by Robert Rose, and Dr. Carl Trischka, Chief Geologist of the Phelps Dodge Corporation.

We have one book on the subject loaned us by the Southwestern Monuments library, and another from the local camp library. We are excluding all reading from the Ranger tent which does not have some scientific interest in connection with the Monument, so that each moment when we are not otherwise engaged is spent in profitable study.

Mrs. Rex Rice, Mrs. Ed Riggs, and several other local students will assist the Park Service personnel in securing specimens for study, and we hope to have a stenographer guide with the party at all times to record and report observations.

There are two other subjects which will receive attention this summer. We are writing for material on wild life, and are collecting some Indian material. As the region is a rich field for the study of both subjects, we should like to make some progress in both Archaeology and Natural History, and hope that Dr. Ball of the University will pay us another visit, and if we are very lucky, our Monuments Archaeologist may drop in on us soon. Sooner or later, when our museum is ready for artifacts, we will begin on our collection in dead earnest. So far we have but a meager collection of metates, and a few rubbing stones, collected last year, which were too cumbersome to be removed during the winter.

I have been cautioned not to let my enthusiasm for Saguaro interfere with my studies at Chiricahua. May I place my sentiments on record at this time, concerning these two objects of my affection?

To me, Chiricahua is like a brilliant child, with its development encouraged, its dress in the form of roads, trails, campgrounds, and buildings provided as abundantly as is reasonable, but which, in spite of all this attention, remains unspoiled.

The peculiarities of this precocious infant are a constant surprise and wonder to its sponsors, and its attractions are such that it deserves more attention than it will ever receive. It is particularly noticeable

CHIRICAHUA NATIONAL MONUMENT (CONT.)

after seven months absence that the camp grounds and rest rooms are conveniently located, and that continued development of trails has made guiding of visitors to points of interest much simpler, while in no way detracting from the pleasure of such trips.

To complete the comparison, may I say that Saguaro has been treated more as an unwanted step-child. This poor waif will come to the front rank when it has received a little financial attention, and with a cactus museum, a loop road, a sky line road, etc., you just watch Saguaro. But this is a report from Chiricahua---excuse it, please.

When Mr. Riggs finishes the Echo Park Trail, there will be more visitors walking along that trail than on all of the other trails together, and there have been about 75 who were hardy enough to visit the big Balanced Rock on foot, so far, this month. I am painting the mail box which I brought with me from Saguaro, white with green lettering, and will use it to keep some registry sheets near the Rock. I will be interested to know how many actually get there.

Last night I tuned in on a broadcast from the college station in New Mexico and heard a very good description of the vegetation at the White Sands National Monument. I did not catch the name of the speaker, but the list of plants sounded quite familiar. I hope we have more broadcasts about our Monuments. How would a lecture on Chiricahua sound, coming from KTAR? I hope I hear one soon.

I have exceeded the space allotted me in the prospectus, but perhaps there will be plenty of room when the non-essential parts of this report are blue-penciled. You told me once that my reports were read, but it was necessary to keep the published part of the report within certain prescribed limits, so here is hoping that a part of this report will be published.

SAGUARO

By Charlie Powell

Although Chiricahua is taking all my attention now, I feel that Saguaro deserves a little additional report to cover the interval between the time the May report was mailed and my departure. To begin with, the last state to be represented, Delaware, finally appeared on the register, on Sunday, May 26.

Evon Z. Vogt called on the Ranger at Saguaro May 12, and later sent us a picture, which Mrs. Powell has mounted at home over the radio. Just what she did it for will have to remain a mystery, as two such characters as El Morro's Kustodian and Saguaro's Ranger are seldom seen in one picture. Perhaps that is why.

I wish Mr. Vogt would call at Chiricahua during his travels.

Now to confess the real reason for this belated report from Saguaro.

SAGUARO NATIONAL MONUMENT (CONT.)

There seems to be some little misunderstanding about a certain specie of Cacti, called the Saguaro. Let me start at the plant and follow it back along the cactus tree so that it may be properly classified. The Saguaro is truly the *Cereus gigantea*, now called the *Carnegie gigantea* for reasons given later. It belongs to the subtribe *Cereanae*, tribe *Cereeae*, family *Cactaceae*. Its flower is the state flower of Arizona, as it was the territorial flower prior to the time Arizona became a state.

At the time of the establishment of the Carnegie Desert Laboratory Mr. Carnegie gave ten million dollars to a fund for the scientific study of the desert, and its flora and fauna, and later, in honor of his generosity, certain scientists changed the name of the Saguaro from the *Cereus gigantea* to the *Carnegie gigantea*, as far as their own writings were concerned. Later, it was said, Mr. Carnegie made a further donation of another ten million dollars for the same cause.

I have heard it said, by other botanists, that they, too, would gladly assent to the change for a portion of the gift, and I personally would be glad to give my own consent to such a change, if someone would appropriate a fraction of such a fund to the proper development of the Saguaro National Monument, which is the only place in the world where this same vegetation may be found, ranging all the way from the desert floor, through all the changes, to timber on the mountain tops.

It is hoped that the National Park Service will develop this wonderful area in its own efficient way, including a road to the mountain top where all the changes may be studied, as well as a few side trails, both from the proposed loop road and from the high scenic drive, in order to make all of these natural beauties accessible, before considering the return of any part of the area to other uses,

In my opinion, the name gives the casual visitor a wrong impression of this wonderful botanical unit. Most people come to think only of the giant cactus, and having seen that, are satisfied that they have seen the only attraction.

A cactus museum would help, by showing that the Saguaro is one of about 90 varieties of the cactus family growing in Arizona. The loop trail will bring out several small coves, showing the beautiful other varieties of vegetation, and a road to the summit will permit the studies of all the changes in vegetation in southern Arizona, from the desert floor to timber, within a few short miles. All of this within a few minutes drive from Tucson.

Can any other Monument match this in its own peculiar importance?

Sincerely,

Cactus Charlie

CHIRICAHUA E.C.W.

By Wm. Stevenson, Proj. Supt.

Several hard rains during this month have converted the maintenance of the Bonita Road into a project of major importance. Approximately 1,500 yards of rock slid into the road between Massai Point and the Ranger Station. Many of the rock cut banks continued to "work" for several days after the rains making it necessary to pull down an enormous amount of material before the road can be safely traveled. We are working extra shifts in an attempt to expedite the elimination of this danger.

Excavation for development at the spring area has been completed and forming started for the concrete core dam and 5,000 gallon reservoirs. This was extremely heavy work and progressed slowly as light charges were used in blasting to insure holding the present flow of water. Excavation reaches a maximum depth of 10 feet.

The pipe line to the 10,000 gallon reservoir is completed and the excavation for the reservoirs is ready for the forms.

800 feet of the Echo Canyon horse trail has been completed this month making a total of 1,800 feet. However no crew has been working on this project for the past two weeks as it was necessary to use these men on "double shifts" to expedite the spring development and pipe line work.

Public camp grounds are rapidly nearing completion---the road and parking stubs are 90% complete; Comfort Station 95% complete, and Picnic or Camp units 60% complete. We are prepared to start the construction of fireplaces at once.

The Comfort Station at Headquarters is 30% complete. Sewer line, septic tank, and filter trench have been completed this month.

The Lookout House on Sugar Loaf is complete.

On June 17, Fred Winn, Supervisor of the Coronado National Forest and George Russel, Forest Ranger, were very welcome visitors at this camp. Mr. Russel brought us the Forest Showboat and this camp and the YMCA boys who are camped near here jointly enjoyed his presentation.

EL MORRO

By Evon Z. Vogt, Jr., Acting Custodian

The 25th of the month approaches threatenly close and beckons me to attempt my second monthly report. Having received the "Prospectus for June Monthly Report" and not knowing whether it meant that we were limited to only two pages or whether we must write at least two pages, Pete and I have decided to play safe by making our two reports as near two pages as possible.

Weather and Roads: With the exception of a few days the weather has

EL MORRO NATIONAL MONUMENT (CONT.)

been blistering all through June. Day after day a hot sun sends us scrambling for shade about 9 o'clock in the morning. The plentiful spring moisture is rapidly being lost, but we think the soil still holds enough to keep the grass and shrubbery from withering until the summer rains begin.

After many years of continued efforts, partial success has been attained in regard to the Grants-El Morro road. The road has been made the Number 1 project in the Rural Roads Program for Valencia County. When work will begin on the road, nobody has actually been able to determine.

An FERA surveyor continues to peep through a transit on the Ramah-Gallup Highway, but here again nothing definite can be discovered as to when the highway will be constructed.

Official Visits: On the 1st, three Park Service men visited the Monument. Mr. Hamilton drifted into the ranch about 8 o'clock in the morning and we made a hurried trip to El Morro. By noon we were back to the ranch, having measured all the stone stairways which need concrete cappings, and visited the local gravel pits about five miles from the Monument. I spent that same afternoon at El Morro with Mr. Richey and Mr. Carpenter, who looked over the various proposed studies for the parking area and administration building, examined the stone steps and discussed the possibility of dusting the proper-colored sand into the raw concrete to make the cappings the same color as the original steps, and made some valuable suggestions about the trail, wrongly placed drainage ditches, etc.

Other Visits: On the 2nd a Gallup grocery store held a picnic at El Morro; brought half the store and left the wrappings and cellophane from off same to mess up the camp grounds.

On the 16th Gallup and Albuquerque Kiwanians picnicked at the Monument. The party ate a Dutch lunch, drank coffee made by Pete and myself over a campfire, made the round trip over the rock and around past the inscriptions and water cove, and had a good time in general.

Flora and Fauna: This being our best year for moisture for 50 years, one would expect everything to be especially bountiful. And every living thing is. Parts of our reclaimed area look like a Kentucky pasture. The clover stands 4 feet high and is a mass of yellow blooms, which fill the atmosphere with a fragrant aroma that floats gently into Pete's cabin, giving it an air of romance.

Old-timers have never seen the new shoots on the pinyon trees come out as profusely as they came out this spring. On the end of each shoot is a deep red blossom which will be a cone with pinyon nuts a year from this fall. Navajos are positive that pinyon picking is going to be immensely profitable next year.

Pete reports the presence of four eagles which may be seen soaring

EL MORRO NATIONAL MONUMENT (CONT.)

around El Morro's loftiest pinnacles. He also located the nest high above the register on the north side of the rock. Three summers ago we had a nest with two eaglets. The mother eagle could be seen carrying prairie dogs and rabbits to her young and once in a while the eaglets would hang their heads over the edge of the nest and squawk shrilly at the visitors below. The one night a carload of Zuni Indians camped at the Monument and left hastily the next morning before sunup. From that night on the eaglets were never seen again. A Zuni will risk his neck any day for an eagle, which, when captured, is kept in captivity in a wicker cage within the Zuni Pueblo to grow feathers for Zuni ceremonies. This, so Pete claims, is what happened to our little eagles three years ago. I would like to suggest that Pete sit up on top of the rock every night and guard our eaglets with a double-barrelled shotgun. I'll furnish the shotgun.

Monumental Improvements: After taking your telegram on the 18th, I immediately hopped the mail truck to El Morro. Pete climbed aboard at the Monument, and we rode on over to the El Morro store and Post Office to find out just how the homesteaders felt about the water at the Rock. Finding that the water would soon be needed, Pete came to Ramah the following day, happened to catch a Gallup Mercantile salesman at the store, and ordered the pipe right then and there. The pipe is now at the Monument ready to be installed Monday.

In my few days work at the Monument rock dips and drainage ditches on the trails were repaired, campgrounds were cleaned, and ten new road signs were painted and put up on the road.

General: Pete and I have been going over the inscriptions together and discussing the hazy places in the translations which have so puzzled scholarly Spanish students. It helps us both to argue a bit once in a while about the translations. And, by the way, Mr. Pinkley, we could use some new translation cards sometime to replace the old weather-stained ones now in use.

Our local chapter of Navajos was the only one on the entire reservation that voted unanimously in favor of the New Deal for the Indians.

P.S. I'm afraid that I have written more than two pages. Just cut out a lot of the above trash, so that there will be room for Pete's report.

ED. NOTE: The report is uncut.

EL MORRO RANGER REPORT

By Alfred Peterson

I reported here for duty on the first of the month, and it has been a fairly busy one, but those to follow will be much more taken up with visitors, judging from past seasons. El Morro has had about 373 visitors for the 24 days of June, representing 17 states, Washington, D.C., and England. Special parties are enumerated in the Custodians Report.

EL MORRO RANGER REPORT (CONT.)

One lady, after being shown around the entire Monument, expressed great appreciation of the service rendered and ended her thanks with the request that I "might tolerate having her 15-year-old son come and live with me for a few days." I appreciate the implied compliment, but hardly see how I can start a private boys school while on Park Service duty.

And just two days ago a young lady in a party seemed to be puzzled by hearing the rest of the party address me as "Ranger" and finally burst forth with "I should think you'd feel terribly antiquated having people call you Ranger. The name Ranger always makes me think of an old man with chin whiskers living up in the mountains all his life." I told her that just about fitted me but that I was trying to hoodwink the people. She would not believe it and accused me of spending most of my time in a city.

One of the radio operators at the nearby emergency landing field showed me a broken arrow or dart head which he found at the landing field. I was surprised to note that a cross-section showed it to be thinner through the central part than at the edges, which, if my memory serves me correctly, is one of the chief characteristics of Folsom points, thus:



This same man showed me what appears to be an old camp grounds of the Indians. There is a water hole filled with lava rock, although the water is plainly visible, broken pottery, and we found an arrow head and broken spear head. Also, there are the remnants of two houses, apparently of early settlers or Mexicans, and what is apparently a broken sandstone tombstone with some Spanish characters on it.

Gnats are terribly thick at present, and when they bite it leaves an itchy welt that endures for a week. They seem to be thickest around on the north side of the Rock among the pinyon trees in the neighborhood of the front entrance---just where the stones are piled up for future buildings.

