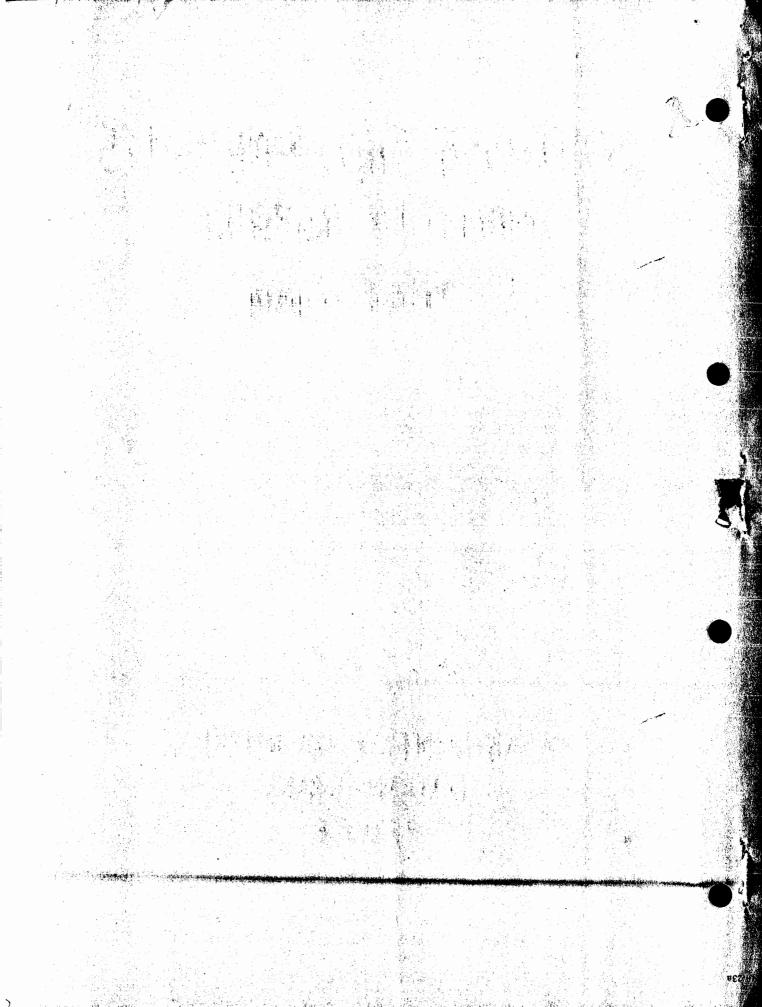
# SOUTHWESTERN MONUMENTS MONTHLY REPORT AUGUST 1935



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# SOUTHWESTERN MONUMENTS PERSONNEL

HEADQUARTERS Southwestern Monuments, Coolidge, Arizona: Frank Pinkley, Superintendent, Hugh M. Miller, Acting Assistant Superintendent. John H. Diehl, Associate Engineer. Robert H. Rose, Assistant Park Naturalist. Dale S. King and Louis R. Caywood, Junior Park Naturalists. Robert L. Cole, ECW Clerk. Eric Reed, Roving Ranger. Luis Gastellum, Temporary Clerk-Stenographer.

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, Carl Schmidt, Rodmen.

### FIELD STATIONS:

- 1. Arches-B-Moab, Utah. J. M. Turnbow, Custodian.
- 2. Aztec Ruins --- Aztec, New Mexico. Johnwill Faris, Custodian. E. W. Lewis, Temporary Ranger.
- 3. Bandelier -- Bcx 669, Santa Fe, New Mexico. Earl Jackson, Custodian. Jerome W. Hendron, Temporary Ranger.
- 4. Canyon de Chelly---Chin Lee, Arizona. Robert R. Budlong, Custodian.

  J. Douglas Harritt, Temporary Ranger.
- 5. Capulin Mountain -- Capulin, New Mexico. Homer J. Farr, Custodian.
- 6. Casa Grande Ruins---Coolidge, Arizona. Charlie R. Steen, Acting Custodian.
- 7. Chaco Canyon --- Crewpoint, New Mexico. Thomas C. Miller, Custodian. Lewis T. McKinney, Temporary Ranger.
- 8. Chiricahua -- Willcox, Arizona.
- 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 Ledge, Arizona. No Custodian.
- 18. Saguaro -- Tucson, Arizona. No Custodian.
- 19. Sunset Crater --- Flagstaff, Arizona. J. W. Brewer, In Charge.
- 20. Tonto---Roosevelt, Arizona. Woodrow Spires, Acting Custodian. 21. Tumacacori----Box 2225, Tucson, Arizona. George L. Boundey,
- Custodian, Martin Evenstad, Park Ranger. 22. Walnut Canyon---Flagstaff, Arizona. Paul Beaubien, Acting Custodian.
- 23. White Sands---Alamogordo, New Mexico. Tom Chærles, Custodian.
- 24. Wupatki---Flagstaff, Arizona. J. W. Brewer, Acting Custodian.
- 25. Yucca House --- Cortez, Colorado. No Custodian.

# CONDENSED REPORT

Coolidge, Arizona August 1, 1935

The Director, National Park Service Washington, D.C.

Dear Mr. Director:

The Condensed Report for Southwestern Monuments for August, 1935:

### TRAVEL:

|                  | August, 1935 | August, 1934                          | August, 1933 |
|------------------|--------------|---------------------------------------|--------------|
| Aztec Ruins      | 2,250        | 2,184                                 | 1,821        |
| Bandelier        | 2,475        | 2,125                                 | 959          |
| Capulin Mountain |              | 7,000                                 | 1,800        |
| Casa Grande      | 1,376        | 1,376                                 | 1,036        |
| Chaco Canyon     | 1,031        | 1,014                                 | 1,262        |
| Canyon de Chelly | 135          |                                       |              |
| Chiricahua       | 958          | 1,102                                 |              |
| El Morro         | 333          | 605                                   | 579          |
| Gran Quivira     | 385          | 365                                   | 523          |
| Montezuma Castle | 1,910        | 1,654                                 | 1,843        |
| Natural Bridges  | 120          | 50                                    |              |
| Navajo           | 140          | 83                                    |              |
| Pipe Spring      | 256          | 250                                   | 285          |
| Sunset Crater    | 1,216        | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ |              |
| Tonto            | 360          |                                       |              |
| Tumacacori       | 906          | 641                                   | 689          |
| Walnut Canyon    | 2,047        | 1,910                                 | ~            |
| White Sands      | 7,013        |                                       | 3,000        |
| Wupatki          | 290          | 190                                   |              |
| Yucca House      | 14           |                                       |              |
| Actual Reported  |              |                                       |              |
| Registration     | 23,215       | 20,549                                | 13,797       |

The 14 Monuments which reported both in 1934 and 1935 showed an increase from 13,549 to 14,477---928 visitors, or 6.4%.

The 10 monuments which reported both in 1933 and 1935 showed an increase from 11,977 to 17,935---5,938 visitors, or 33.1%. This is a rather remarkable increase.

Thus, it would appear that August, 1935, as a travel month was 6.4% better than the same month in 1934; 33.% better than the same month in 1933.

CONDENSED REPORT (CONT).

### WEATHER

August in the Southwest is usually a month of showers, and this time she almost overdid herself. Practically all Monuments report more showers than usual---resulting in damage to roads at De Chelly, El Morro, Bandelier, Tonto, and Montezuma Castle, and considerable flood damage at Pipe Spring.

Hindrance to visitor traffic was more than compensated for by improvement in range and agricultural conditions. It is interesting to note that rain at Gran Quivira broke the bad drouth, at Wupatki packed the cinder roads.

Southern parts of New Mexico and Arizona have been experiencing cooler weather and more rain than usual.

### FIELD TRIPS

Assistant Superintendent Miller visited Bandelier on official business late in the month.

Park Naturalist Rose visited Chiricahua August 6-8; made educational studies, and gave two lectures to the CCC camp there.

Junior Naturalist Caywood was in the field the whole month--at Canyon de Chelly until August 22, then to Aztec Ruins on relief duty.

### ENGINEERING ACTIVITIES

Park Engineer Diehl spent most of the month in the field, visiting most of the northern Monuments August 6 to 27, inclusive. The survey crew at Walnut Canyon made topographic studies of the Headquarters Area, and followed the boundary line of the proposed addition. Office work consisted of plotting cross sections of the Bonita Highway, Chiricahua National Monument.