I have never seen so many Evening Primroses, Spiderworts, and Yuccas all in blossom at one time as at present in the immediate vicinity of my cabin. The Evening Primrose has the reputation of opening in the evening, staying in bloom all night, and then hiding their faces from the rising sun. But as their numbers increased daily many of the blossoms remained open during the day. One lady remarked today "What's the matter with these flowers; don't they know it's daytime?"

Regarding the matter of piping the water from the interesting old Water Cove, the job has been completed today, at least to the extent that I expect to see some local settlers come in early in the morning to get some much needed water. This work has been done within the amount allotted me by your telegram, and now I feel some assurance about keeping the water from overflowing and causing damage to the seeded ground which we hope will eventually obliterate all sign of the old, filled-in arroyo.

TONTO

By Charlie Steen, Acting Custodian

Who turned on the heat? The weather has been an unfailing source of conversation since the last week in May. Despite the weather man's efforts to discourage half mile walks on a very sunny hillside, 447 people visited this Monument during June and of these 282 walked to the lower and 19 to the upper ruin.

I was quite interested in the correspondence, printed in last month's report, pertaining to the "buried treasure" at Tumacacori. Every section of the country has its own pet story of a hidden hoard of gold, and not to let Tumacacori get ahead of Tonto, I began asking questions to see if I couldn't get a good tale of my own.

There is a well known quotation to the effect that "He who seeks, shall find." I did, and the Tonto Treasure isn't a myth but is the real McCoy. There is a body of low grade ore not more than 100 yards from the lower cliff dwelling. A local prospector had it assayed years ago, but there was too little gold in the ore to be mined at a profit then altho he believes it could be now. A few days ago an Australian mining man told me the richest of the Australian and Fijian fields are in this same type formation---Perhaps we could put this Monument on a paying basis!

I received the two bulletins on the preservation of antiquities. Of the two methods advanced by the authors for the preservation of wood neither are possible, I believe, to be used for the timber in dwellings. Fumigation is entirely out of the question, and spraying with celluloid in acetone would be difficult and expensive. I should suggest a spray of some form of creosote for all exposed wood here. I hope the piece of timber I sent you was of some help.

Lately I have noticed javelina tracks in the lower dwellings on several occasions. A visitor here told me, after being shown the tracks, that his brother was in the desert southwest of Phoenix several years ago and a small herd of javelina chased him. He was on foot and to escape the pigs he climbed a saguaro and stayed there for three hours!

That paragraph introduced the question of the spelling of the common name for *Carnegia gigantea*. I received your correction last month with unbowed head and immediately began looking for a possible source of spelling. I find that proponents for using "g" and "h" are about evenly divided, and found one intrepid soul who wrote "suguro." Webster spells the word with a "g" and says that it is probably an Indian word with a Mexican spelling. Given that derivation I lean even more toward "h", for I believe that letter is more correct phonetically, as it suggests the aspiration of the syllable better than the "g". I hope you don't mind, but I am going to continue spelling the word with an "h".

P.S. Can you suggest a good field book on the reptiles of this state or region?

TONIC NATIONAL MONUMENT (CONT.)

It would be OK with us, Charlie, except that the order in regards to the spelling of Saguaro came from the Washington Office. Thus, in Government Reports you will have to stick with the "g". Shipping to you immediately Van Denburgh's "Reptiles of Western North America."

WHITE SANDS

By Tom Charles, Custodian

The warm weather of the past two weeks has brought justification of the claim that the White Sands National Monument is as much of a summer attraction as a winter one. We have no night shift at the Sands but rumor kept coming of many evening visitors there, so Saturday Night, after the day's work in the office and the chores on the farm were done, the "assistant" custodian and I drove out to the Monument. We arrived at the heart of the Sands about 10 o'clock and found 12 cars (60 people) parked around in the various coves. Most of the groups had selected a cove of their own. The most we found in anyone group was three cars. They were all so well scattered that the noise and laughter of one group did not disturb another.

The next night we found 31 cars (160 people) playing on the Sands within a mile of the Turnaround. There was not an organized party on either evening. We find that most of the weekend visitors came from El Paso and the Rio Grande Valley.

We have kept up with the evening count for a full week and found that Monday night the official family of the Lincoln National Forest, about 50 strong, spent the evening there. Tuesday night the crowd included 21 cars of Alamogordo people in one big party, and several other smaller groups, with a total of about 125 people. Wednesday and Thursday nights had good crowds, and Friday night the local Methodist Sunday School had nine heavily loaded cars of children out for a picnic.

These people visit the Monument at night at this time of the year because it is 25 to 30 degrees cooler there than in the surrounding country. Last week the officials of the district court sweltered in the court room in Alamogordo all day and spent their evenings in the Sands, although the mountains of the Lincoln Forest were available at the same distance in the opposite direction.

These evening visitors stay from three to five hours and are pretty sure to leave with reluctance. The mid-day visitor, usually a tourist, gets out of the Sands as quickly as possible, for the glare is blinding and the heat terrific.

Our evening crowds are a pleasure. Excepting for a few kicks about water and other conveniences, they are satisfied. We challenge the whole Park Service to produce a more soothing atmosphere than a moonlight night, on top of a clean, cool white sandhill all your own; away from the heat and hustle of the streets; away from everything and everybody but the select

WHITE SANDS NATIONAL MONUMENT (CONT.)

few whom you have brought along; no insects to bother, no noise except the ripple of children's laughter on a distant hill. Nothing but the stars and the moon, the deep blue sky, and the outline of the jagged San Andreas Mountains 30 miles away, and the winding, curling figures of the White Sands everywhere. That is solitude for you.

A break in publicity is that Joe Bursey, Director of the New Mexico Tourist Bureau, has received permission from Assistant Director H.C. Bryant to use the White Sands reel at the convention of the National Education Association in Denver in June. Joe grew up on the White Sands and knows their recreational value. Another good thing that came our way was the fine new folder published by the Southern Pacific Railroad in which they give the Sands a place at the top of the column, front page. It deals mostly with the National Parks and Monuments and is very fine.

Among our visitors this month were Mr. Harry Hommon and his son Jim. Mr. Hommon seemed to be more interested in the new well of drinking water that we have developed than anything else. He expressed himself as being favorable to the idea of portable comfortable stations, so arranged as to be moved just ahead of the creeping sandhills.

We thought we caught him looking out of the corner of his eye a time or two, and suspected that he was looking for the bug that makes our lakes red, and which he has been trying to catch for sometime.

We noted by our registration book that Walt Attwell and Mr. Diehl, also Miss Nancy Pinkley and her party, visited the Monument while we were away on vacation, much to our regret.

Our tourist count has been good this month, despite the fact that our evening visitors do not register. 802 registered in 26 days or at the rate of 926 for 30 days.

About 40% of the daylight visitors register, so we had about 2,315 daylight visitors this month. Thirty one states and two foreign countries were represented.

In addition to the above daylight visitors there were from 1,500 to 2,000 who visited after dark. We have no evidence that any of these have ever registered.

PIPE SPRING

By Leonard Heaton, Acting Custodian

There have been more birds nesting here than I ever knew of before and hundreds of mourning doves come in for water. Of nesting birds I have found the following: 1 killdeer, 1 Rusty Blackbird, 1 Bullock Oriole, 1 Western Tanager, 1 California Shrike, 1 Western Robin, 1 Western Flycatcher, 2 Arizona Crested Flycatchers, 1 Cassin Kingbird. There are many other nests, I think, but I have been unable to find them.

PIPE SPRING NATIONAL MONUMENT (CONT.)

Our weather has been very hot and dry the past month. Weeds and grass which came up so thick in the spring and bloomed so abundantly this past month have now almost burned up. Ground has become so hard that we have to use picks to accomplish much in working the ground.

There has not been much wind---that is, hard wind; just nice steady winds that have helped to keep nights cool.

Snakes have failed to show up as usual this year, as I have found only two bull snakes, two king snakes, and one very small rattler, and no racers. Usually the rattlers are the first to come and the last to go. Why the large ones have not appeared, I do not know.

About ten days ago we had a visit from Mr. Porcupine. I had been remodeling the Tower to conform to the original design and left the ladder up one night. About eleven there was a sobbing sound, so I got up to see what was the matter with the children, but found that they were all fast asleep, so went back to bed. After a few minutes the sobbing came again, this time from the roof of the house. Getting up, I looked on the roof and there was the porcupine, calling to his loved one, as in a few moments we heard an answer back on the hill a short distance. After the porcupine made the sobbing call a time or two he immediately started to find the way off the roof. After making two trips around the edge, he started down the ladder backwards, and he did it as if it were a daily habit with him, and hit out as fast as he could go.

There have been to the Monument as visitors and as campers the following: California, 36; Utah, 47; Arizona, 32; Michigan, 2; Colorado, 3; D.C., 1. Total 121. Local travel I estimate at about 340. This is a total of 461, a few more than last month. Increase in local travel is due to the stockmen holding a meeting on range control and getting ready for spring roundup.

We have also had many homesteaders in for water. I believe they are averaging 350 gallons of water per day the last three weeks, and if it does not rain soon, I expect to have a lot more water hauled away by then.

I have had two men working this month to straighten up some of the grounds and do odd jobs--the upper meadow pond ready for grass seeding, and removing milk weed from the meadow.

I am making a trip to Zion Park Wednesday to see Mr. Cowell about getting the projects and estimates for the ECW men that are to be assigned to the Monument this coming six months.

I guess the place is getting along shipshape. I am enjoying the work of collecting the plants, and only wish I knew more about them.

WUPATKI

By Jimmie Brewer, Acting Custodian

Weather : Hot and dry; high 101 degrees (19th and 20th); low 55 degrees. June 6th provided the only trace of precipitation, and that was unmeasurable. On the 21st, 22nd, and 23rd the thermometer reached 100 degrees.

Visitors: 122 visitors registered at Wupatki Pueblo, representing 18 states. At Citadel 97 names appear. Of these 41 are duplicated at Wupatki. Total for June is 178, including 3 parties of overnight campers. Earliest arrival: 6:45 a.m.; latest arrival: 7 p.m.

The total for June, 1934, was 72 visitors. Increase 106, 146%.

Newsworthy visitors: On June 6 Mr. and Mrs. Hamilton of New Rochelle, N.Y., were visitors who expressed a desire to see Wukoki. After a trip around Wupatki I drew them a small map showing Wukoki's relation to Wupatki and Heiser Spring where they would join onto the Sunset Crater road. At 10:30 a.m. in response to a "hallo" outside our door, I went out and flashed my light on something of a spectacle. All three had walked back from the east side of the Little Colorado River where their car had stalled in loose sand; Mr. Hamilton was carrying a quarter section corner; Mrs. Hamilton was emptying her shoes of sand and cinders; and Son Bill was clutching an empty canteen. I put them all to sleep in the cook shack. In the morning with the help of Clyde Peshlacai (navajo) and his team we pulled the car out, returned the section corner, and sent them on their way. I can't help feeling a bit to blame, in spite of drawing a map, for their getting lost, because I neglected to give them a landmark. However, they seemed to look on the whole affair as the highlight of their coast to coast trip.

Walt Attwell and Jack Diehl were here on the 13th; for Walt a farewell (good luck Walt), for Jack a brief introduction to Wupatki (good luck Jack).

Mr. A.C. Kuehl of Plans and Design Division of N.P.S. visited us three times. Mr. Wirt, N.P.S. Forestry, accompanied him on his latest trip.

Mr. E.C. Alberts of Petrified Forest came May 31. Then Mr. and Mrs. M.V. Walker, with daughter, all of Petrified Forest, were here on June 3.

Mr. Virgil Hubert, Secretary of Northern Arizona Society of Science and Art, spent a good part of June 9 here.

Miss Ruth Harley who was advised at the Grand Canyon not to miss Wupatki (thank you Mr. Getty) arrived yesterday evening on foot. Our last cinder hill three-fourths of a mile from the Pueblo looked too tough, so Miss Hurley walked in. After a glance around the Monument and a bit of dinner, Sallie drove Miss Harley (who has since become Ruth to us) back to

WUPATKI NATIONAL MONUMENT (CONT.)

get her car and drive it on in. Ruth is with us tonight and I expect you will see her at Casa Grande after you get this.

E.C.W.: The refusal of the Army to approve a camp at Wupatki or vicinity for C.C.C. has aroused citizens of Flagstaff. Telegrams to Congress ...people have followed up with an offer of City Park as a campsite. This is a beautiful spot not too far removed from any of the proposed work programs, and if I am not mistaken the water supply is unlimited and the shade plentiful. (I read in the paper that Heiser Spring was not approved because of inadequate water supply and lack of shade.)

ROADS: Are in very poor shape where cinders are deep and dry.

I have recruited the help of my Navajo neighbor Clyde (in exchange for watering privileges) and have been working on roads exclusively for the past six days, while Sallie guides visitors. Mr. Munro of the Forest Service has very kindly loaned me a light grader. I thought that since the CCC camp at Wupatki looks so doubtful I might at least use some of the non-expendible equipment to very good advantage. While I have the dump truck Clyde and I are grading the roads and shoveling the loose cinders from the deep places. The road between Wupatki and Citadel is improved now; I hope to have the whole thing whipped into good shape within the week.

ET CETERA: With the help of the staff of M.N.A. we are organizing some educational charts to be used at Wupatki and are studying visitor reaction to rough drafts of tentative lay-outs.

If any of you fellows happen to be in Flagstaff between the 1st and the 6th of July remember the Hopi Craftsman Exhibit at the Museum of Northern Arizona. Without much doubt this will be the finest collection of contemporary Hopi arts and crafts ever assembled.

This morning I passed Dr. Colton on Highway 89 as he was returning from Bonito Park where the M.N.A. has located field headquarters for the first excavation project of the summer's dig. We expect to have the expedition working on some problems around Wupatki later in the summer.

SUNSET CRATER

By Jimmie Brewer, in Charge

Travel total at this Monument for the past month is 563. Visitors from Arizona lead with 71 parties. Except for state visitors the registration sheets look as if they offer a pretty good cross section of the license plates following the main highways in this part of the state just now. The number of parties from each state represented, as shown on the registration sheets, follows: California, 30; Texas, 18; New York, 8; Colorado, 8; Ohio, 7; Oklahoma, 7; Pennsylvania, 6; Indiana, 5; Illinois, 5; Wisconsin, 5; Missouri, 5; Kansas, 4; Iowa, 4; Tennessee, 4; Arkansas, 3; New Mexico, 3; South Dakota, 3; Louisiana, 3; Florida, 2; Georgia, 2; Virginia, 2; Michigan, 2; Maryland, 2; Mississippi, 1; Montana, 1; D.C., 1;

SUNSET CRATER NATIONAL MONUMENT (CONT.)

New Jersey, 1; Nevada, 1; Washington, 1; Maine, 1. Which makes 31 states represented, and one party from Paris, France.

BANDELIER

By Earl Jackson, Custodian

Visitors: Numbered 2,083, arriving in 494 cars. Several large parties of students were in: one group of 24 from Texas, one group of 11 U. of New Mexico Summer School students, one group of 32 Texas Tech students, who are summering in New Mexico, and one group of 100 Indian girls from the Indian School, plus about 25 other interested people who were in the party. Visitors registered from 33 states and the District of Columbia. Alaska, Germany, England, Holland, South America, and New Zealand were represented.

The six highest states by travel were: New Mexico, 1302; Texas, 184; California, 97; Colorado, 92; Oklahoma, 66; Illinois, 50. Our travel figure compares with 2,052 visitors for June, 1934.

One or two interesting facts might be pointed out about our Bandelier travel record. The new road has been in for 12 months. 11,645 visitors have come here in the last 365 days. Each month of the 12 has shown an increase over any former month, and in all but one month the change has been phenomenal. On Sunday, June 23, Bandelier had by far the largest crowd of visitors of any day on record---423; the largest previous day shown was 225.

Weather and Roads: Precipitation for the month was so low I am ashamed to register it, but will anyhow; it was .06 of an inch. About half of our afternoons have come in with many blustering thunderheads in the western sky, but those clouds always heat a dismal retreat before Frioles Canyon could benefit.

The highest temperature recorded in the shade here was 90 degrees Fahrenheit. Days have been windy or sultry, but always hot.

Roads are exceedingly dusty and corrugated, but have not interfered with travel.

Special Visitors: May 29, Chuck Richey and Thomas Carpenter were in, and departed next day. It was Mr. Carpenter's first visit to Bandelier.

Mr. Harry Hommon, sanitary engineer for the Park Service, accompanied by his son Jim, paid a brief visit for inspection purposes, and left the same evening. Wish he could have stayed longer, but perhaps it's just as well---he might have decided on some sanitary measures in my bachelor kitchen, where I wash the dishes once a week whether they need it or not.

May 31---Walter Attwell was in for a day and a half.

June 1---Mr. and Mrs. Frederick H. Smythe, of the American Museum of Natural History, were in. I was in town on business that day and didn't

BANDELIER NATIONAL MONUMENT (CONT.)

get to meet them.

June 3---John C. Clark, judge, of New York. June 8---Walter Attwell and Jack Diehl arrived to install Mr. Diehl. Departed on June 10. June 12---W.R. Sheldon, acting superintendent, Northern Pueblo Agencies, and H.S. Nettleton, Forest supervisor at large for the S.W. district of Indian Service. June 16---Mr. G.P. Harrington, State Cadastral Engineer, came in to try the Frijoles fishing.

June 19---Walter Attwell arrived for a stay of a day and a half. He was accompanied by his son Jimmy. E.N. Horner, owner of Horner Woolen Mills, of Eaton Rapids, Mich., was an interested visitor. He manufactures Germantown yarns, so widely used in New Mexican weaving, especially by the Chimayos. June 22---11 U. of New Mexico students under charge of Prof. Read, paid a visit to the ruins.

June 23---previously mentioned party of 100 Indian girls from 13 different Pueblos. Thirty two botany students from the summer school of Texas Tech, Lubbock, came for a two day stay.

Forest Fires: We have had no forest fires this year! That is a very remarkable and happy fact. We may have one break out any minute, however, for the country is very dry.

Nature Notes: Recently on the north rim of Frijoles Canyon very near the Monument boundary I saw the beautiful whitetail bucks standing at the side of the road. They showed no fear until the car had approached to within 100 feet, then they turned and gracefully trotted into the brush.

It is possible that our dreaded infestation of the eastern tent caterpillar will not strike this summer. While some of the pests are here, and are active, I can see no evidence as yet of any projected wholesale campaign of annihilation on their part. We hope and pray that last summer ended this particular cycle of their activity.

Bears are out again. We haven't seen one, but some lusty bruin has defied our attempts to keep the garbage pits on the mesa covered with dirt.

General: With continued increase in travel at Bandelier manifest by our June performance, I am well satisfied with attendance. Motor travel by private car is humming in this region. However, the other day I heard a very good indication that the depression is not yet over. Railroads are doing heavy business, representing a very economical means of transportation; but the private transportation companies which send visitors into the Indian Southwest by bus and car, representing luxurious travel and sightseeing, report a continued dull period.

On Sundays it seems that Santa Fe and Albuquerque move en masse to the campground in Frijoles Canyon. Here they fill the picnic area to capacity, their stomachs to the limit, and the creek water with bare feet. They just go native again, and breathe in Nature with great gulps. This

BANDELIER NATIONAL MONUMENT (CONT.)

is evidently one of the best and most beautiful picnic places in New Mexico, for people come again and again.

Which is all well and good, and we like to have the people, but it makes me wonder what we are going to do for space if summer crowds continue to increase at the rate they are doing. When that camp ground was built, I figured it would be five years before we saw a capacity crowd in it, but that crowd has been here several times within one year.

Am looking forward with great eagerness to the arrival of a temporary ranger to help handle the situation this summer. Am sure the evidence put forth in this report would suggest we can use another man. The CCC boys are of some aid in checking visitors, and is guiding some parties, but the best they can do is not enough, for they are not trained. They do their best, but an 18-year-old boy with a high school education lacks the experience and book learning to answer the kind of questions visitors ask here.

Some visitor asked the other day why we call the talus ruins "tailless houses."

CHACO CANYON

By T.C. Miller, Custodian

General: The approach road to the north has been in good shape the entire month. During the first part of the month our road from headquarters to State Road 55 received some much needed maintenance. The approach road to the south that joins U.S. 66 at Thoreau, a distance of 65 miles, has been dry and passable but very rough, and has received no maintenance whatsoever.

The latter part of May and the first few days in June the Custodian spent much of his time showing prospective bidders the 40 miles of Boundary Fence that is to be let by contract soon. Mr. H.E. Williams, Rodman on Engineer Clark's crew, spent three days on the Monument Boundary with two prospective bidders. Mr. Clark's cooperation was greatly appreciated in this matter. Visitors are coming in to the Chaco in a big way, and without the help of Mr. Williams it would have been impossible to have rendered any guide service and at the same time show the prospective bidders the line.

Travel: 649 persons arrived in 304 automobiles coming from the following states and foreign countries: Ariz., Calif, Colo., Conn., Ga., Ill., Kans., Mo., Nebr., N.Y., N.M., Ore., Pa., S.D., Tenn., Texas, Utah, Washington, and the District of Columbia. Foreign countries, Sook, Statt Eriqna.

Weather: June has been a warm dry month with clear days and cool nights. Maximum for the month was 92, on the 19th; minimum was 33, on the 5th. Precipitation, .01, was recorded on the 11th.

Trees: About 85 percent of the 93,770 trees that were planted in

CHACO CANYON NATIONAL MONUMENT (CONT.)

the Chaco Wash during the months of April and May are growing. As previously reported, these trees were planted by the Soil Conservation Service now under the Department of Agriculture.

Special Visitors: Andrew E. Clark, engineer, and party arrived on May 28 to survey and stake the Mounument boundary.

Thomas C. Carpenter, landscape architect, Charles A. Richey, resident landscape architect, Assistant Engineer and Mrs. Gene Gordon arrived on the 5th and departed on the 7th. Purpose of their visit was to study a new proposed approach road some 10 miles west of headquarters. Also to study the new proposed headquarters area south of the Chaco Wash. The Monument approach road that far west would put us more than 50 miles from the nearest post office which would be Crown Point. Crown Point is only 29 miles due south of headquarters. Would we get as many appreciative visitors in this Monument on a ten mile stub road as we would on a stub road one or two miles long? However, we are getting more visitors now than we can take care of efficiently. We need some help and, of course, we won't object to a new road, but that approach road should be carefully studied before it is located that far west of headquarters.

Miss Nancy Margaret Pinkley arrived and departed on the 8th, Walter G. Attwell and Jack Diehl, associate engineers, arrived on the 10th and departed on the 11th. Mr. Attwell informed us that he was transferring to Sequoia and that Mr. Diehl was taking his place in the Southwestern Monuments. We regret very much to lose Mr. Attwell, and we wish him well with his new assignment. We also welcome Mr. Diehl to the Chaco.

The first load of equipment for the University of New Mexico summer school was unloaded on the 15th. Arrived one cook, helper, and one student. Supt. Stacher of the Eastern Navajo Reservation was a Monument visitor on the 17th. Mr. Stacher's business here was in connection with the Indian Allotment within the boundaries.

University of New Mexico: The field school of the University of New Mexico and School of American Research arrived on the 22nd. The party consisted of Dr. R.G. Fisher, assistant director; Dr. D.D. Brand, acting head of the department of anthropology; William Postelthwaite, lecturer of anthropology, Stanley J. Milford, research fellow, and 12 students. With all these Doctors, Professors, and scientific minded people in the Chaco all summer, we should be able to learn a lot about this archaeological Monument.

Boundary survey: Engineers have survey and staked 35 miles of the boundary. We are now ready for the contractor to start construction. We now have eight miles of boundary to survey, and then we can start on the outlying tracts to survey and stake the ruins. Some of these ruins. Some of these ruins are located 45 miles from headquarters.

YUCCA HOUSE

By T.C. Miller

Yucca House was inspected on the 20th. I found the approach roads rough and dry. Highway 666 from Ship Rock to Yucca House was rougher than I have ever seen it.

We are getting quite a lot of travel to that Monument according to tracks around the ruins. Mr. Ismay contacts most every car that comes in and discourages any pot hunters or vandals who would like to see what could be uncovered with their shovels. However, potsherds are being picked up even tho visitors are told such a practice is not allowed.

Travel bureaus and all road maps show that Yucca House is near the highway, and naturally visitors are interested in seeing the ruins and it cannot be hid from them even though you keep all signs and markers down, some of these visitors are going to find the place. During the summer months this Monument should be protected. Mr. Ismay reports about 30 or 40 visitors for this month.

Museum Contributions: Mr. Houston Ismay plowed up two fine skulls in his field near the ruins during the month. The skulls were donated to the museum at Chaco.

These burials should be taken up and put in a museum for future study of Yucca House. Mr. Ismay pointed out to me what appears to be quite a large burial ground on his farm.

Due to the busy season here at Chaco I did not get to Hovenweep this month, but I have planned to inspect the place early in July after the Summer Ranger enters on duty here.

WALNUT CANYON

By Paul Beaubien, Acting Custodian

1306 registrations this month without any large parties.

To me the important visitor of the month was Chester F. Deaver of the Botany Department of the Arizona State Teachers College, who made two trips to acquaint me with the exact species names of the plants at Walnut Canyon. Soon hope to send copy for more of the aluminum signs furnished by the Berkeley Office on your order.

The 13th was a bad day as I had to say goodby to Walt Attwell. Felt like I lost one of my best friends. I sincerely hope he likes Sequoia, and that Mr. Diehl likes us.

Was tremendously disappointed to see that the proposed CCC camp at Wupatki with a stub camp here seems to be rather doubtful. A very little CCC work at Walnut Canyon would be productive of very much benefit not only to this Monument, but to the whole system.

WALNUT CANYON NATIONAL MONUMENT (CONT.)

In the first place, Walnut Canyon is midway between heavily traveled Petrified Forest and Grand Canyon. Last year more than 100,000 people traveled along Highway 66 to see those two. By coming to Walnut Canyon said tourists would only have had to travel five miles farther in distance to see more than 300 cliff dwellings. Of course, there are interesting botanical and geological features besides the dwellings.

Another point to be stressed is that Walnut Canyon is the western gateway to the archaeological Monuments of the Southwest. Not all tourists come from the east, for, with the exception of one car from Oregon, 25 consecutive carloads registered from California about two months ago. Many of these people didn't know the difference between a Pueblo Indian and a Cheyenne when they arrived but left asking where to find bigger and better ruins. Walnut's ruins are not so large and spectacular, but they are representative of an important type of dwellings not too well scattered through the Park system. Their archaeological worth is unchallenged. Their situation is lovely, and they are the only cliff dwellings that thousands of tourists will ever get to see, due to their accessibility.

If Walnut Canyon could be properly improved, I believe every Monument and Park in the Southwest would be benefited. It would draw its share of the 100,000 tourists going by only a few miles away, and influence them to see other places in addition to the Petrified Forest and the Grand Canyon.

Have been debating with myself about adding the following---but murder will out. Some people do queer things with ink but the ranger who got up at 3:30 a.m. to hunt a forest fire at the intersection of Highway 66 and the "loop" road, instead of Highway 66 and the Leupp road isn't any too brilliant. The next week I certainly received explicit directions from the Forest Service "lookout" when a fire started about a mile southwest of the Ranger Station.

TUMACACORI

By M. O. Evenstad, Acting Custodian

During the period of May 26 to June 25, inclusive, 843 persons visited Tumacacori. In looking back on the records for the corresponding period of last year, we find there were 764 visitors. We therefore have had an increase of a little over 10 percent over last year. Twenty eight states, Arabia, China, Mexico, and New Zealand were represented.

On account of beginning of summer weather, with its higher temperatures, we are not getting very many regular tourists who are passing right through the country. Rather, a good percentage are people who are making short visits for various reasons in this part of the country, as well as a good many local people.