### E.C.W. ACTIVITIES

### BANDELIER

- 1. Roofing, wiring, and plumbing completed on Headquarters comfort station.
- 2. Finished 175 additional feet of highway guard rail.
- 3. Fireplaces in campground completed, and some faulty ones replaced.
- 4. Walls to flashing height of utility warehouse completed.
- 5. Progress on tent caterpillar control, old trail obliteration, timber cutting and rock quarrying.

### CONDENSED REPORT (CONT).

### CHIRICAHUA

- 1. Water system almost complete --- 10,000 gallon reservoir and trench for 4-inch pipe line in headquarters area dug. Pool for wildlife completed in spring area.
- 2. Headquarters comfort station ready for plumbing and fixtures.
- 3. 2,000 feet of old road obliteration.
- 4. Dips and fireplace construction as well as road grading pregressing well in campground. Cleanup started.
- 5. 2,500 feet finished on Echo Trail, the latest part through hard going.
- 6. Sara Deming Trail started.
- 7. Forest Service Ranger cahin at Rustler Park 40% complete; work started on cabin at Fly Peak.

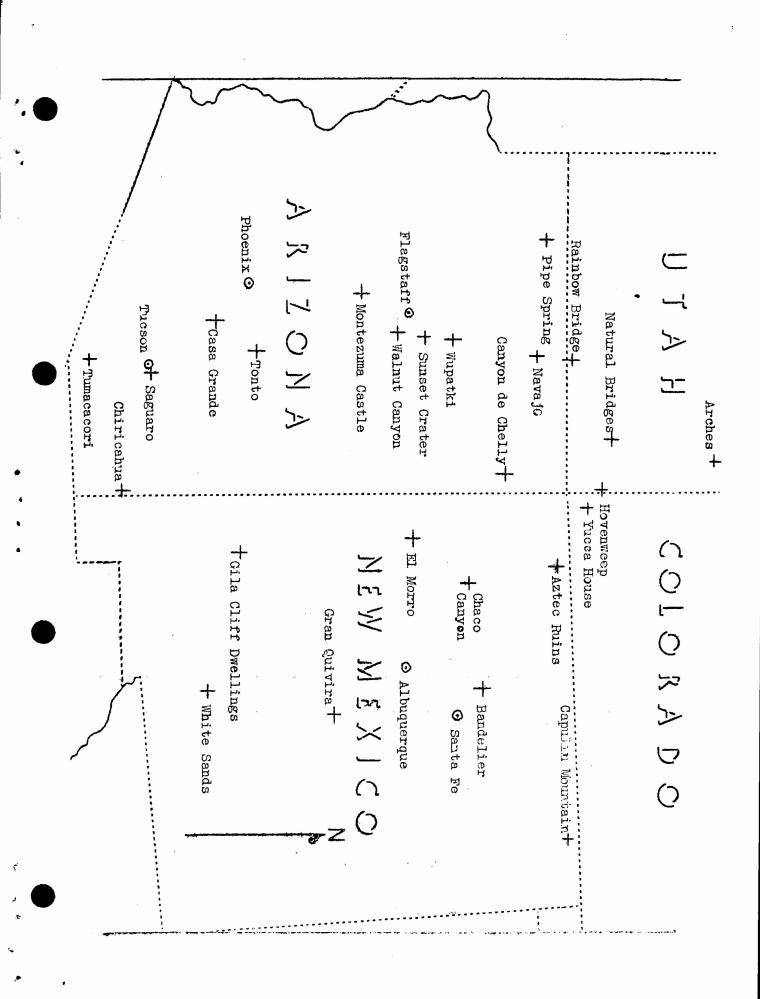
### PERSONNEL

- 1. Charlie R. Steen, who has served capably as Temporary Ranger and Trail Foreman, alternately, at Tonto National Monument for the past year, was appointed Park Ranger at Casa Grande National Monument August 1. Charlie comes to us with an excellent record at Tonto, and his high position on the Civil Service eligible list made his selection indubitably a wise one.
- 2. Temporary Ranger Charles E. Powell left Chiricahua early in the month to assume Army duties under his Reserve Commission.
- 3. Temporary Ranger E. W. Lewis of Aztec Ruins left on August 20 for a teaching position in Texas.
- 4. Temporary Ranger Erik Reed, who has been turning in some fine reports as traveling Ranger in the "Four Corners" region, resigned late in the month. He received an ECW appointment as Assistant Archeologist in the State Park Division, headquartering at Goliad, Texas. Although Mr. Reed was on the traveling job only a short time, his work demonstrated that such a position fills a real need in our organization.
- 5. Woodrow Spires, who has served as ranger and guide at Casa Grande intermittently for the past two years, was appointed trail foreman at Tonto National Monument the first of the month. His presence there, while working on trails, will assure the Monument protection at least until the first of the next fiscal year.

### VISITING PARK SERVICE OFFICIALS

Resident Landscape Architect Richey visited Headquarters for three days late in the month on matters relative to New Mexico Monuments. Landscape Architect Kuehl dropped in at Headquarters for a part of a day on Arizona Monument business.

Cordially, FRANK PINKLEY, Sup't.



# REPORTS FROM MEN IN THE FIELD

# MONUMENT POSSIBILITIES

By Erik Reed, Roving Ranger

### 1. Lake Canyon, Utah.

On the property of W. W. Reed, nineteen miles by road from Dover. Creek, Colorado, in a southwesterly direction, at the head of Lake Canyon, a tributary of Montezuma Creek, there is an unusually large site in rather poor condition. It is an open site, a pueblo extending over two low ridges, very much eroded and somewhat potted, with no walls standing above ground—merely piles of rock.

Mr. Reed has corresponded with the American Museum of Natural History, the Peabody Museum, and the Field Museum on the subject of excavation of the site. Paul Martin has visited it and John O. Brew plans to visit it this summer.

Pothunting in the site is prevented as far as possible by Mr. Reed. It is by no means completely gutted although a little digging has been done in it.

The road into the site is quite good except in wet weather.

It seems clear to me that the Lake Canyon site is a potential national monument if and when excavated. It is unusual in its extent, which is indeed striking. If after it has been excavated, which it is quite likely to be, sometime, it presents features of interest in addition to mere hugeness and would be a good show place, it certainly should be reconsidered.

Incidentally, there are numerous small sites in the immediate vicinity—one in the back yard of Mr. Wilson, the nearest resident to the site, from which he has recovered several very interesting pieces of pottery. On the first large ridge just west of the draws around which the big site is located there are a number of small open sites. Small cliff dwellings, none of great extent or special interest, are reported to exist in Lake Canyon, in Squaw Canyon (the next east), and Monument Canyon (the next west). Some of these could be included in the monument, if one were created, to advantage.

Several years ago five government men spent five days here, apparently surveying the ruins and considering it for a National Monument. Although it was then on government land they for some reason turned it down.

### PROPOSED MONUMENTS (CONT.)

### 2. Alkali Ridge, Utah.

The traveling ranger visited a number of sites on Alkali Ridge, southeast of Monticello, Utah, on August 11, in company with Mr. Ralph Frost of Monticello, an amateur in archeology of considerable potentialities, and Mr. Hoagland of Alkali Ridge, We visited several sites of various types, including some of the ones excavated by J. O. Brew; by no means all the sites on the ridge, of which there are over a hundred certainly. Also, there are small cliff dwellings in Dodge Canyon, Long Canyon, Devils Canyon, and Alkali Canyon (which run into Montezuma).

From what I saw, and from what I was told of the sites we did not go to, I judge that there is no single site here that really should be a national monument, although several possible reserve monuments. Many of the sites in this vicinity would probably turn out to be of unusual interest archeologically, and there is perhaps an unusual concentration of sites. But there is nothing, so far as I know, sufficiently unusual to demand special attention; there is relatively little pothunting hereabouts; there is little or nothing that would especially attract lay visitors. Brew's largest and most important site, the extensive EM3 surface building, is badly washed already and would be most difficult to preserve.

Certain of the sites below the ridge, several miles south, as described by Mr. Frost are of considerable size and interest.