One thing is noticeable, and that is a fair percentage of "repeaters," By that term I mean people who have visited this place at least once in the past. This means that during a former visit they became sufficiently inter-

TUMACACORI NATIONAL MONUMENT (CONT.)

ested in the place to want to make a second, third, or fourth visit. I often hear something like this: "I was here so and so many years ago, and this time I am bringing Mr. and Mrs. So and So in order that they may see the place, too. I think Tumacacori is very interesting." Another expression often heard is along this line: "I think the Government is doing a fine thing in setting aside this place, and looking after it. It would have been just too bad if it had been left to the elements and vandalism."

I don't know just where credit is due for instilling this feeling in so many people, but the fact remains that the people of the Southwest, especially, are quite consciously proud of their monuments.

Upin coming back again, after an absence of nearly two years, I notice the following changes: the quite impressive entrance gates; the boundary wall (although not completed). Both have added to the attractive appearance of the Monument, in my opinion, and I am quite certain that this viewpoint is shared by practically all the visitors.

The need for a museum is quite apparent, and an authentic collection (even if small) properly housed and displayed would add greatly to the value of Tumacacori. There also should be a leaflet for distribution, briefly giving the Mission story in general and Tumacacori's story in particular.

Weather has been rather hot for the last three weeks, and right now there is a decided need for rain. However, the nights are quite cool and pleasant.

During the month, the Acting Custodian, in addition to attending to the regular routines, did some needed repair work on the pump for our water system, and also got the windmill into shape for use, so as to reduce the operation cost for pumping which has heretofore been done mostly with the use of a gasoline engine. I had to pull the pump once, and found the trouble to be a piece of wood getting under one of the valves. The curbing is gradually giving way, and dropping pieces of wood in the water, where the pump is liable to catch them any time. The motor of the little light plant was tuned up by grinding the valves, and cleaning out the fuel and oil systems. However, we do not expect to use the plant much until the days get considerably shorter.

Custodian Boundedy and family left on the 10th, for a well-earned vacation trip to the coast and other California points, including Yosemite National Park. They are expected to be back the latter part of July.

Engineers Attwell and Diehl were here for a short visit during the first part of the month. The past month has kept the present personnel of the Monument quite busy, and time has not had much chance to drag along.

AZTEC RUINS

By Johnwill Faris, Custodian

Visitors for the month total only 903. Just why we have this decided drop for June is not understood. It is possible that floods in the middle west and uncertainty of the mountain passes have something to do with it.

Everything with the exception of our few visitors has been normal, and the fact that we have had so few makes possible a longer time to each party than is usually the case. Oscar Tatman served as guide during the fore part of the month and did some excellent work. Many visitors expressed themselves as being especially pleased with the trip. E.W. Lewis of Clovis, New Mexico, the regular appointed guide, started on duty the morning of the 13th, and is proving very satisfactory. His guided trips are very popular and we appreciate the interest and enthusiasm he is showing.

Both Engineering and Landscaping divisions were represented at Aztec this month. Chuck Richey and Tom Carpenter were in the 8th, and spent time enough, even to eat dinner with us. We enjoyed having them very much and do hope they can come again and spend even longer. Walter Attwell and Jack Diehl followed the Landscape boys a day or two and we enjoyed having a meal with them also. While Walter has never been particularly active at Aztec, we are going to miss him and wish him every success at his new post. To Jack, we offer our entire resources, that he might develop our units in keeping with standards set by his department. We have not heard what Jim Hamilton is going to do yet, but we hope that he will stay with us.

By the way, speaking of the Landscape and Engineering Departments, I want to congratulate them both on reports sent in this last month. W. H. Gebhardt, Inspector on the Museum and Administration Building, wrote an excellent report on his work, and was especially kind in his expression of our help, Koss. When it comes right down to it, the help was mostly from him. Aztec will long remember the cooperation and excellent services of Gebhardt, and we trust that if we ever have any more building he will be the Inspector. Then Jim Hamilton turned in a dandy report on the ruins repair work conducted the past year under P.W.A. Jim always prepares swell reports, though, so we were not too surprised when he pops this last one on us. Both Jim and Herb were mighty pleasant to work with, and the work they did was of the highest caliber.

A week or so ago, the new guide and myself in company with the Editors of our local newspaper drove over to Chaco. The trip was most pleasant, and, as usual, all came away sold on the idea that Cal has the next best ruins in the Southwest. One purpose of the trip was my intention to convince Miller that we needed to do some repair work at Aztec, and I needed some of his nicest Type IV masonry for fill, etc., but I actually believe that he thinks his fill out there is better than our dressed stone here. There seems to be no accounting for some people's tastes, etc., so I am really not too bitter toward Cal. Upon second thought, however, I think as we were leaving he made some catty remark about not having to tear down

AZTEC RUINS NATIONAL MONUMENT (CONT.)

more than two or three of his rooms to build a couple of ruins like Aztec. We are going to hold these vile remarks against him, and are entertaining a hope that on Judgement Day Cal will confront one of the high priests of our Great Kiva and be held accountable for all his harsh words about Aztec.

Shortly after my return from Chaco it was my pleasure to show Taylor Julian, state senator, our ruins. He seemed very much impressed, and his keen insight into the value of the Ruins to the state and the Southwest made him especially interested. He left assuring us that every effort would be made to secure a proper approach road for the Monument. He at least promised us that he would see that what we have would be declared a state road and receive state maintenance. Even that would be appreciated, and I in turn promised him that if the state would build us a good road up to the ruins, the National Park Service would build an entrance sign that would be a credit to the road and to the state. I am sure that the Landscapers will see to that part of it, and to the removing of the present sign.

This approach road has been a sore spot at Aztec the six years I have been here, and your Office is acquainted with the effort we have put forth with the various state administrations for this piece of work.

Several of our museum cases arrived a few days ago, and they are splendid. We await now the material prepared for us by the Berkeley Office, and hope to have the exhibits ready for inspection.

One feature we notice so often, Boss, and do appreciate very much, is the fact that visitors mention repeatedly their approval of spending public funds for the National Parks and Monuments, and how they enjoy visiting the various places.

The past few days our visitors are coming in with some greater regularity, so it may mean that July will pick up in proportion to the increase shown by many other months this season.

We folks up here with temperatures running about 40 to 50 every night, certainly feel for you folks down there with your heat. Come up and spend a few weeks in a most delightful setting. We will even take you over to see Cal Miller and his dump.

NATURAL BRIDGES

By Zeke Johnson, Custodian

I am pleased to report that all is well at the Natural Bridges; there never was a time in the history of the Monument when there was more grass and flowers--hundreds of acres of flowers that are more beautiful and of more luxuriant growth than ever before. Drinking water is still plentiful and very good in the Canyons.

The number of visitors so far this year exceeds that of any previous

NATURAL BRIDGES NATIONAL MONUMENT (CONT.)

year during this season. Sixteen states have been represented. There have been from one to three cars every day now for the last 20 days.

Visitors seem to be more enthusiastic and better pleased than ever before---due partly to the flower garden which extends from Blanding to the Bridges, which is quite a contrast to the dry condition of last year.

Among the many noted visitors we mention the following:

A.E. Borell, Wildlife Technician, N.P.S., Berkeley, Calif
Supt. Tillotson, Grand Canyon National Park.
Hubert Evison, Supervisor State Parks, E.C.W., Washington
H. Langley, Resident Landscape Architect, N.P.S. San Francisco
Carroll H. Wegeman, Regional Geologist, N.P.S., Oklahoma City.
Emery C. Kolb, Grand Canyon, Arizona.

Many have expressed themselves well pleased with the trip, offering as it does, such a wide variety of scenery.

First there is the "Goblet of Venus", then the great forest of yellow pine and quaking aspen on Elk Ridge, the beautiful view of "Arch Canyon", then the great panorama from the "Bears Ears" where many have expressed themselves as being in a place where for the first time in their lives they are able to see the "whole world at a glance." They feel repaid for the trip before they even reach the Bridges.

I hope you do not think I am over-enthusiastic about my Monument or that the picture is being over-drawn, but I do feel, and others feel the same way, that the trip from Blanding to the Bridges combines many prominent features of at least six other Monuments.

There is the coloring of Arch Canyon, the sheer bluffs and ruins of White Canyon, then the three Bridges, each an unique masterpiece in itself; as well as numerous other spectacular and unusual features.

I am happy to report that the State Road Commission has in operation a 60-Cat with all of its trimmings and plenty of men to handle it to improve the road all the way to the Bridges, and there is a prospect that there will be a camp established in that vicinity and continue the road on to the Colorado River.

I have erected a new Army tent, 16x16, floored and walled up, and have a good table and benches made, which will be quite comfortable until something better is furnished. There is also one new rest room. I am sadly in need of some tables and benches to accommodate the campers. What about it?

I am leaving this morning for the Bridges with Prof. T.C. Brues, wife and daughter, of Boston, Mass., who will spend a week or more at the Monuments.

NATURAL BRIDGES NATIONAL MONUMENT (CONT.)

Frank, I am still in love with my Monument, and am trying to promote its interest and to give every tourist every courtesy and care possible under the circumstances.

CAPULIN MOUNTAIN

By Homer J. Farr, Custodian

'Tis a pleasure this time to make my brief report for June. Weather conditions have been admirable. It appears that this Monument has come in full blossom and all leaved out almost overnight. We now have a wonderful crop of bluebells covering a hundred acres or more on the west side of the Mountain, especially around the cabin. No bluebells have been noticed on this Monument before as well as I can remember.

Vega and gramma grass are in abundance mostly due to the Monument being fenced and no livestock thereon.

There have been 2,500 visitors this month---a large percent seemingly from the 13 original states. I feel that the recent radio talks have swelled our number of visitors from the east, and all of those whom I have contacted have expressed appreciation of the trails and road. No particular notables have visited the Monument this month, but in general a mighty fine class of visitors.

The small PWA project which I have just completed on the Monument ~~has~~ left the rim and crater trails and roads in a very fine condition. However, the continued sloughing of ashes and lava into the road is a continuous eye sore to the Custodian. We hope sometime to correct this permanently.

Continuous showers keep farmers and ranchers smiling. While most crops in the community are a little late they look good and have a fair chance.

This Custodian felt mighty bad in failing to get this Monument included in the itinerary of Assistant Director Tolson, but will be willing to call it square if I can have a visit this summer from my own Southwestern Superintendent.

BANDELIER E.C.W.

By H.B. Chase, Project Sup't.

The headquarters Office Building has been completed this past month with exception of the final coat of finish on the floors and openings. Arrangements are being made to move into it the 29th.

Construction of the stone guard rail along the entrance road has progressed very rapidly this month withh 200 lineal feet of completed rail in place together with an additional 96 feet of footing constructed.

Additional work has been carried on in the campground extension con-

BANDELIER E.C.W. REPORT (CONT.)

sisting principally of surfacing the parking stalls and planting of boulders for traffic and parking control together with landscape features.

The camp ground table project was completed this month which now offers a campers table with each camp site in the entire area.

Approximately one mile of old woods roads in the floor of the canyon has been obliterated by the landscape foreman and his crew.

Footings for the headquarters comfort station have been poured and wall construction started this date (June 27). This building is located adjacent to the new office building which will serve the headquarters parking area and administration building.

Two crews have worked continuously in the rock quarry quarrying and trimming building rock for the buildings and guard rail.

Construction of the long-discussed utility area was started this month. To date 50% of the outside walls, to finish garde line, have been completed in addition to footing walls for the gas station and warehouse. The excavation project in conjunction with this area has been carried on for backfill as the footing walls were carried up.

A small amount of side camp preliminary work has been done in view of a quick establishment of the side camp on arrival of the material for construction of the Monument fence.

MONTEZUMA CASTLE

By M. L. Jackson, Custodian

Have had 1,587 visitors for the past month which is some 12 percent less than we had last June. I hate to have to report this because I imagine that all other Monuments will have more than last year.

Still we have had more out of state visitors than last year according to our register book. Where we have fallen down is with Arizona people, which is really not hard to account for,---at this time last year there were some 40 or 50 men working here, and we noticed that almost all of them brought their families out while they worked here. And, too, there is work being done on the roads from both Prescott and Flagstaff---a nasty detour or two.

And we have been told by several visitors that they were advised in Flagstaff not to attempt driving down here. While we believe that to be a little too strong, as the roads are surely passable, still they could be much better.

Another thing that has been very noticeable is that we have had very few of the Salt River Valley farmers this year. Have been told it is because of a late melon crop this year and that farmers have not been able to

MONTEZUMA CASTLE NATIONAL MONUMENT (CONT.)

GET AWAY YET.

Another one for you Custodians and Rangers to shoot at. Had a party in from Canada a few days ago who said his uncle had made a trip around the world some years ago and that on his return he told his family that Montezuma Castle National Monument was the most interesting thing he saw on his trip, and that he went into deato, describing it before anything else was mentioned. I feel just a little reluctant to mention any names, but it might be a good idea for Robert Rudlong, Charlie Steen, and Earl Jackson to get a load of this.

I hereby call you attentioj to the fact that you and Bob Rose shall not have the distinction of being the only dumb ones in the Monument service. Even if you do pull a good one now and then, Ranger Frank Fish is still working, you know, and he is so dumb that he thinks La. is the abbreviation for Louisiana. The proof: a party was in the other day and Fish asked them where they were from. They replied "La.", and Fish said, "Oh, Louisiana, and how is Huey?" The party immediately replied they were from Los Angeles, not Louisiana. Fish then wanted to know is Los Angeles wasn't some place in Iowa. The visitor insisted that Los Angeles was in the state of California.

A pair of Gambel quail showed up at the ranger quarters last night with a nice brood of babies,---the first young ones we have seen this season. We are hoping for a better hatch this season than last. We saw only five young ones all last season.

Would like to add that we are quite in harmony with your idea of changing the personnel around from one Monument to another. It will surely be educational and will give some of the other fellows a chance to see the best cliff dwelling in the world. And, of course, will give me an opportunity to see what the other fellow is doing.

ENGINEERING REPORT

By J.B. Hamilton, Assoc. Engineer

Aztec Ruins National Monument: I made final revisions of the Ruins Repair construction report and sent it to San Francisco for typing and assembly.

El Morro National Monument: I left Mesa Verde the afternoon of May 31 and went as far as Gallup. The next day I went as far as Vogt's Ranch, picked up E.Z. Vogt, Jr., surveyed and photographed the carved steps which disintegrated last winter, priced sand and cement in Gallup, and returned to Mesa Verde that night.

June 2 I prepared sketch plans of the work to be done and made an estimate of cost. This data was sent to the Branch of Engineering the next day.

Canyon de Chelly National Monument: I spent June 24 to 26, inclusive,

ENGINEER HAMILTON REPORT (CONT.)

at the above Monument. With Custodian Budlong's help I staked out the proposed Custodian's residence and the water and sewer system. I made slight revisions of the lists of materials as advertized to correspond to the staked lines and mailed data from Gallup.

I made an inspection trip up Canyon de Chelly as far as the Monument. Fences put in by the S.E.S. last fall are in sad shape, undermined and tipped badly. They have done a lot of planting which has a chance to survive if we have no heavy floods for the next two years and the Navajos live up to their agreement not to run sheep and goats in the Canyon.

There were quite a few sheep and goats in the canyon at the Monument. They may have been there only to get water as per agreement. Elsewhere there were none except a small band climbing out in charge of a herder.

Yucca House National Monument: On the way to Canyon de Chelly I drove off the main highway to Yucca House. None but prairie dogs have done any excavating there since my last trip on May 26.

June 7, 1935

On Sunday, May 27, Supt. Leavitt and I, with our wives, visited Yucca House and Hovenweep National Monuments. I visited them in accordance with Chief Engineer Kittredge's request that I keep an eye on them and report to you. This is a report of my first visit to either place.

Yucca House is about as I expected from what I had read of it in Southwestern Monument reports and elsewhere. The fence is still standing, though badly in need of tightening. But both gates are wide open allowing cattle and sheep to graze over the area at will.

Pothunters have dug a few holes but none appear very fresh. I noted that some erosion control work should be done in a gully in the southwest corner of the fence area.

Mr. Ismay was away; I met Mrs. Ismay briefly.

We had some little difficulty in finding Hovenweep Ruins, but felt well repaid when we did find them. I took several pictures, a print of which I enclose, with notations on the back.

I looked up what references I could find on the ruins in the library here. I hoped to find old pictures which I might compare with mine. About the only pictures available were those taken in 1917 and appearing in "Prehistoric Towers and Castles of the Southwest", by J. Walter Fewkes, published in June, 1918.

Since his pictures and mine were taken from a different viewpoint I could make no direct comparison. When I make another trip out there I have to take Mr. Fewkes pamphlet along and make a clearer comparison to

ENGINEER HAMILTON'S REPORT (CONT.)

see if any changes can be noted.

LANDSCAPE REPORT

By Charles A. Richey, Resident Landscape Architect

On June 1 a field trip was made to El Morro N.M. with Mr. Carpenter from our San Francisco Office. It was found that homesteaders are again using water from the reservoir and I believe the temporary facilities used last year to get the water down as far as the ranger cabin should again be installed. Settlers are driving up to the reservoir with their wagons, and starting erosion in the area which was the large arroyo which was filled in during CWA program.

The alternate site for the headquarters area on the west side of the Monument was studied on the ground with the new topography and was found to be inadequate for present needed facilities and would allow for no expansion whatsoever. The area on the north side was studied and thought to be much more satisfactory regarding future planning.

June 3 and 4 we spent at Canyon de Chelly going over proposed development with Custodian Budlong. Proposed Custodian's residence was staked and floor grades set. Plans for the proposed sewer and water system were checked over and the alternate on the plan to provide a windmill for pumping power was discussed with Cozy McSparron and several people from the Indian Service. All parties pointed out that there is not enough wind at this Monument during July and August to operate a windmill.

Considerable time was spent with Mr. Carpenter and Mr. Budlong studying approach roads to find whether it was possible to locate these roads so that better protection could be given the Monument.

Mr. Carpenter also accompanied me to Chaco Canyon June 5. Here we spent several days studying approach roads in the vicinity of this Monument with Assistant Engineer Gordon and Custodian Miller. We found that a road location to by-pass the Monument on the west was possible and would be easy to construct. The Indian Service has just finished 20 miles of construction on this line to reach a new Indian Day School at Juans Lake.

The fencing project was reviewed and cattle guard locations checked. It is felt that the proposed 28 foot cattle guards should not be placed on the present narrow approach road as the road location will probably be changed when this road is improved. Proposed development plans were carefully reviewed on the ground.

On June 7, enroute to Mesa Verde N.P. we stopped at Aztec Ruins N.M. and reviewed the proposed PWA and ECW program with Custodian Faris.

June 18 to 20 inclusive was spent at Southwestern Monuments Headquarters at Coolidge reviewing development plans for the above mentioned Monuments, 6th period ECW plans, and proposed PW plans. June 20 to Carlsbad N.P.

CASA GRANDE

By Louis R. Caywood, Acting Custodian

With seasonal travel dropping off because of the heat our visitor registration came down to 1359 as compared to 2443 for last month. These people came from 35 states and three foreign countries. Arizona visitors numbered 789 with Texas having 49 and Oklahoma 40.

These visitors were personally contacted on 230 ruins trips and 222 museum trips. Besides this number there were approximately 300 who used the picnic grounds and other facilities offered at the Monument. At this season of the year many families bring picnic lunches and hold picnics in the evening. When compared with 1355 for June of last year we have an increase of only four persons.

Weather: Thermometer has jumped around a bit during the month. Maximum was 108 and Minimum was 49 on June 1. There was no rain nor even a cloudy day all during the month.

Museum: During the month three sliding map and chart file cases were received from Berkeley. Two of these will no doubt be sent into the field when need arrives. A large cartograph showing the Culture Areas of the Southwest and representative ruins was also received from Berkeley.

Robert Rose and the Acting Custodian spent considerable time cataloging specimens in the museum and planning new labels.

Miscellany: The Acting Custodian spent an afternoon of his day off using the library of the Gila Pueblo at Globe. Their library is almost entirely archaeological and is rather complete. Material was obtained for the article in the Supplement on prehistoric irrigation.

Four wicker ~~seats~~ have been placed outside the east wall of the Casa Grande. It has been observed that a great many visitors. It has been observed that a great many visitors take advantage of these chairs while listening to the Ranger.

ENGINEERING REPORT

Several months ago according to the Monthly Report "the Engineers moved White Sands National Monument." This month, however, we have no such alarming engineering activities to report, for the Engineers, instead of doing the moving, are getting moved.

Associate Engineer Jack Diehl arrived at Casa Grande the first week in June to replace Walt Attwell. Walt in turn replaces Mr. Diehl at Sequoia National Park. So long, and good luck, Walt---we enjoyed working for you. Mr. Diehl and Walt immediately set out on a two weeks tour of the Southwestern Monuments.

Assistant Engineer Gordon was transferred to Zion National Park.

ENGINEERING REPORT (CONT.)

After spending a week with his party at Mesa Verde doing some work for Associate Engineer Hamilton, he left the Southwest to resume his new duties.

Transitman Howard Leslie was sent to Grand Canyon National Park to take charge of road construction.

Transitman Andrew Clark, having finished his Topography Survey of Frijoles Canyon at Bandelier, moved with his party to Chaco to run out the new fence line.

In the Office we have completed maps on "The Ruins Survey" showing the walls recently discovered at Tumacacori National Monument. Also maps on proposed "Boundary Extension, Montezuma Castle National Monument," "Fence Improvements, Pipe Spring National Monument," "Boundary Extension, Tonto National Monument," same for Wupatki National Monument. For Tumacacori we have also prepared a map of the "Proposed Water System."

Other engineering activities are covered in the Project Superintendents' reports for Bandelier and Chiricahua National Monuments.

NATURALIST DIVISION

By Robert H. Rose,
Park Naturalist

This marks the re-appearance of a separate report on museum and education activities. For some months in the past activities along these lines were reported under individual Monuments, or were treated briefly under "Southwestern Monuments General" which was usually prepared by the Park Naturalist. Personnel of the Naturalist Division has generally given assistance in the preparation of the Southwestern Monuments Monthly Report and will probably continue to do so, but the filling of the new position of Junior Park Naturalist, Southwestern Monuments, is going to make a continuing program of museum and education activities possible. Hence it seems that now is the desirable time to start organizing a separate report to show the constant progress we are going to make in general educational work.

Before going into detail regarding our activities for June it is well to point out that the position of Junior Park Naturalist is not to be filled until sometime after July 1st and that we have been extremely short on personnel during the month. Despite this fact, it appears that progress along some lines has been made.

The Staff

The Park Naturalist was at Headquarters at Coolidge from June 1st to June 22nd, inclusive. Remainder of the month he devoted to investigation of proposed National Monument areas to which further reference will be made.

NATURALIST DIVISION REPORT (CONT.)

On June 24 Junior Park Naturalist Dale S. King returned from Berkeley where he has been on duty at the Field Division of Education since April 24. His work there consisted in supervising preparation of museum exhibits for Southwestern Monuments. In the Supplement for this report a more detailed account of Mr. King's work in Berkeley will be found.

Ranger Louis R. Caywood has devoted much time to Naturalist activities during the month in addition to the usual guide duty and this occasion is taken to express appreciation for his cooperation.

Museum Equipment, Supplies, and Materials

Three sliding panel map and chart cases were received from the Field Division of Education, Berkeley, during the month. These cases will be used in Monuments having cramped museum space. These cases have the advantage of occupying small space compared with the number of illustrative materials that can be exhibited in them.

Requests for "Birds of New Mexico" have come from a number of Custodians and Rangers during the Month. Tumacacori, Bandelier, Montezuma Castle, El Morro, Chiricahua, Tonto, Walnut Canyon, Pipe Spring, Chaco Canyon and Aztec are among the Monuments that should have this volume for ready reference at least all during the summer season of heaviest travel. An order of six copies of this valuable reference has been placed. These volumes will become a part of the circulating library and will thus be made available to all needing them.

Labels for Nature Trails at Chiricahua have been forwarded to Ranger Powell for installation. Chiricahua has several miles of beautiful nature trails abounding in scenic, geologic, and botanic interest. These labels should perform a real service to visitors there.

Museum cataloguing at Casa Grande has been started several times during the past two years only to be interrupted by acute personnel shortage, field trips, or other reasons. However, some 100 cards were completed fully up to June 1st. During the past month Ranger Caywood and the Park Naturalist spent the equivalent of two full days, at odd times, getting this work well under way again. About 500 additional cards have been numbered and the numbers entered on the museum pieces. Considerable cleaning, washing of Indian baskets, and other work was done at the same time. Entering detailed descriptive data on all of these cards will be an extensive task. Upon filling of positions now vacant, it is hoped that this project can be carried steadily to completion without further delays.

In order that plant and flower specimens might better be prepared some botany presses have been requested through the Field Division of Education, Berkeley.

NATURALIST DIVISION REPORT (CONT.)

Publications, Circulars, Correspondence, Miscellaneous

The Park Naturalist prepared Museum and Education Series No. 3 during the month entitled "Reviewing Our Public Contacts Problem" for distribution among Southwestern Monuments personnel. This is the beginning of the busiest travel season in most of the Monuments to the north and now seemed a most appropriate time to stress the importance of trying to improve our public contacts services.

About three days during the month were spent in the preparation of personnel papers for permanent and temporary positions in Southwestern Monuments. Approximately two full days were spent in catching up on routine correspondence while the spare time during several days was spent assisting in the organization of monthly report material for the Southwestern Monuments Report for May. Relief duty and public contacts work during June have taken the equivalent of approximately seven full days.

Junior Naturalist King prepared copy for a circular on relief work and vacation schedules. It is expected that the new Junior Naturalist to be appointed will do a great deal of relief work at various Monuments during the vacations of Custodians and Rangers.

During the month bird banding and natural history records were kept current by Ranger Caywood.

Special Lectures

On May 23rd the Park Naturalist gave an illustrated talk before the members of the Tucson Rotary Club with an attendance of about 110. There followed an invitation to give the program at the meeting of Kiwanis on June 14th. This engagement was met and the attendance numbered 65.

Investigation of Proposed National Monument Areas

Toward the latter part of June all plans were completed for the investigation of proposed National Monument areas in western and southern Arizona. The Park Naturalist was assigned to accompany the party which included State Parks Supervisor Evison of the Washington Office, Regional Geologist Wegemann of the Oklahoma City Office, Assistant Wildlife Technician Russell Grater of the Southwestern District, and Assistant Landscape Architect Keeling of Chiricahua National Monument. This party left Phoenix on the morning of June 23rd. After visiting the Palms area in the Kofa Mountains, Mr. Wegemann left the party proceeding to Santa Fe and Colorado. The remainder of the party continued their work by visiting a proposed area south of Ajo. Most of seven days was devoted to visiting these areas on the ground. On June 30th the assignment was completed with an airplane flight. Supervisor Evison, the Park Naturalist, Staff Photographer Newcomer of the Arizona Republic, and the pilot comprised the air survey party. This investigation is the subject of a detailed

NATURALIST DIVISION REPORT (CONT.)

report now being prepared. It is well to say here that a number of definite conclusions regarding the proposed areas resulted from these studies.

Closing

Thus ends a very busy month of June in Naturalist activities. During July we hope to get all vacant positions filled. Once this is done the Naturalist Division will be situated to initiate and pursue to completion a number of definite projects and to work out a proper administration organization scheme. Before July is over it is expected that the Headquarters Naturalist Division will consist of the Park Naturalist and two Junior Park Naturalists. Public contacts and other naturalist work is such a fundamentally important phase of duties of Custodians and Rangers as to make closest co-operation at all times a necessity. We hope to be of more direct help than ever before to men in the field and we invite your assistance in the submission of naturalist activities from your Monument that they might become matters of record.