### 3. The Lowry Ruin, Colorado.

The Lowry site, a large pueblo situated on a high mesa point in the Montezuma drainage, precisely 10 miles by road from Ackmen, Colorado, was excellently though incompletely excavated recently by Dr. Paul Martin. It is in very good condition, partly because of the preservation work--cement capping, etc.--done by Dr. Martin.

This site is large, easily accessible, in good condition, it has been competently excavated, and it presents a number of interesting features. The last applies especially to the great kiva--although it doesn't quite come up to the Aztec standard perhaps. It is on government land; although not in a spectacularly scenic sitting at all, it is in attractive country.

The work necessary in cleaning out the rooms and completing measures for preservation would not come to a great deal. Dr. Martin might be quite willing to part with some of the artifacts as a permanent loan or long-term loan to a museum at the site.

Your correspondent feels that both for the purpose of preservation of a large and interesting pueblo and from the viewpoint of a tourist attraction the Lowry Ruin is a suitable candidate for the PROPOSED MONUMENTS (CONT).

status of a national monument.

4. Barker Arroyo, New Mexico.

While helping Deric Musbaum in potsherd gathering on the La Plata just before being taken on for this present job, I saw one site, or group of sites, rather, that would be a pretty good national monument.

On the point above the junction of Barker Arroyo and the La Plata River, nine miles above the confluence of the La Plata and the San Juan, in San Juan County, New Mexico, there are four huge buildings close together and one oversize kiva, considerably pothunted but still in passable condition in general. One of the pueblos has been nearly all cleared; the others have been merely potholed a little; the great kiva is untouched. The site evidently underwent the same sort of history as Aztec-built by Chaco folk, later occupied by Mesa Verde culture. The site surely totals larger than Aztec.

Possibly this place is too close to being a duplicate of Aztec to be worth making a national monument. But it should be somehow protected from further vandalism; it would be of interest to casual visitors and is not at all difficult of access. It is on privately owned land, I believe.

By the way, while in this section, why aren't at least some of the cliff dwellings in Johnson Canyon and Lion Canyon under National Park Service protection? The simplest way would, I suppose, be to include them in Mesa Verde National Park.

### 5. General remarks on the McElmo and Montezuma drainages:

There are innumerable small sites in many, probably most, of the canyons which extend out from McElmo Creek and Montezuma Creek and on the intervening mesas. There is no reason to pick any of these more than others for protection and preservation, and they would not be outstanding attractions to lay visitors. Few are of especial importance archeologically, even. However, there must be a few sites here and there of particular importance from one point of view or the other. Goodman Canyon, Goodman Lake, Moki Lake, West Rock Creek Canyon, in the northern drainage of the McElmo; Cross Canyon, Ruin Canyon, Cajon Canyon, in the eastern drainage of Montezuma Creek, should be examined with reference to possible reserve monuments. I mention these in case I don't get around to them while roving.

\*\*\*\*\*\*

# CANYON DE CHELLY

By Robert R. Budlong, Custodian

Total number of visitors to this National Monument for the month of August, 1935, was 135. Twenty-seven of these drove to the rim only; 50 descended the White House Trail; 34 drove within the canyons by car, and 24 rode horseback to Antelope House.

Visitors arrived in 43 cars, as follows: Arizona 14, New Mexico 7; California 6, New York 4, U.S. 4, Colorado 1, District of Columbia 1, Iowa 1, Massachusetts 1. Minnesota 1, New Jersey 1, Ohio 1, and Texas 1. We had two visitors from England, one from Mexico, and one from Siam.

Maximum temperature during this month was 94 degrees, on August 11. Minimum was 49, on the 18th. Total rainfall. .42 inch, of which .23 fell on August 15.

This has been a rainy month, and muddy roads and threatening skies probably have frightened away many visitors who otherwise might have visited this Monument. The canyons have been impassable for cars equipped with narrow tires. Those visitors who drove within the canyons drove either in the car of the concessionaire, which has eight -inch "airwheels", or in other cars similarly equipped. The new pickup stationed at this Monument has been unable to negotiate the canyons, since it is equipped with the usual narrow tires.

Mrs. Harold L. Ickes visited this Monument August 19. Mrs. William Denman, of San Francisco, was a visitor on July 24 and August 21.

Byron Curmings, Curator of the Arizona State Museum, and head of the Department of Archaeology of the University of Arizona, visited this Monument August 9, with a party of 26 graduate students. We greatly enjoyed their visit, and were sorry they could not stay longer. Mr. and Mrs. TenBroeck Williamson, of the Laboratory of Anthropology, and guests, visited here August 10. and rode horseback in the canyons.

Associate Engineer J. B. Hamilton has been in a number of times during the month, to inspect the progress on the PWA projects here. Engineer Jack Diehl drove through here August 22, on his way to Gallup, New Mexico, in a hurry, as he was last time. Come back and stay longer:

Junior Park Naturalist Louis Caywood and Winnie Caywood arrived here July 26, and are just leaving for Gallup as I write this report. We greatly enjoyed their visit with us, and regret they can't stay here longer. I know they enjoyed seeing a real Monument. In fact, I believe they are strongly contemplating spending their vacation here in the near future.

Public Works projects here--construction of water and sewer systems for the proposed Custodian's residence--will probably be completed by the

CANYON DE CHELLY (CONT).

end of this month. The septic tank and sewer lines were completed August 16. Manhole installation is 75% complete, the water line 80% complete. The excavation for the water reservoir has been finished, and the cement for the reservoir will be poured within the next few days.

The Honorary Custodian Without Pay made a trip to Headquarters with Mrs. Dick Lovald (formerly Gay Rogers) during the month. They left Gallup, New Mexico, August 2, and returned to Gallup August 15. I am still hearing the details of that trip. They first drove to Montezuna Castle, where they spent the night with the school of Fishes, and where they sat up half the night talking over old times and new. The next day they drove to Coolidge, where they spent a most enjoyable week as guests of The Boss. They had only planned to remain there three days, but were made so welcome they couldn't break away for a week.

After visiting the Grand Canyon on the return trip they drove through the Hopi country, witnessed part of a Katchina Dance, and encountered some wet weather. Twenty miles outside of Keams Canyon their car became hopelessly stuck in a mudhole, and then the heavens opened and the rains descended. Apparently they were right in the center of the second deluge.

The whole slope on which they had been driving turned into a solid sheet of flowing water, and water flowed around and through the car until they weren't sure it would remain where it was. So everything was transferred into the front seat, and the car abandoned. The two victims hiked up the "road" (then under water) until they found another car, but that one was also hopelessly stuck, so they returned to their own car and slept in it until about one o'clock in the morning. Then they had to build a fire in order to thaw out, and I never have been able to find how they managed to locate any dry wood.

About daylight an Indian armed with a shovel helped them to extricate the car, and they drove back to Keams Canyon, and on to Gallup, where I met them just as they arrived. Never have I seen anyone more thoroughly covered with mud than was my better nine-tenths! But both of them had a fine trip, and I must confess I listened to the accounts of it with something approaching envy.

During the H.C.W.P's absence I attended a big "squaw" dance. It was held over a period of three days, August 8, 9, and 10. The first was at Black Mountain, the second about five miles from Chin Lee, and the third about two miles from Thunderbird Ranch.

The night of the 10th, Louis and Winnie Caywood, Doug Harritt and I drove to the dance, and remained until about 1:30 a.m. There were hundreds of Indians present, and we greatly enjoyed the spectacle. (Louis shakes a mean hoof, Boss). Louis was roped-in for one dance, but both Doug and I escaped.

CANYON DE CHELLY (CONT).

About midnight we partook of a midnight supper given by Mr. Garcia of the Canyon de Chelly Trading Post, and just when I was eating a devilled-ham-and-green-chile sandwich, and congratulating myself that I hadn't been dragged into the dance, someone grabbed me by the shoulder, and I turned around to beheld a most attractive young Navajo girl of about ten years of age, holding me firmly by the shirt, and insisting that I enter the dance. I tried to talk around and through the sandwich and explain that I was enjoying supper, but she insisted, and I finally had to pay off in the approved fashion. I think it was a frame-up, but we all enjoyed it.

But I had to bolt that green chile in too much of a hurry, and still regret it.