CHIRICAHUA ARCHITECT REPORT

(Partial report of Assistant Landscape Architect Edward L. Keeling).

The month of June has been very active, inasmuch as several new projects have been started and much work accomplished. Among the projects now under way are the following: Grading and landscaping the trail at Sugarleaf Mountain, Road Dips at the Comfort Station in the Campground, and the masonry work at the Comfort Station in Headquarters Area. Work is also progressing on the Twin culvers, foundation being laid and stone work going ahead.

....A landslide on the Massai Point road June 11 poured about 900 yards of rock material into a cut about one mile below Massai Point, blocking the road completely, and stranding a party of tourists who had to leave their machine and walk to camp. This slide reemphasized the necessity of properly backsloping portions of this road, and removing the hazard of overhanging and loose rocks. Some work has already been accomplished under the direction of the Camp Superintendent.

....June 23, upon telegraphic orders from Mr. Pinkley, I left camp for the Kofa Mountains and Organ Pipe Cactus regions, to accompany the inspection party making a reconnaissance for possible National Monuments. I returned from this trip to arrive at camp at noon, June 30.

....Work has begun on Dip No. 2 at the Camp Grounds. The plans call for a dip 120 feet in length, which, in my opinion, is a length not justified by the terrain. After careful consideration, and a corroborating opinion by Mr. Stevenson, it appears that a length of 60 feet will be ample. Mr. Pinkley appeared to agree with me, and if agreeable to Resident Landscape Architect Langley, we will proceed with the 60-foot dip.

GRAN QUIVIRA

By W.H. Smith, Custodian

Travel has been rather slow for the past month. I have registered only 386 visitors entering the Monument in 101 vehicles---somewhat below my expectation for the month of June which is generally the top month here. It has not been surprising, however, considering that when one goes from here to Mountainair the road is very bad. It is in worse shape than it has been for three years. The state sent a grader and a caterpillar out to maintain it about a month ago, and they ran the blade over about five miles of it and their work stopped.

Among those registered last month we find Mr. Charles A. Richey and wife and Mr. Thomas E. Carpenter, both of the Branch of Plans and Designs. While here Mr. Richey and Mr. Carpenter located the proposed comfort station. Late in the afternoon of June 7, Mr. Walter G. Attwell investigated the water well work here, and he and Mr. Brown went over the sewer line work.

The sewer line work here under the supervision of Mr. Harry F. Brown has almost reached completion. While here Mr. Brown has constructed four four-foot manholes with two-foot covers, has laid 400 feet of sewer tile, and moved 225 yards of material in ditching for this. He built a septic tank seven feet by 11 feet by five feet, and also a drain. Moved 55 yards of material in excavating for this. Also an aeration trench 60 feet long where he was obliged to move 70 yards of material. He is now running a line from the Custodian's Quarters to the cistern at the southwest corner of the old residence to catch the water from both houses.

The water well here has been quite a problem as they had to drill to a depth of 840.3 feet before they struck water. Then they drilled 35 feet deeper to insure a good supply of water and get to a good solid bottom. At 875.3 feet they stopped drilling and tried the bailer with 125 feet of standing water. By running a 15 gallon bailer three hours they lowered the water to 75 feet. The well stood a seven gallon test without lowering the water.

The well is cased from top to bottom with five inch casing. The last 35 feet drilled was all water bearing formation and the volume of water increased all the way until they struck solid rock bottom. Mr. Sheets, the driller, is a very agreeable man and is very particular to try to carry out his agreements. He is a man that I can recommend to be a good driller and a first rate gentleman.

I am using the little leftovers of the regular appropriation this week to do a little much needed repair on some wall work and clean out some of the debris which has fallen into excavated rooms. This makes them show up so much better and it shows the little fireplaces more clearly.

GRAN QUIVIRA (CONT.)

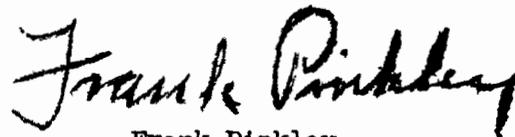
Weather conditions here the last month have been very disagreeable for travel. There has not been any rainfall and it continues to be hot and windy. It is getting so dry that about all the vegetation of spring has dried up and died. If we do not get some rain before long, farming in this district will be a failure again this year. Just at the present time it is almost as dry as it was this time last year. It is beginning to look as if we were in for another drouth.

CLOSING

Taking it up one side and down the other, it has been a pretty good month and I think the reports from the men in the field reflect the fact.

As Bob Rose intimates, we are putting our heads together and when we fill the vacant places among our personnel we hope to put into execution some new ideas and revive some old ones which we have had to put on the shelf due to our shortage of man power. We are looking forward to the new fiscal year with a great deal of pleasure; the new setup will make us shave the corners, but we are used to doing that among the Southwestern Monuments.

Cordially,



Frank Pinkley
Superintendent

THE
SUPPLEMENT
TO THE
MONTHLY REPORT
FOR
THE
SOUTHWESTERN
MONUMENTS

WHERE WE ARE SERIOUS
—BUT NOT TOO SERIOUS

PREHISTORIC IRRIGATION IN THE SALT AND GILA VALLEYS

- LOUIS R. CAYWOOD -

The present development of irrigation in the Salt and Gila valleys has so completely changed the status of these two valleys that there is no comparison between the old -- the dry desert -- and the new -- well kept fields. Ecologists would say that this is man's triumph over his surroundings. However, this new era has only come into being because of two major dams that have been built, the Roosevelt dam on the Salt River and the Coolidge dam on the Gila River. As a part of the resulting irrigation projects there arose the need of miles and miles of canals to properly distribute this water to the land owners. Engineers laying out these canals found that an early people had already laid out an elaborate system hundreds of years before the white man had come into this region. So well laid out were these canals that in some cases the same course was used by modern engineers.

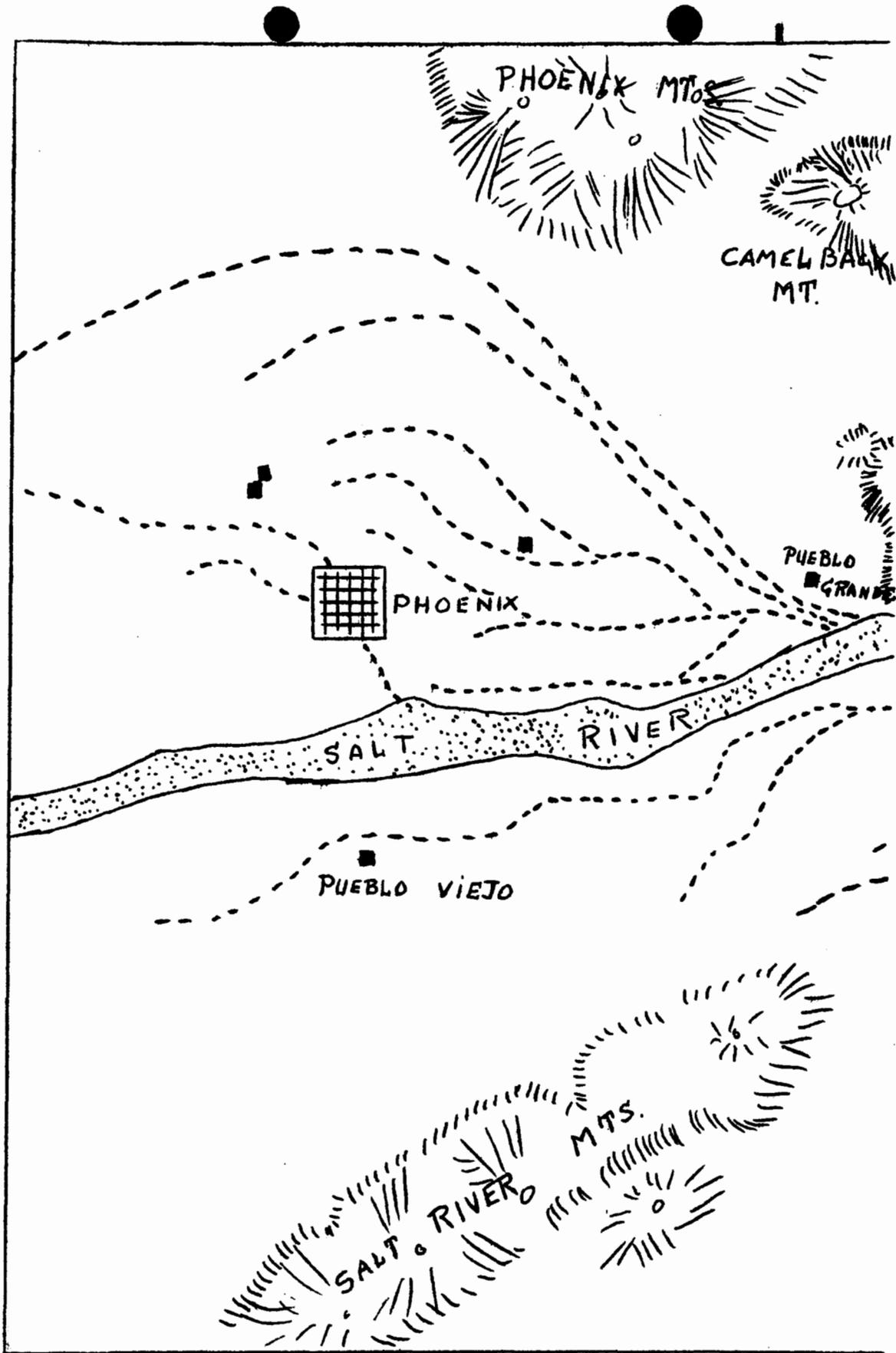
Many interesting things have been found out about how and in some cases why such elaborate canals were dug. The Hohokam, the prehistoric inhabitants of southern Arizona, no doubt used very elementary methods in laying out such canals. The biggest problem was not to get the grade, but was to clear the heavy growths of mesquite and ironwood and to remove the dirt and in some cases stone to make way for the water to flow to a lower level. The water itself was undoubtedly used in the digging of these canals by letting it soften the ground ahead of the actual digging. The task of clearing the mesquite and ironwood trees with stone axes is no mean job. And the digging of canals which in some cases were as much as fifty feet wide by fifteen to twenty feet deep was a tremendous undertaking. Some of these canals show evidence of an inner canal or channel which would concentrate the water into a very narrow space so that in dry

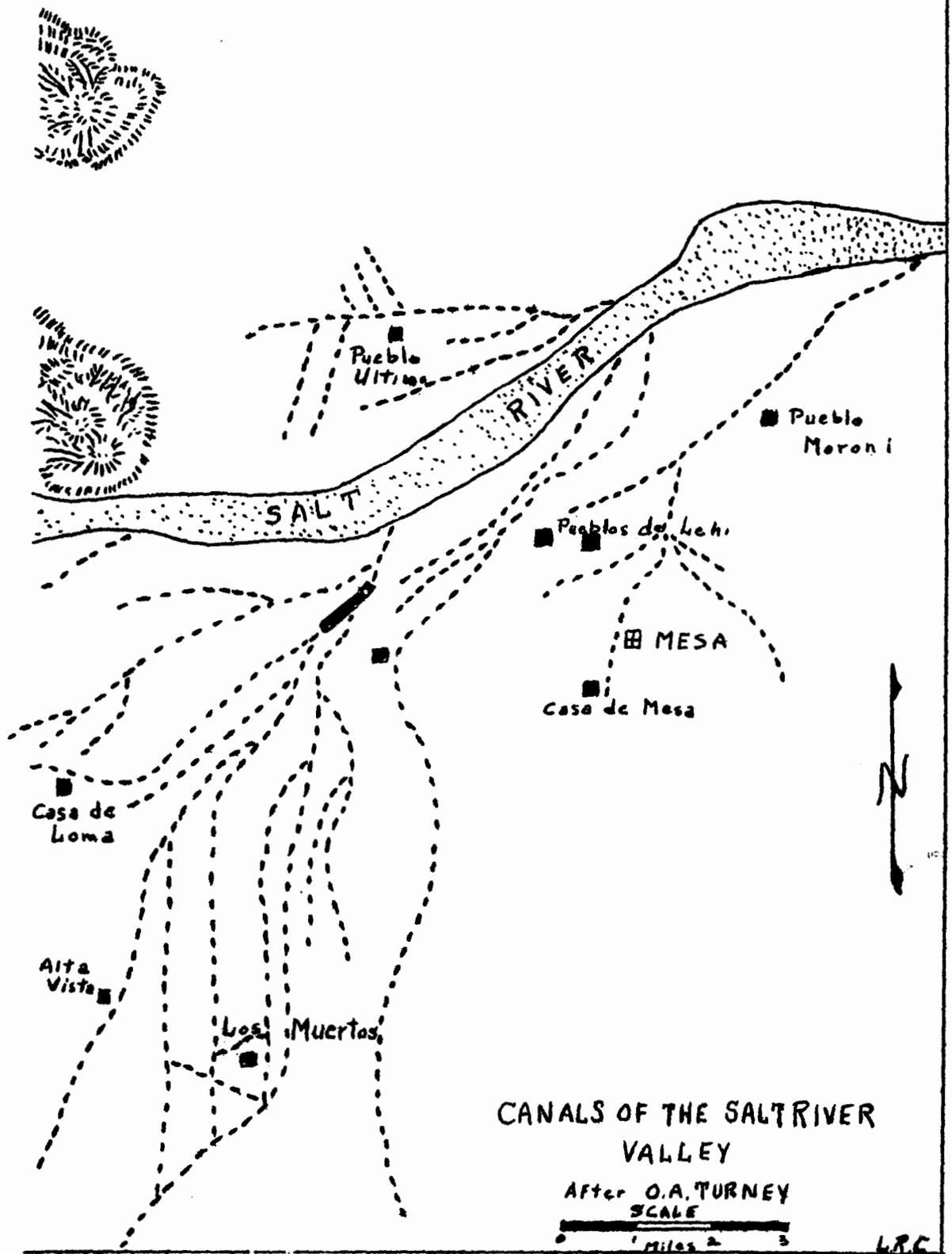


Cross section showing inner channel.

times or times when they were not using the canals for irrigation purposes there might be water for drinking in some of the pueblos some distance from the river bed.