# AZTEC RUINS

By Johnwill Faris, Custodian

August was a mighty interesting month and we have enjoyed every day of it.

Visitors for the month total 2,250 which will compare with any August in the history of the Monument. The year 1930 shows a few more in number, but I know can not compare with this August in many ways.

The Custodian made one official trip off the Monument, going to Chaco the sixth. The school at Chaco made us a visit a Sunday or so before, so we returned the call. I tried to find a day when Cal was away but found him right on the job.

Engineer Williams was with the students and made a very effective silent appeal for the Dodge truck, which he needed, but it took another week or two for me to break down completely.

Early in August this office was in receipt of a letter stating that former Director Albright would stop with us a few minutes at noon August 12. Since Mr. Albright as Director was instrumental in obtaining money for our new museum and administration building, we felt it might be suite a treat to honor him with a dinner in the lobby of the building. After being assured he would be here at noon August 12, invitations were sent out to some 90 business men of the Basin. With all the help of the entire community noon August 12, we served 84 people in the lobby of the new building. Ninety-four plates in all were served, each with fried chicken, mashed potatoes, gravy, all the fixings and ice cream and cake. All the food was cooked down at the residence and hauled up in the old Dodge.

AZTEC RUINS (CONT).

We were especially honored not only with Mr. Albright's presence but also with that of Associate Director Demaray and wife, Architect Baker and wife, Superintendent Leavitt and wife, of Mesa Verde, Chuck Richey, and Kenny Saunders both from the Park. We were glad to have these folks with us and had not even dreamed of such a possibility. We only trust that they enjoyed the affair as much as our Monument enjoyed their company. We thank Mr. Demaray for his talk and assure him it was appreciated by the entire Basin.

Cal Miller and wife was another Park Service couple and Mrs. Miller just stepped right out of the Ford and into the kitchen. It was certainly a big help, since feeding 84 at a time is a mighty big order for a little Monument. We have been complimented repeatedly on the affair and wish to thank the entire Basin for its support in our attempt to show our appreciation for what the Washington Office and others have done for us.

Shortly following the dinner we were showered with several arrivals from the Department of Forestry. Mr. Coffman, chief, Mr. and Mrs. Wirt and Mr. Cook all dropped in on us on the 14th. It was a little late when Coffman and Cook arrived, but they got to see a little of our Monument, and we are planning on having our CCC boys plant a regular forest this winter, that we might have visits oftener from these boys. This was the second time Mr. and Mrs. Wirt have been in and we are looking forward already to their return.

Thursday, August 15, Aztec Ruins National Monument added another service to its visiting public, in the form of last minute news flashes. This means getting the news every morning on the seven o'clock broadcast noting the important features and putting them (not over three or four0 on letter-head size paper and posting in a place easily and quickly seen. Many visitors have expressed themselves as being especially appreciative of this point since they, in traveling have no way to get late papers, and often do not get to hear any of the news. This service is posted the first thing each morning, and has been especially valuable on the recent Rogers-Post tragedy.

Late afternoon of the 15th Frederic Webb Hodge, Director of the Southwest Museum, with a party of six stopped with us. Four of them put cots on our new porch (the weather looked like rain at any minute), and three of the girls, wishing more atmosphere, spread their cots in three of the little rooms around the Great Kiva. About two A.M. they felt sure the Gods in defiance of women partaking so freely of the Kiva, had caused the early spirits to return and protest, but upon investigation found the ancient spirit just a friendly old house cat, investigating this strange occurrence.

The next day it was my pleasure to accompany the party and learn first-hand many of the customs and habits of the early people as gained

AZTEC RUINS (CONT).

by Dr. Hodge in his research. They left us for Chaco and we know found Cal and Mrs. Millor splendid hosts. We sincerely trust that the girls did not defy the Gods further and try sleeping in the Kivas at Chaco. Cal's house cats might turn out to be rattlesnakes. Anyway on my visit there, several were encountered.

I suspect, however, that Cal had them penned up and primed for my visit, that I might think them tough out there. I particularly suspect this upon hearing that when Mrs. Demaray wanted to see one Cal had to take here over and show her the one he killed the day I was over there. And while I am talking about cal and Chaco, he and Williams stopped in with us the 16th and as a result we were forced to forfeit our seniority on the Leather Medal for a Bailing Wire expert. We lost the Dodge but realize that they need it worse out there than we might here. We can at least hire a truck in an emergency and I don't know where they could out there. We shall hold Cal responsible for any complaints about our entrance road. The old truck was sure handy for hauling all the food, dishes, tables, etc., for the dinner.

No doubt we have to accept the bitter along with the sweet, and after listing all the nice things, on to some a little less pleasant. We are most sorry to have lost E. W. Lewis as guide, but he had signed a contract to teach this winter, and had to leave us the night of the 20th. We enjoyed his services very much and thank him publicly for the splendid manner in which he carried out the duties assigned to him. Oscar Tatman was placed in the ranger position and will hold it down until such time as a permanent ranger can be approved. We want to thank all concerned also for the permanent ranger that was recently approved for Aztec. With such a position we can now attend to many things that we have of necessity had to pass by heretofore.

Plans for our parking area and trails have not been received as yet, but we know that Chuck and Jim are working on them and it will be only a short time until we will be working on both features.

We were somewhat surprised but pleased to have Mr. Haury and Mr. Sayles of Gila Pueblo drop in on us for a short visit. We would have been pleased to have them stay with us longer and hope that they may get back soon.

The Great Kiva comes in for its first regular night session this month, when on the night of August 20 the Presidents of both the Colorado and New Mexico Rebekah Assemblys were in Aztec and a meeting was held in the Kiva and lunch served afterwards in the lobby of the Administration building. We are glad to be of service to the various orders and invite them to meet at our Monument when ever they see fit. The kind feeling that results from these various meeting out here are certainly worth all the trouble and bother that they might bring about.

### AZTEC RUINS (CONTINUED).

I wish, Boss, that you and the boys could see this place at night with all the lights on. It is simply beautiful.

I realize, Boss, that this is running into a report that is some longer than was assigned to me, but August has been so full of thrills for us that I just had to write you all about it. If you cut any this month do not just cut the nice things we say about you, like you have in a report or two in the past.

In checking back over some of our old reports we find, Boss, that in 1930 and 1932 we had official visitors from the Washington Office, and even with their being here and our mentioning it in the report, our 1930 report contained just ten lines, and for 1931 we had the grand total of three and one-half lines for our monthly report. Quite a contrast, isn't it?

We are in receipt of a very nice letter from Associate Director Demaray thinking us for the luncheon. They are certainly most welcome and we were honored that they found time to attend. I feel that the little affair did more to cement the goodwill of the entire Pasin and interest them in our Parks and Monuments than anything in the six years that I have been here.

While the dinner was given to honor Former Director Albright he has insisted on paying all the costs connected with it; and while we protested vigorously to his doing so, he was firm and all we can do is thank him not only for the honor of serving as host but also for what it has meant to our Ruins.

Well, Boss, after all there is a limit to anyone's endurance and with that in mind I will ring off, not only with the report but all duty for a week which I plan on spending in California. I have no idea as yet who is to relieve me, but I am certain that any of the boys will carry on in a splendid manner and with Oscar to help them I feel positive that service at Aztec will not suffer one bit.

Closing one of the most pleasant months that it has been my pleasure to serve, I am very truly yours....

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# WHITE SANDS

By Tom Charles, Custodian

Our crowds are still increasing. From June 20 until July 20 we had an increase of 47% over the previous month in registered visitors. This month we have had an increase of 74.6% over last month's registration. This increase takes into account only the registered group in which there is no element of doubt or guess work.

WHITE SANDS (CONT).

A material part of this increase, no doubt, comes from the fine article by Dr. Carl P. Russell in the August issue of the National Geographic. Dozens of cars have come into the Monument recently with one member of the party carrying that issue of the Geographic and referring to it frequently.

Then, too, for the past few months the New Mexico State Tourist Bureau has been putting out some wonderful publicity, bearing down especially on "The One National Park and the Eight National Monuments which Call you to Cool New Mexico." This publicity has run in the newspapers of Kansas, Oklahoma and east Texas and in the high class magazines of the east. It seems likely that it has had something to do with the fact that Kansas visitors jumped from 5 to 38, Oklahoma from 86 to 180, and Texas from 479 to 1099. In the eastern states Missouri went from 17 to 35, New York 5 to 15, Kentucky 0 to 11, Tennessee 4 to 14. In fact about the only state that did not show an increased attendance in August was California which dropped from 41 to 38, but it was significant that the Tourist Bureau did not advertise in California.

Our registration is purely voluntary. There is a box at the end of the road with a sign on it to "Please Register." Probably a third of the visitors do not drive out that far and about half of those who pass the box do not stop. On the basis of 40% registration we had 5160 day light visitors this month. Of those 2.64% were from Alamogordo and 12.51% from El Paso. Points in eastern Texas furnished nearly 50% of the total.

Our night visitors are mostly local and as a rule do not register. On the night of the full moon we had 216. The night before there were five different parties with something like 175 people. I see no reason to change our last month estimate of an average of 60 visitors every night or 1800 for the month.

This makes a total of 7013 for the month ending August 20 as against 4755 the previous month.

Our boasted freedom from insect life in the Heart of the Sands had a wallop this month. It has been our contention that there could be no insect life in such a large area with no food. And I think it is generally conceded that insects do not live on 100% gypsum. One morning this week when Charlie was working at the Turn-around a flock of sage gnats settled down upon him. The air was full of them, the boards and tools were covered with them. They got in his ears, eyes, mouth and nose. There were 10-to-1 more gnats than Tom Boles has bats. They stung like Black Widow spiders and smelled like "sixty". Gnats in droves like this are not uncommon at the edge of the Sands but this is their first recorded venture out to the Turn-around. In the course of a short time they went as they came, unannounced. The only explanation that we can offer is, like a sister state's inclement weather,

WHITE SANDS (CONT).

### this is very unusual.

Recently we completed a fine new four-stall equipment shed which has been greatly needed and this week we are completing the first of two temporary toilets. These toilets are to be located at the Turn-Around.

Purchase of the Artesian Well area at the entrance to the White Sands is still pending. John Happer, Washington, D. C., has been sent here as project manager, under the direction of the sub-marginal department. In view of the fact that this proposed purchase has been approved by every one of the inspectors of each of the departments interested, it looks like we may expect its acquisition soon. The area includes 1280 acres at the entrance to the Monument, with a good 8-room house, an artesian well of warm water from a depth of 1000 feet and a 200-acre lake which is said to be ideal as a resting place for migratory birds.

We had a number of visitors extraordinary this month. Miss Mary White, Regional Director of the Girl Scouts of the southwest brought two different groups of girls, of about 20 each, from Camp Mary White in the Lincoln Forest and spent the night in White Sands. The girls were from almost every state in the central division.

Jack Diehl was here this month; Horace M. Albright, former Director, and Tom Cramer, manager of the U S Potash Company at Carlsbad, spent a day with us. This was Mr. Albright's first visit since his inspection trip before the area was made a monument. He is now working on a plan to have southern New Mexico featured in a radio program over a national hookup, once a week. The stories will cover the frontier days of this section. The local Chamber of Commerce has promised Mr. Albright all the "color" that is needed in the program. While here, Mr. Albright visited his former Chief, Secretary A. B. Fall, at Three Rivers. He found Mr. Fall unable to leave his chair but still intensely interested in the development of National Parks and Monuments.

This week we caught two white lizards out in the White Sands. We were in about the same fix as when we found a goat out there; we had something we didn't know what to do with. Of course, we thought of sending you one, but someone said it would be like sending you a canary to feed. In a little hick town like ours we always take every unusual find to the newspaper office so someone suggested that we send a white lizard to Miss Isabel Story then some friend of the Wildlife Division thought they should go to George Wright. In the meantime, a bunch of New Jersey school ma'ams visited the Monument and as one of them teaches a class in "Nature Study" they showed extreme interest in these lizards.

Since they left we have been unable to find but one, but that is enough for the Assistant Custodian is getting tired of killing flies

WHITE SANDS (CONT).

for it morning, noon and night. We have decided to do a little advertising in this column, if we may, and see what we are offered. This lizard is about an inch long exclusive of a tail equally long. At first it was almost snow white except for three little black "service stripes" running parallel with his ribs on each side. He is strong, quick of eye and fleet of foot and we have noted that when we put him in a glass jar and set it on a green blotter for a day he takes on a tiny tint of green by night. That is evidence that he will fit into your surroundings, and we will sell him cheap, subject, of course, to regulation.

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# GRAN QUIVIRA

By W. H. Smith, Custodian

I will endeavor to submit my monthly report. There has been but little of interest the last month---everything has been exceptionally quiet here. I find my register to show 387 visitors entering the monument in 100 vehicles. This is a slight increase above the registration last August, and a considerable drop from last month. There are ten states represented on the register this month including New Mexico but of out-of-the state travel, Oklahoma has given the best run.

On August 9, John H. Diehl came by for a short visit. While here he went over the grounds and inspected the sewer line work and the septic tank that were completed a short time before he came in as Associate Engineer.

On date of August 11, we had a Mrs. Morgan who is one of the Indian teachers at the Indian school at Santa Fe and a few of her students. There were six in the party and each of them were of different tribes. It was rather interesting to hear them talk of this mode of living compared to the ancient mode of their own tribe, as knowledge has been handed down to them by their ancesters.

On the same date there were three doctors from El Paso, Texas, here who were much interested in this place and especially in the skeletons that we had taken up here. They looked at the one we have on display and were comparing it to some they had seen in a collection of the amcient Aztec of Central America. They examined this one minutely and gave a talk on the ones they had seen in the Aztec collection and it was very interesting and entertaining.

I hear that there is a pretty good chance of us getting the road between here and Mountain Air fixed up in pretty good shape. They are trying to get WPA project to cap and gravel it to Gran Quivira and three miles east from here. There is a good chance that this will go ower and if it does we will expect things to pick up here considerably.

GRAN QUIVIRA (CONT).

The drouth finally broke here. We had a good rain on August 3 and also another on the night of August 18. Grass and other vegetation is surely growing fast. There will not be much crop here this time as the rain came so late that practically all crops had died, but I think that grass will have time to mature and if it does that will be a great help for the stockmen of this country.

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# TUMACACORI

By George L. Boundey, Custodian

Visitors for August, 906.

Owing to a number of Dude Ranches in this vicinity, we have quite a number of visitors who come on horseback, muleback, and burroback and once in a while we have visitors who have come by plane but when a man and his wife from Tucson delivered a tractor to one of the local ranchers, it struck me that was the first time I had ever had visitors come by tractor.

August seems to have been a sort of a home-coming month to quite a number of the real old timers in this vicinity. We have had visitors from three of the five oldest families in Nogales and six others who visited the Mission in the very early eighties.

They all seemed to agree that the five oldest families were the Brickwoods, Capt. Mix, J. M. Soto, Ramon Vasquez and the Peck family. The Brickwoods ran a saloon and hotel directly on what turned out to be the International Boundary Line. I have a large photograph showing their building with the stone boundary marker on the front porch of the building. A cigar counter farther out on the porch was in Mexico while the building itself was in the United States. The old timers say this was very convenient in getting in and passing out goods of the two countries without the formality of a tax.

Mr. and Mrs. Peck were running a small restaurant at Nogales and a little later bought a ranch up Peck's canyon a short distance below the Mission. It was in this canyon in 1887 that the whole Peck family with the exception of Mr. Peck were killed by one of Geronimo's bands just prior to Geronimo's capture in the Sierra Madres a little later in the same year.

Jim Breen was the contractor for the Tombstone-Calabasas railroad in 1882 and Nath Burgoon and John Glisson were formerly miners at Harshaw prior to 1884.

I think the most interesting visitor of all was an old prospector and miner from this vicinity, Mr. Colin Timmons. He was the partner of

TUMACACORI (CONT).

Bucky O'Neal, one of the much loved Arizona Characters who was killed in the Spanish American War while charging San Juan Hill with Theodore Roosevelt.

It was this Mr. Timmons who built the Bright Angel Trail in the Grand Canyon; this trail they later turned ower to Coconino County.