The tools used in digging canals were the stone hoe, as it has been called, a flat piece of stone which was used to scrape up the dirt which



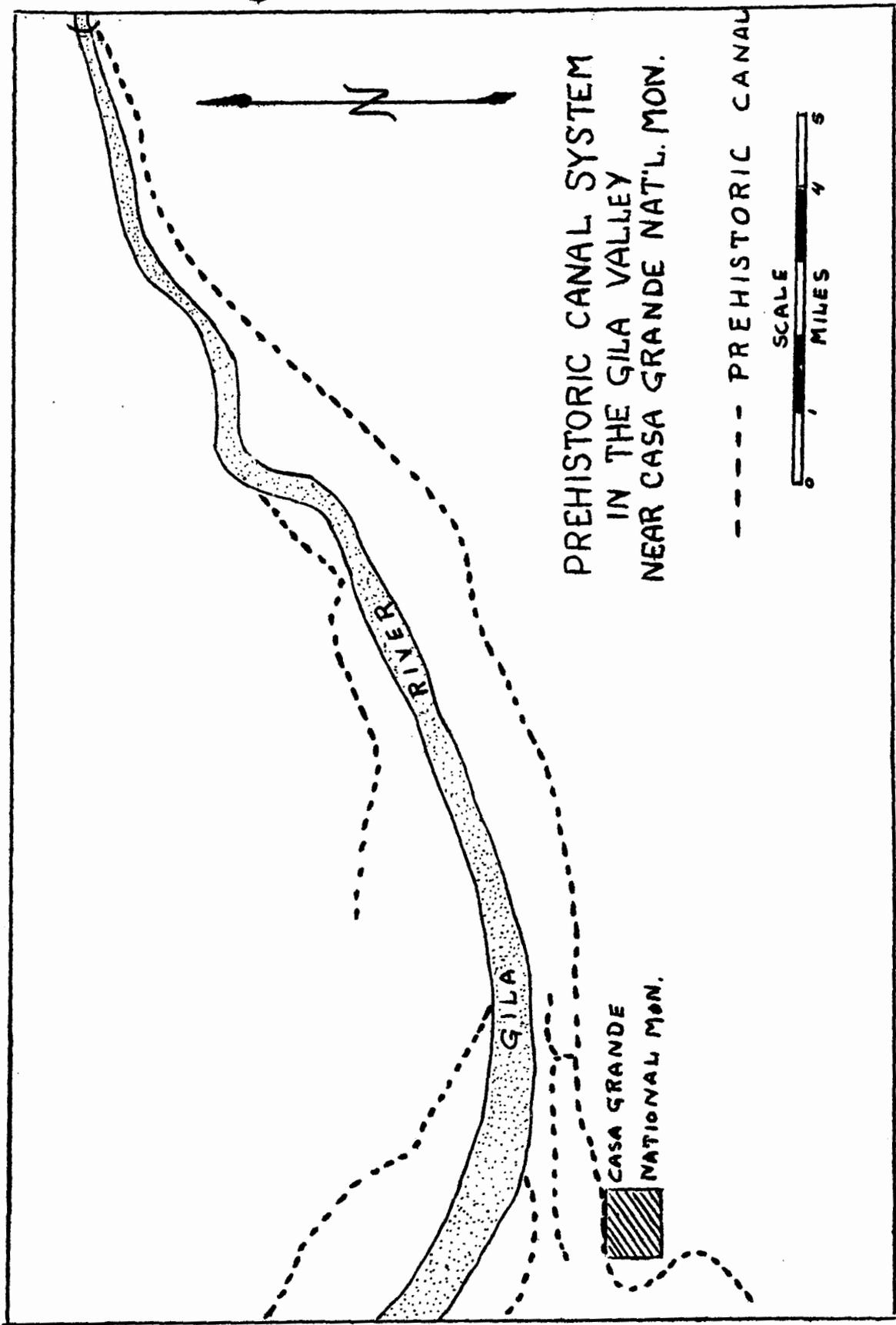


CANALS OF THE SALTRIVER VALLEY

After O.A. TURNEY
SCALE



L.R.C.



had been softened by water, and perhaps a digging stick might well have been used in some cases. The wet dirt was removed from the ditch in baskets and possibly bags.

Where these old canals originally left the river they are now in places as much as thirty feet above the present water level. This would indicate that among other causes the lowering of the river level in the Salt and Gila rivers brought on the decline and final exodus of the Hohokam civilization.

The canal systems of the Salt and Gila valleys were traced out a number of years ago before the present system of canals and the cultivation of land had almost obliterated all traces of the old canals. Foremost in the tracing of these old canals in the Salt River Valley was Mr. Herbert Patrick. Dr. Omar Turney later took over the study. More than 240 miles of main canals were found. In the Gila Valley in the vicinity of Florence and the Casa Grande Ruins Dr. Byron Cummings, Emil Haury and A. Larson traced out more than fifty miles of canals.

Today very little evidence remains of these canals. Modern agricultural methods demand that all ground be leveled in order that it be properly watered. So the evidence of the prehistoric canal system is fast disappearing.

The accompanying maps show the miles of canals that were traced in earlier years. The canal system of the Salt River Valley was drawn from a map by Dr. Omar Turney. The canals of the Gila Valley were taken from a map presented by Dr. Byron Cummings of the Arizona State Museum at Tucson, Arizona.

TALL CACTUS

....The Southwestern Monuments reports are very interesting and enlightening. The Tonto cactus list and the measurements of the saguaros especially so, as we claim to have the tallest one here in Arnett Canyon. It is 49 feet by actual tape measure. It is close to a bluff where one can stand and hold the tape on the top, while an assistant goes below to read the tape at the first root, which is above the surface of the ground. That figure is a challenge to Ranger Powell at the Saguaro Monument. He has a very good idea to develop:---the classification garden according to the outline of a tree. If we can aid him in any way, call on us.

-----Extract from letter from Fred Gibson,
Boyce Thompson Southwestern Arboretum
to Frank Pinkley, Superintendent,
Southwestern Monuments

WOOD BORERS AT TONTO

By Charlie Steen

Dear Boss: I have tried to get one of those wood boring beetles for you. I have just spent some 15 or 20 minutes blowing cigarette smoke into a piece of timber. The operation was successful but the smoke blower was so startled by the sudden appearance of the bug that he nearly dropped the wood and let the beetle get away.

I am sending you the timber so that you may see the type of hole which is bored. The beetle itself is a large black one and makes quite a buzz while flying---particularly so when he suddenly emerges from a hole into your face. I am of the opinion that there may be eggs, or possibly larvae in the tubes. Perhaps it would be advisable to split the wood in order to find out. So far I have found only three pieces of wood in the Lower Ruin which have been attacked by this beetle, and as all three were lying loose, I have brought them down to the house.

There are, however, a number of timbers in the Upper Ruin which have been bored by these beetles. If they should bore into the rafters which are still supporting adobe, the structure would be materially weakened,

The wood has been sent to Chief Forester Cook, Charlie, and soon we will get a method outlined for the preservation and protection of your vigas.

"BOOK OF MAGIC"

Note from Charlie R. Steen

....I have just read an article in the American Magazine for July entitled "Book of Magic", which deals principally with the Grand Canyon and the Hopis. It's the darndest mixture of fiction and misinterpreted fact which I have received in a long time. Articles of this sort explain some of the wierd fancies which easterners, and even some Arizonians, entertain about this country.

He speaks of ruins which have been visited by only one white man, a gun-toting guide of his whom I suspect is entirely fictional, petroglyphs of ibexes, monkeys, and mastodons in Havasupai Canyon, "black" flint arrowpoints, the method of manufacture of which is unknown, and relates that, in the Petrified Forest, "On the long-dead trees we sat, knocking off chunks."

He is either a liar or a vandal---possibly both. There ought to be a law against articles of this type....

Charlie also asks about making a catalog of his museum articles. We are trying very hard to complete catalogs of all Monument museums, and are sending him standard catalog cards to be filled out. Other Custodians desiring such cards and file boxes, please communicate with Headquarters.

TONTO BIRD NOTES

By Charlie R. Steen

BIRDS BREEDING IN TONTO NATIONAL MONUMENT, APRIL-JUNE, 1935:

Lophortyx gambeli gambeli--Gambels Quail
Zenaidura macroura marginella--Western Mourning Dove
Melopelia asiatica mearnsi--Western White-winged Dove
Carthartes aura septentrionalis--Turkey vulture
Buteo borealis calurus--Western Red-tailed Hawk
Falco sparverius plalaena--Desert Sparrow Hawk
Centurus uropygialis--Gila Woodpecker
Colaptes cafer collaris--Red-shafted Flicker
Aeronautes saxitalis--White-throated Swift
Myiarchus cinerascens--Ash-throated Flycatcher
Sayornis sayus--Say Phoebe
Corvus corax sinuatus--American Raven
Helodytes brunneicapillus couesi--Cactus Wren
Catharpes mexicanus conspersus--Canyon Wren
Salpinctes obsoletus--Rock Wren
Mimus polyglottos leucopterus--Western Mocking Bird
Icterus parisorum--Scott Oriole
Icterus cucullatus nelsoni--Arizona Hooded Oriole
Richmondia cardinalis superbus--Arizona Cardinal
Carpodacus mexicanus frontalis--House Finch
Astragalinus psaltria--Arkansas Goldfinch
Astragalinus psaltria hesperophilus--Green-backed Goldfinch
Phainopepla nitens--Phainopepla
Calypte costae--Costa Hummingbird
Piranga rubra cooperi--Cooper Summer Tanager
Amphispiza bilineata desericola--Desert Black-throated Sparrow
Piranga ludoviciana--Louisiana or Western Tanager
Vermivora luciae--Lucy Warbler
Tyrannus verticalis--Arkansas Kingbird
Vireo belli arizonae--Arizona Least Vireo

BIRDS SEEN ONLY OCCASIONALLY:

Geococcyx californialis--Road Runner
Chordeiles minor henryi--Western Nighthawk
Chordeiles acutipennis texensis--Texas Nighthawk

I have been unable to identify the owls and other night birds. Of the thirty two birds in the list I have been able to see the nest and eggs of the young of 30. I believe the other two---Road Runner and Nighthawks---breed in this vicinity. I am starting this week to study the night birds.

ON THE PRESENCE OF NESTING LOUISIANA TANAGERS AT TONTO:

In speaking of the country near Roosevelt Lake, on June 6, 1917, Swarth (1920) says, "From a thicket of mesquite several Western Tanagers emerged, belated migrants, looking very much out of place in this hot

TONTO BIRD NOTES (CONT.)

~~Assert.~~ Bailey (1928) gives the breeding range of this bird as in the Canadian and Transition Zones.

On the evening of May 27 I saw a male Louisiana Tanager just below the mouth of the canyon leading to the cliff dwellings and four days later evidently saw the same bird at the same place. Since that time I have noted a pair of these birds at the water trough in front of the Roosevelt postoffice on several evenings. To all appearances these birds are nesting in the vicinity, although I have not seen any nests. Perhaps the proximity of the timbered section of the Sierra Ancha may explain their summering at this low altitude.

TUMACACORI TREASURE

Following is an extract from a booklet prepared by Frank Pinkley on Tumacacori about 1922:

The Treasure

Almost all vandalism (at Tumacacori) can be traced to the treasure hunters. For generations tales of buried treasure have hung around the Mission. If one is to believe all these tales, the padres spent all their time in mining and reducing immense amounts of gold and silver and the church was rich beyond computation.

Most of the vandalism has been done, not on any system, but on "hunches". A scoundrel with a pick and shovel seems to have felt free to walk into the church any day and dig here, there, and yonder without rhyme or reason. It never seemed to dawn on his dull brain that if the padres were hard pressed and decided to abandon the Mission in haste, they would hardly try to secrete any valuables by tearing up a perfectly good cement church floor where the soft earth and broken material would be sure to tell the tale to the first visitor, when they could go out into the garden and dig a hole in the fresh turned earth where a newly covered hole would merge into the rest of the soil and would not be noticed 12 hours after the work was completed.

One school of treasure hunters are trying to use some system in their work, but so far, at least, have not attained any success. In my work I have happened upon four copies of a document in the hands of different treasure hunters, from which they were constructing charts with which they were expecting to find the mines and treasure of the padres.

A copy of this manuscript might be of interest, and I will insert a fairly accurate translation here, leaving the distances blank at the request of the person who allowed me to transcribe this copy.

The Manuscript:

"One document which dates of the years 1559 to 1658. It expresses as follows:

TUMACACORI TREASURE (CONT.)

"The mine which is called 'Virgin of Guadalupe' close to Tumacacori, it will be found at ___ leagues, measured from the great door of the church to the south, and from the waters of San Ramon measured to the left ___ varas to the north. About ___ varas before arriving at the mine is a black rock engraved with a chisel. On the rock you will read the inscription

$$\begin{array}{c|c} \text{CC} & \text{D} \\ \hline \text{T} & \text{D} \end{array}$$

and ___ varas from the cross you will find the treasure and that is what the letters signify.

, "At ___ varas after you pass the black rock you will find a small monument in the direction of southwest. It is two peaks which were demolished by powder and fell over the mine in great masses. Without more testimony than the powder put in the cliff the place was abolished forever so people could pass over it and it would never be seen.

"In a certain place exists one square of ___ varas in a square inside and outside the mine and the treasure is in the middle of the square. In the mouth of the mine there is silver and gold and white silver. The gold was brought from the mountain of Guachapa close to Tubac. The silver consists of 2,050 bars melted together with 905 of virgin silver. The whole amounts to the value of about 50,000,000 (pesos?).