Last Friday night we had the heaviest rain we have had during the six years I have been stationed at Tumacacori. It rained so hard some of the water ran down the stairs of the bell tower and formed a pool on the floor of the Baptistry. It was evidently from a new direction for it beat in thru the east door in the Sacristy and left another pool Three small leaks in the roof of the Nave can easily be caught up when we put the roof dressing on the main roof. When Engineer Jack Diehl makes his rounds as he proposes to do in the near future we will take up a number of repairs which should be made before the winter weather sets in.

Among our visitors this month was Fred Winn, Supervisor of the Coronado National Forest. We are always glad to have Mr. Winn visit us as he always has so much of interest to tell us. With Mr. Winn was a gentleman who has evidently given quite a bit of study to early Arizona History, especially that pertaining to the Mormons. Tubac was once a Mormon town. I believe it would be well for us to collect as much information as possible from these people who pass our way as many of the old settlers will soon be gone and the information may be lost.

I always emjoy visits from the Tombstone people, they are not only filled with interesting facts about this country but they are enthusiastic over the Mission and the work that has been done here. Mr. A. H. Gardner and a party of his townsmen visited us last week. Mr. Cardner is the Manager of the Tombstone Chember of Commerce and also editor of the Tombstone Epitaph. Many visitors come this way thru the efforts of Mr. Gardner and Tombstone people and we always try to have visitors southward bound to take the Patagonia route by way of Tombstone.

There are very few native families in this vicinity that are not receiving help from the Government. Their little patches of ground were formerly carefully cultivated, but the past two years this work has nearly ceased and they say the reason is that those with gardens receive less food from the charities. This giving of a dole is a real problem.

Our Santa Cruz river which is dry sand much of the year is a raging torrent in the rainy season. We went ower to the river early the other morning to watch the flood waters loaded with trees, sand, and much refuse from the ranches up river.

TUMACACORI (CONT).

while we were watching, a group of five cows and two young calves started to cross the river and they rolled about by the waters, sometimes under and sometimes above the water; everyone of them finally made the other shore, but, of course, it was a long distance from where they entered the river and where they finally left it. I once saw a whole herd lost in this way.

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# EL MORRO RANGER

By Alfred Peterson, Ranger

Just got through with my first party of visitors this morning and missed the mail man. I know this ought to be in the mail, but I may make it yet by taking it to Ramah myself. Besides I want to visit with the Winton's who are camping at the Vogt's,—if it does not rain too much. Since the Custodian is home, I suppose he will report and that Vogtie will make good his statement that he was going to let his father write his own report.

This has been about the poorest summer month for visitors that I have experienced at El Morro due to road conditions. I wrote you some time ago about road conditions at the first of this month and the resultant lack of visitors.

Visitors to date number about 333, and about 45 people who came for water. These visitors came from twenty different states. Other Augusts have run as high as 600 or more visitors.

On August 10, former director of the National Park Service, Horace M. Albright visited El Morro after sleeping in a Packard bogged down in an old lake bottom on a so-called road the night before. That was to the south of the Monument. Mr. Albright wrote in the register "Many fine improvements since 1930. Monument is in excellent hands." On that same day, late in the afternoon, Mrs. Anna W. Ickes, wife of the Secretary of the Interior, washere with some friends, and we had some fun recalling her trip here last year during which we all got drenched in rain when visiting the ruins on top of the mesa.

Several parties of campers, as much as 11 to a party, have stopped at El Morro, and I have on several occasions turned the tool shed over to them to keep out of the rain. On August 20, I had Dr. Wyman of Boston University and two Navajo Indians sleeping on the floor of my cabin, while the tool shed was the refuge of three ladies, two artists from Taos and one from New York. Dr. Wyman has his summer headquarters at Coolidge, New Mexico, and is doing research in ethno-botany.

One rainy afternoon some visitor left the register box open until about 9:30 P.M. when some Seventh Day Adventist missionaries, who were

camping in the Nine Pine Cove, closed it. For the following three days I had the book all apart in my cabin trying to dry it without it buckling all out of shape.

It has been my opinion since my first season here that a stone or log shelter should be built for the register box. This could be large enough for a couple of benches---except for the objection that it would probably be littered with remains of lunches. Some people deliberately avoid registering and say so; and many of these are the desirable type. One lady said she ordinarily shunned registers, but in this case she wanted to register with the Conquistadores.

I have previously reported about the hard rains the first few days of August and the trouble with contaminated water. This matter has been somewhat remedied by raising the siphon pipe nearer the surface, and now the water has lost the offensive odor. However, I have come to the conclusion that this contamination is caused largely by the waterway built last year just south of the cove. A large volume of water which formerly flowed from the rock and down the old arroyo now is directed by this flume into the cove reservoir. Along with the water goes many frogs and other undesirable objects. Not until this new water-way was constructed did I see frogs in the reservoir, but now they are numerous, and I have seen dead ones in the water. Once they get inside the dam, they cannot get out again. But then it is just about like any other pool. carry my drinking water from the landing field about 4.4 miles according to my speedometer. That is somewhat better than bringing it from Ramah. Just this minute Chat Lowry, a former civil engineer and now a homesteader, drove in with a team from 25 miles away to get four or five barrels of water. Conditions could be much worse.

On the 22nd another hard rain, with some hail, and the cove reservoir came within 15" of running over. The valves have been open now for nearly two days slowly lowering the water level. Fortunately, so far we have not had three of those hard rains come in rapid succession, or it would be just too bad for the "flower garden" which has taken possession of the old arroyo area.

Humming birds, which came in force the first week in July last year, arrived during the last few days of July this year. And they seem to be more numerous than ever, perhaps because of the profuse growth of the Rocky Mcuntain Bee Plant, their favorite plant hereabouts.

During the month work has been done on roads and trails which has improved them, although there is still some work to be done.

The rains have certainly improved grazing conditions, and several bands of sheep have been feeding in the neighborhood for several days past. While the visitors have not been numerous because of roads and weather conditions, all my visitors are of the right sort to make a

EL MORRO (COMP).

ranger's work a pleasure. They are people who have braved the cruder conditions of the back country because they are interested in the worthwhile things in life.

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# EL MORRO CUSTODIAN

By Evon Z. Vogt, Custodian

Greatest Shock

Your custodian is back from a 17,000 mile scouting trip made for the mining department of an eastern firm whose president is an old, old friend.

The I have travelled the lonely reads to the most remote mines in Sonora, Mexico, crossed the hot furnace surface of Death Valley, California, penetrated the deserts of Nevada, driven down thru deep woods of California's Sierras, rimmed thru the untrodden reaches of Utah, and crept my Plymouth safely over Arizona's worst paths, the fact still strikes me upon my return to El Morro and my ranch home, that no where that I have been able to discover are there worse reads.

Only here, does one become stuck in mud, endanger his life on skiddy wet bridges, clay covered and no guard rails, unannounced curves, arroyos, high centers, spring breaking cuts across the road——all resulting in heart-breaking thoughts about our great country, its remarkable progress, its exemplary program of re-employment centered on road improvement.

"It is to laugh," as the French say.

The trouble is there is no one to blame for the drop in our visitors, running close to 50% ower last years registration. If there were one, single, government, county or state department upon which the responsibility of such terrible roads could be laid I'd be for seizing a spiked baseball bat in an attempt to wake that head up so that this little region, so famed for its beauty, its historic and archaeological interest, its climate mellowed by shady groves which grow in abundant groves of pinon, juniper, oak and pine, would have the road improvement which it deserves. All other portions of the United States are getting road improvement not to mention the efforts made by our dusky neighbor, Mexico.

With the Park Service, the Forest Service, the Indian Service, Soil Erosion Control, Biological Survey, Bureau of Animal Industry, Aviation Division, Department of Commerce, and others, all trying to do business over these roads which now have become impassable goat trails, it would seem that there should be enough leadership somewhere to fuse the interests into a united effort of road betterment which would permit ranchers and farmers to market their produce, visitors to get in and government men to do their chores without such heavy car up-keep expense.

A few distinguished visitors came our way. There was Mrs. Harold Ickes who made her annual pilgrimage with a much-interested party, Mr. John Collier accompanied by Dr. Aberle, his Pueblo Indian Commissioner, wounded their bodies by the bumps of travel, feeling hardly relieved by the reward of seeing our Monument.

Horace M. Albright accompanied by his partner Mr. Cramer of Carlsbad in an effort to follow Coronado's trail spent the night in a mudhole, in a doubled-up effort to sleep in his car. But this disappointment on the part of the former Park Director worked to the benefit of a ranch youth who broke his arm, and who Mr. Albright after shovelling out his car, took to the Gallup hospital for treatment.

Dr. and Mrs. Will Winton of Texas Christian University are here again but in place of camping at the Monument are guests of the Vogt family.

Dr. Paul H. Nesbitt, accompanied by one of his pupils from the Logan Museum of Beloit College, also "paso por aqui". Mr. Nesbitt's visit is a result of my campaign to protect the Look-Out Ruin located 3 miles north of El Morro Against a white sand-stone escarpment. Some digging there, stealthily conducted last winter, resulted in an effort to get some university interested in excavation and preservation of this important prehistoric city. Harvard, Princeton, University of Chicago, and Beloit were appealed to but only Beloit sent a man, Mr. Nesbitt, who is enthusiastic over what he thinks is one of the outstanding ruins of the southwest and is imbued with a welcome determination to "do something about it."

Your custodian will help Mr. Nesbitt with land titles, permits, etc., to the fullest extent.

### Condition of Monument

After so long an absence I took pains to check over the old Spanish inscriptions, the pictographs, the American emigrant names left on the rock.

All are in good shape, with no damage.

The great need here, however—and its the chief one, even transcending the road conditions—is that Dr. Martius of Stanford, who has perfected the preservative which prevents weathering, should come here yet this fall and cover not only the inscriptions, but the Indian and American carvings. I can detect a wearing away of historical values. Letters and dates are showing deterioration and this must be stopped.

Trails are now in good repair the washing of winter, spring and summer rains made new drainage and fill-up work necessary. This, as well as some erosion control work, was done by my son, Evon, who has

been pinch-hitting for me all summer, and Paul Davis, his high school mate, who is an industrious worker.

The major restoration work we did under C. W. A. and F. E. R. A. in the big fill in front of the historic cove is holding nicely. Grama grass, Russian thistle, yellow sweet clover, and a great variety of weeds and wild flowers have combined in fine co-operation to keep the soil from washing away. In a few years more this area will give us no further concern.

One of the major erosion control dams in the Nine Pine Tree Cove arroyo is washing and caving so badly that I have decided that an effort must be made to stop and hold the dirt. So tomorrow we are starting on two days intensive work with a truck and two hands to haul all the "mal pais" rock we can to chuck into the washed-out holes and to build up with stone, dirt and brush in such a way, that flood waters will leap over the top of the dam into the rock breakway in place of carving a course around and under the bank.

Ranger Alfred Peterson will be here until the middle of next month and will be assisted until school starts in Callup by my son.

This part of the state is full of many visitors enroute to the Hopi Snake dance and staying around to see the Inter-Tribal Indian Ceremonial. Many are eager to visit El Morro and Zuni but few venture to travel the heavy roads. I have talked with some in Gallup but when they see my spade, axe, and tow chain, lashed to the front bumper of my car, they readily deduct the thought that I do not carry such war-like impedimentia just for fun. Their desire to see our Monument is quickly diverted to places where travel is more pleasant.

I am sure, tho, that one old traveller of this region will come. That is Dr. Frederick W. Hodge, old friend and valued counselor, whom I met at the Mixed Clan Rain Dance at Zuni with two cars of friends from Pasadena, California.

Hodge who knew Cushing, Bandelier, Dummis, Fewkes and all that galaxy of old timers is in fine health, with the same sharp eyes, friendly manner, and wide fund of information on Indians, history, and life which make him one of the most interesting persons I have ever met.

We are all looking forward to his visit which is promised for tomorrow.

While in Santa Fe we encountered the pleasant Mrs. Chuck Richey and Mrs. Jim Hamilton who were temporary Park Service widows at La Fonda.

By way of 20th marriage anniversary celebration we took our four children to the head waters of the Upper Pecos across the range from

Santa Fe in the Sangre de Cristo Mountains. Here we spent our honeymoon on snew clad peaks in 1915. So this year, now that our children
are all at home in the saddle, we took time to ride to timberline thru
carpets of wild flowers and green grass three feet high, to the tops
of peaks from which the entire glorious panarama of the state's highest mountains were unfolded to our view. It was a grand experience.
We made the 500-mile round trip, camping out and cooking our meals on
camp fires, and sleeping in our bed rolls on an expense of \$50, including the hire of 6 horses.

Dr. Winton just said that the northern Monuments where he visited this summer are getting IC visitors to our one---all owing to roads. He wants to know where Devils Tower National Monument got the money to built that wonderful approach road and why the same thing cannot be done here for El Morro.

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# CHACO CANYON

By Thomas C. Miller, Custodian

### General

Ausut has been a very satisfactory month---with all the visitors we could handle efficiently. The weather has been ideal with enough rain to keep it from getting too hot, but not enough to stop travel very long at any one time.

Approach roads have been rough but passable all the month with very little maintenance.

### Travel

1031 people arrived in 279, automobiles coming from 26 states, the District of Columbia, England, France, Germany, Nova Scotia, Philippine Islands.

Overnight campers: 212. Ranger and Museum Service was rendered to these people by Ranger McKinney and the Custodian. This service includes guided trips through the ruins of Pueblo Bonito, Chetro Ketl and Rinconada.

### Weather

Maximum 95 on the 10th. Minimum 48 on the 16th. Precipitation 1.32 inches was recorded for the month.

### Special Visitors:

Engineer Summer of the State Highway Commission arrived and departed on August 16. Dr. Fred W. Allen, Professor of Biology at the University of New Mexico, arrived August 1, and departed on the 4th. The purpose of Dr. Allen's visit was to make a study of the distribution of the human blood groups among the Navajo's of the Chaco. However, the

CHACO CANYON (CONT).

Chaco Navajos could not see the importance of these blood test where they had to furnish the blood, so the actual work was postponed.

Custodian Johnwill Faris, Aztec Ruins, arrived and departed on the 6th. Mr. Faris telephoned me that he would like to borrow one of our rattlesnakes to show to his visitors in that Monument. At his request the snake was captured and ready when Mr. Faris arrived, but when Johnwill saw the snake, which was one of the nicest snakes on the Monument, he was afraid of it. So Johnwill returned to Aztec sadder but wiser.

Dean Cummings of the University of Arizona and 27 of his associates and Students arrived on the 6th and departed on the 7th. Dr. G. Plathner, Halle, Germany, arrived on the 9th and departed on the 10th.

On August 12 and 13 this Monument was honored by a visit from the Director's Office consisting of Associate Director and Mrs. A. E. Demaray, former Director Horace M. Albright, Ranger Bob Albright, Mesa Verde, Superintendent and Mrs. E. P. Leavitt, Mesa Verde National Park, Mr. and Mrs. Howard W. Baker, Rocky Mountain National Park, Mr. Charles A. Richey, Resident Landscape Architect and Mr. T. M. Cramer, Resident Manager of the U. S. Potash Company, Carlsbad, New Mexico.

This party was treated to a steak fry prepared by Ranger and Mrs. McKinney and Mrs. Miller.

Chief Forester John D. Coffman, Washington, D. C., and Assistant Chief Forester Cook, Berkeley, California, arrived and departed on the 14th. Mrs. C. R. Markley and party from Mesa Verde arrived on the 14th and departed on the 16th.

Dr. W. F. Hodge and party from the Southwest Museum, Los Angeles, California, arrived on the 17th and departed on the 18th. Mr. E. B. Sayles and Dr. E. W. Haury, Gila Pueblo, Clobe, Arizona, arrived on the 19th and departed on the 20th.

The Archaeological Field School of the Texas Technological College, Lubbock, Texas, headed by Dr. W. C. Holden with 28 students arrived on the 19th and departed on the 21th.

Mr. A. E. Limbough of the Cook and Ransom Construction Company, Ottawa, Kansas, arrived on the 21th and departed on the 22nd. Mr. Limbough informed me that he expected to start construction on the Monument Boundary fence within the next week.

### Excavations

The University of New Mexico completed their work in the Chaco for this season and departed for Santa Fe on August 9. Attached to this report you will find a report taken from the field notes of Margaret S. Woods who was in charge of the dig at Talus Unit No. 1, Chetro Ketl. (See Supplement).

CHACG CANYON (CONT).