"Ahead in the same direction to the south at ___ leagues from the mine of Guadalupe there is a pass which is called 'Deep Water'. It has at the south, by the road at the pass way, a town which opens out at the town of Santa Cruz. The mine will be found when you get in the pass. Below the said pass way are 12 arrastras and 12 patios. There is one tunnel of 30 varas which has the name 'Purissima Conception' engraved with a chisel. A tunnel runs to the north and about 20 varas ahead there is another tunnel, small about 100 varas, and it runs to the west. The ore is yellow. It runs $\frac{1}{2}$ silver and $\frac{1}{5}$ part gold.

At ___ varas there is a mine in the direction of north. You will find in this native silver from one pound to at least five arrobas, the greatest. This mine will be found covered or hidden by a copper door; it has enormous iron bars, everlasting. The copper was brought from the neighborhood of the mountain of Guachapa in the neighborhood of Tubac, smelted in Tumacacori and was taken with oxen to the mine in the years 1538 to 1658.

From the mine 'Purissima Conception' to the mountain of Our Lady of Guadalupe there are ___ leagues and half way on the road in the same direction there is another mine. It will be found by the name 'Opata'. It has a tunnel 400 varas long and it runs to the south. The metal of this mine has a lime contact, and about 300 varas from the mouth of the mine there are some inscriptions and furthermore there is along black mesa from the side where the sun rises and sets. Follow a deep canyon to a rock slide. You will see one inscription made by a bar. Here is a hole $\frac{1}{2}$ vara deep and it will last forever. Opposite, to the south of the canyon, you can see the mark of

TUMACACORI TREASURE (CONT.)

the gold. At the side of the canyon to the north of the mark we have _____ leagues from mine Opata to Tumacacori. The mark is to the west.

On the other side of the mountain you will find the mine of Our Lady of Guadalupe. You will find the letters engraved 'P.L.R. 12 Dec. 1508.' This mine was found by chance and all her interests remain in charge of Tumacacori. In this mine will be found a copper box. It has a key hanging on one corner. There is a set screw which you open and then there is a rod which you pull out and open the box. There will be all the maps and the great treasure.

If any one by chance will have the great fortune to find one of the mines he shall be obliged for the good of his soul to give 10% to the mother church.

In the year 1558 belonging to Tumacacori was a mine by the name of San Pedro which you will find _____ leagues from the mine Isabella. The river is to the north _____ leagues and the mine is close to some black rock at the point of the mountains. From this point a trail goes to the mine San Pedro in a line with the line of the mountains at a point of the bar. The mine is _____ leagues from the side door of the church to the west and when the sun rises it is directly in the mouth of the mine, and from this mine you can see the town of Arivaca.

From the Virgin Guadalupe it is _____ leagues to the mine San Pedro. From one to the other there is a deadly sign. There is a landslide of about $\frac{1}{2}$ vara from the top to the bottom of the canyon. There is a trail that descends from the mine San Pedro. It comes down ~~the~~ to the Virgin Guadalupe in the direction of the south to the mine of San Ramon. The eyes will be engraved in one rock. In the mine of San Pedro will be found enormous slabs of virgin silver. There is a wooden door. To the west there is a landslide and in it is a deposit, and to the east there are others, and at a certain place there are three deposits containing all pure virgin silver.

And notice is given that any person who finds this mine will be obliged to give to the mother church 10% and repair this church, and the Lord will bless his soul."

(The following notice is appended to the copy of one document which I saw.)

"Notice: The original of this document was in the archives of the parish of Magdalena, Sonora, and from there it was taken by a priest to the museum of Paris."

It will be noticed at once that the dates of 1558 to 1658 given in this document are entirely too early. Tubac, Tumacacori, Arivaca, and several of the names given here do not appear in history until after Kino's

TUMACACORI TREASURE (CONT.)

first visit in 1691.

Yet the internal evidence points to the fact that all the copies of this manuscript which I have seen came from the same master document. On the face of it it looks like a hoax, yet I know two or three people who believe earnestly that it is an honest document and points the way to real mines and treasure."

TWO RECENT LETTERS:

Department of the Interior
National Park Service

June 10, 1935

Gentlemen:

It has been called to my attention that during recent government excavations at Tumacacori National Monument, located south of Tucson, Arizona, a quantity of silver and gold bullion was discovered. The excavation was being performed within the walls of the old mission. If my question is in order, I would like to know if the above rumor is true.

I own some property close to the old Mission and at odd times have carried on operations in search of the bullion "reputed" to have been buried in that vicinity. If government excavators have found this bullion, you can save me a lot of unnecessary digging by informing me of the facts.

(Signed)

Washington, D.C.
June 19, 1935

Mr. Blank
____ Avenue,

Dear Sir:

The National Park Service has received your letter of June 10. It is astounding how the rumor of buried treasure persists in connection with Tumacacori Mission. Previous to government operation the area had been searched continuously with only disappointment for the searchers. During the past year the Government has done some excavation so as to present better the historical picture. To date the finds have been limited to utensils and experience lends no support to the idea that buried treasure exists. It is the firm belief of all Government men best able to know that the rumor about bullion is "pure fiction" and that disappointment and wasted time and energy await everyone who pursues this unfounded rumor relating to buried treasure in this area.

Very truly yours,

Arno B. Cammerer, Director, N.P.S.

CASA GRANDE POOR SERVICE CHART-JUNE

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THE BERKELEY LABORATORIES

By Dale S. King

On April 22, I left Headquarters for Berkeley, California, where I had been detailed on special duty in the Field Division of Education museum laboratories. Perhaps a general description of the laboratories and the work done there will be of interest to the men in the field and will serve to show our tieup with Berkeley and how they can serve us in our museum and educational needs.

The Field Division of Education has tackled a whale of a problem and is doing an excellent job toward solving it despite many hindrances and a great handicap in not being able to obtain sufficient supervisory personnel.

Work is done in three buildings: Hilgard Hall on the University of California campus, the ECW Laboratory on College Avenue, and the rented Federal Land Bank Building just off the campus.

Hilgard Hall is, of course, permanent headquarters of the Educational Offices and houses the executive officers of the setup: Ansel F. Hall, Chief of the Field Division of Education; Dr. Ralph Beals, Assistant Chief; Mr. Montgomery, Purchasing Officer; secretaries, etc. These men have the terrific task of organizing the whole program, keeping it running, and attending to the million and one difficult problems that arise in such a complex situation.

Workers at the Laboratories fall under six classifications: CCC, ECW, PWA, SERA, FERA, and EEP. The CCC boys and their ECW supervisors (although perforce too scanty) provide the backbone of the organization, because they are more or less permanent and can be depended upon to finish a project once started. A small group of PWA artists and sculptors do remarkable work, but PWA money is very scarce, and this group is necessarily very small. Some good results can be obtained from State ERA and Federal ERA workers, but each one usually is assigned for only three to six or seven days each month which means that they must be used on "hack" projects which can be started and stopped with impunity, else the work will suffer. The EEP (Emergency Educational Program) workers number only six, and have to be used in a teaching capacity---instructing workers in painting, casting, modeling, etc.

Altogether there are about 200 persons working at the laboratories. You can imagine the problems arising---payrolls, supervision, trying to select workers according to their special abilities, if any; purchasing the widely varied list of materials needed; keeping paper work up, particularly when half of the workers change every few days.

ECW Laboratory^E on College Avenue: Here Mr. H. Smith, technician, directs about 15 CCC boys and about six or eight carpenters. The carpenters have a fairly complete set of mill machinery and construct museum storage cases, lantern slide cases, trays, botanical specimen cases, etc.,

BERZELEY LABORATORIES (CONT.)

---in fact any wood work orders that come in from the field. The CCC and ECW workers make relief maps according to the new and efficient methods evolved there. They also make bird traps, stamp and paint aluminum labels, model and cast figures, and are prepared to produce almost any type of handicraft. There is an efficient photographic laboratory.

Land Bank Building: Here are the majority of the workers. In the basement are additional carpenter shops, two store rooms, the label-printing shop, and the lantern slide mounting department.

On the first floor about 30 to 50 SERA typists hammer away on bibliography cards which have been written by a dozen or so researchers who go through all library material available at the University. Bibliographies of all Parks and Monuments will be forthcoming soon---Yellowstone's was issued only a few days ago---some four volumes and more than 400 pages, comprising all the known printed references to the Park---books, newspapers, magazines. Many hundreds of cards are already assembled on the Southwest, and when our bibliography is complete, it will be a major step in the educational program of the Monuments.

Also on the first floor are the painters of relief maps and dioramas, order and supply department, lantern slide colorists, SERA supervisor's office, and the Accessories Department which makes all the miniature trees, shrubs, and grass which are used in dioramas and other exhibits.

The mezzanine floor is occupied by the Mimeographing and Book Binding Department.

On the second floor are rooms which house about 20 artists making maps, cartographs, charts, diagrams, and paintings to go in various museum displays. Here, too, are the sculptors' office, and office for the Foresters who make visibility maps, the etcher's workbench, and the office of Technician Arthur Woodward and whatever supervisory assistants have come in from the field.

This is probably enough to convince you that the place is huge and that there is a convincing bustle of efficient activity manifest at all times.

How can this Laboratory help your Monument?

Dioramas, elaborate and expensive displays, naturally have to wait for regular appropriations or PWA funds, but there are many projects which can be done with CCC or relief labor which you may obtain. If you want maps, cartographs, sketches, small carpentry or cabinet maker jobs, pictures framed, lantern slides made from negatives, aluminum botanical or field labels, small printed signs or labels of cardboard, bird traps, relief maps, small architectural models, models of animals or human figures, etc., work up your plan in complete detail, and shoot it to Southwestern

BERKELEY LABORATORIES (CONT.)

Monuments Headquarters. We will determine the advisability of ordering it and make the official order to Mr. Hall's Office.

The following projects were started, under way, or completed during my two months in Berkeley. Much of the material will be shipped within the next two months. Glance over the list and see if it does not give you some ideas:

1. Diorama, 8'x5'x3', showing Montezuma Castle with archaeological crew in foreground. On display at San Diego Exposition.
2. Water color and tempera scenes for Ecology, Animal Foods, and Vegetal Foods cases for Aztec National Monument. (PWA project).
3. Map and Chaco kiva model for Comparative Culture case at Aztec. (PWA project.)
4. Twelve museum storage cases for textiles, basketry, and bird and small mammal study skins. For Headquarters, Aztec, Bandelier, Canyon de Chelly, Casa Grande, Chiricahua, Navajo, Tumacacori, White Sands, Wupatki.
5. Twenty two-compartment bird traps for Monuments which have established bird-banding stations: Casa Grande, Canyon de Chelly, Navajo, Wupatki.
6. Six woodpecker traps for the same Monuments.
7. About 40 lantern slides for headquarters, and coloring of 14. Berkeley Office can make the slides, but can not color more at the present time.
8. Two hundred trays for sherds and artifacts. For headquarters and various Monuments.
9. Two lantern slide cabinets. One for Headquarters; one for Aztec.
10. Approximately 2,500 metal cactus labels for Saguaro and all other Monuments wherein is found cactus.
11. 2,000 metal rods to affix same, and to be used if desired for labels already distributed to Bandelier, Walnut Canyon, El Morro, and Chiricahua.
12. Three pyrite mirror reconstructions for Casa Grande and, eventually, Tumacacori.
13. Model showing Pima house, kitchen, and store room, for Casa Grande. Now on display at San Diego.

BERKELEY LABORATORIES (CONT.)

14. Relief maps of Wupatki and Citadel portions of Wupatki National Monument.
15. Restoration drawing of Pueblo Bonito for Chaco.
16. Three maps showing distribution of Western Apache in 1850. For Tonto, Tumacacori, and Casa Grande.
17. About 15 signs for archaeological and botanical features along trails at Walnut Canyon.
18. Thirteen insect and dust proof cases for botanical specimens. For Aztec, Bandelier, Casa Grande, Chiricahua, Montezuma Castle, Tonto, Tumacacori, Walnut Canyon, White Sands, Wupatki, Canyon de Chelly.
19. Large map showing relation of Mission and ruins at Gran Quivira, for display at Gran Quivira museum.

"THANK YOU'S"

Lubbock, Texas
June 30, 1935

"...Would like to receive the monthly report here at the College of it would not be too much trouble to send it here. It is the most interesting and wide-awake report I have ever had the opportunity to read."

Carl A. Moosberg

(Mr. Moosberg will be remembered as the generous donor of a fine ceramic collection to the Casa Grande National Monument Museum.)

Smoki Public Museum
Prescott, Arizona

Mr. Louis R. Caywood
National Park Service
Coolidge, Arizona

Dear Mr. Caywood:

We wish to express our appreciation to you for your co-operation and help in making the opening of the Smoki Public Museum a success on Wednesday evening. The illustrated talk was a very decided addition to the program.

Very truly yours,

The Yavapai Archeological Society
Kate T. Cory, Secretary

CLOSING

And so we close the month and the year and wipe off the slate and open up the new business for Fiscal year 1936. It seems to us this report carries considerable real information and as we look back over the last six months period and leaf through the other reports with which this will be bound we think we can see some real progress.

I might tell you here that we are trying out a plan of sending out a circular letter to the personnel of our district about once a month. Tentatively we called it the Broadcast, principally, I suppose, because that was what it wasn't and we couldn't think of any name that fit any better. It just goes to the home team, as it were, and is an attempt to cover the weak spot in our armor of being scattered so widely that we get to thinking of ourselves as single units instead of members of an organization. It is much more personal than the Report or the Supplement, and incidentally is giving signs of filling a real need. You will probably hear more of this Broadcast as time goes on.

We were glad to see from some press releases out of your office this past month that the idea of Reserve Monuments is taking hold and we may have one proclaimed in the near future. This will form a precedent and we will follow up with several offerings as soon as the way is made clear. Future issues of the Supplement may contain articles on such proposed reservations of our present plans work out.

Cordially,

Frank Pinkley

Frank Pinkley
Superintendent

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