### Accidents

Mrs. Louise E. Young, 630 North Martin Avenue, Tucson, Arizona, sprained her ankle August 11 while walking through the ruins of Chetro Ketl. This was our first accident of the season, but the extent of the injury was not serious. First Aid was rendered and Mrs. Young left the Monument a booster for the Service. Boss, this will remind us that we do need trails through the best ruins in the United States.

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# WALNUT CANYON

By Paul Beaubien, Acting Custodian

2047 names on the register for August. This is the first time I could report more than 2000, although an old report stated more than 2500 registered one July a few years ago.

Wish I could write that the 2047 left satisfied with the Service, but it is impossible to contact them all---especially with two trails into canyon three-fourths of a mile apart. Then, a few arrive by 7 A.M. while some come after sindown. To guide a party takes one full hour by the shortest trail while quite often there are more than 20 parties a day.

Have found that most of the "first-time" visitors have been directed here by rangers in other Monuments or Parks. The small "miss-worded" signs at the entrance roads are often missed by people who know of their existance instead of helping to draw new customers. I believe adequate signs would draw many more visitors.

While speaking of signs I wish the Monument boundary was properly marked. Deer smason will soon be here and there are a few bucks left, Have had reports of turkey on south side of canyon. About the only protection that could be given them would be boundary signs.

Have had lots of rain this month. The roads have been worked some by the county and oil in better shape now than at the end of the dry season.

Assistant Wildlife Technician Russel Grater spent some time here during the month. I believe he is sending a report to you so won't speak of his finds.

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# WUPATKI

By James Brewer, Acting Custodian

Travel

159 visitors registered at Wupatki Pueblo, 206 at the Citadel. 75 names are duplicated, leaving a total of 290 visitors to this Monument SOUTHWESTERN MONUMENTS 104 MONTHLY REPORT FOR AUGUST, 1935

WUPATKI (CONT).

for the month of August, 1935. (August 1934, 190 visitors).

### Weather

Generally cloudy; July 25 to August 1 two showers and one cloudburst netting 1.85 inches rainfall. August 1 to 25 six showers netting .65 of an inch. High temperature 98 degrees on the 11th and 12th, low 60 degrees on the 1st and 16th.

### Roads

The road between Wupatki Pueblo and highway 89 is in better shape now than I have ever see it. On July 31 a cloudburst amounting to 1.52 inches of rainfall landed between the Pueblo and Doney Crater washing parts of the road out. It was necessary to fill some of the larger washouts with stone, cover with cinders and run the grader over the whole.

Mr. and Mrs. Ross Montgomery of Los Angeles asked, "Where are the CCC boys camped who have been working on the road?"

The cinder road between Wupatki and Sunset Crater is passable in either direction.

### News-worthy Visitors

July 26, Assistant Superintendent, Hugh W. Miller and Engineer Jack Diehl. (We missed seeing these two because after collecting the travel figures from the Citadel and Sunset Crater we often stay overnight in Flagstaff and snop the following morning).

Mr. L. F. Brady, Curator of Geology, Museum of Northern Arizona, was here on the 29th studying the Moenkopi formation.

On the 31st the field expedition of the Museum of Northern Arizona visited Wupatki.

Dr. and Mrs. Colton and Miss Bartlett brought out a picnic lunch on the 7th. Sallie (Custodian for the day) showed Dr. Colton Clyde's new road that gives access to a mesa heretofore inaccessible by car.

Mr. and Mrs. Eddie McKee brought Dr. and Mrs. Ries to the Monument on the 11th. I gave Eddie a fine specimen of live rattlesnake I had taken two days before.

Mr. H. G. Franse (Fred Harvey) of the Grand Canyon, here on the 25th, said that Wukoki and some surrounding sections had recently been transferred to the Government. Whether for Park Service or Indian Service he did not say.

### Water Report

Bob Rose and Jack Diehl suggested that I measure the output of the

### WUPATKI (CONT).

various springs near the Monument. Using a one-gallon can I clocked each spring 4 times and averaged the number of second required to fill the can at each spring.

### Result:

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Heiser Spring (major) - - - - - 1,004.65 gallons per day Heiser Spring (minor) - - - - - 421.30 gallons per day Coyote Spring - - - - - - - 1,032.43 gallons per day Wupatki Spring - - - - - - - - 514.28 gallons per day
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Heiser Spring is  $1\frac{1}{2}$  miles south of Wupatki pueble and Coyote Spring is one mile farther. There are also two undeveloped springs, the flow of which I can not estimate.

### Quail

In the fall of 1933 the Arizona State Game Department supplied Dr. A. J. Mackey, of Flagstaff, with 24 Arizona Scaled quail (Callipepla squamata pallida). Mr. L. L. Hargrave and I banded and released them at Heiser Spring, where they were observed only once shortly after their release and for two weeks their tracks diminished until none were seen.

There is no record of their reappearance until August 1, or 2, when they were seen by a sheep man, who is now camped at Heiser Spring. On August 7 he told me he had been seeing 5 to 8 adults, with broods of from 5 to 16 (The group of 16 was herded by two hens).

Knowing that quail trapping requires a specially built cage I improvised one and placed it, baited, at the camp on August 11. The first catch was made on August 13. Passing the camp I stopped and released one hen and two immature. I did not have my banding kit with me and did not want to keep the birds confined until I could get it, because the hen's head was already featherless and scratched from butting the cage.

The hen was not banded but may have been one of two that escaped without a band when we released the group, or may have been the off-spring of one of the original stock.

With the good rains we've been having I expect this will be a good year for the quail and hope they become well established.

### New Arrivals

On the 20th "Chief" Ansel F. Hall's truck arrived with a fine new specimen case. (A close inspection failed to produce the key with which the case should be locked.) I seized this opportunity to express the samples Dale requested sent to Mr. Hall's cffice---Moenkopi sandstone, Kaibab limestone, basalt rock, and cinders, to be used as color guides in the production of the models of the Monument. All were loaded

WUPATKI (CONT).

on the empty truck and headed for Berkeley.

From Headquarters came Bailey's "Birds of New Mexico" and "The Hawks of North America." From the National Geographic Society, in response to my request, send a complimentary copy of "Dating Pueblo Bonito and Other Ruins of the foothwest" by Dr. A. E. Douglas. From Mr. and Mrs. C. A. Pierce came "Evidence of Early Man in North America" by Edgar B. Howard, Museum of the University of Pennsylvania.

Recent Departures

On the evening of the 18th I drove the borrowed V-8 and the tools to the Grand Canyon. This completes the transfer of E.C.W. equipment from Wupatki to the Grand Canyon.

### Restoration

On the 19th Dr. Colton sent three Hopis out to repair Room 35. This was the room with the corner supported on Planks and a pine post. We jacked up the roof, removed the temporary timber, and tore down the unsupported wall (not original). Replacing the timber with a great stone lentil, we rebuilt the entire corner walls to the former roof level. We then sawed off the protruding beams and replaced the roof. The restoration harmonizes nicely with the original and does away with the dangerous and unsightly situation left by C.W.A.

Important

The I-beam that was rushed to Wupatki too late for C.W.A. installation is still idle. The leaning wall (east wall of Room 41) needs this support badly. This is the tallest and one of the most impressive walls of the pueblo and should be supported as soon as possible. I intend to call this to the attention of Jack Diehl on his next trip to Wupatki.

### Residence

Room 63 adjoins Room 36 (Custodian's residence) on the south. By stretching the reconstructed window in the south wall of Room 36 into a door and partially restoring the south and west walls of Room 63 we have added a room to the residence! This eliminates the necessity of building a new residence (pro tem).

### Etc.

I feel very much as though I have lost my right arm. Sallie has gone to the Snake Dance with Miss Frances Gilmor and has been gone these last five days. You will remember Miss Gilmor as Mrs. Wetherill's collaborator on "Traders to the Navajo." I will remember Miss Gilmor as "Traitor to the Park Service" because she has taken away our Custodian-without-pay. Sallie has always typed the report for me and eliminated my bad puns, such as appear above, but while the "cats away the mice will" exhibit their male superiority---or something.

# SUNSET CRATER

By James Brewer, In Charge

If I remember correctly the 1935 Annual Report estimated 4000 visitors as the travel figure for this Monument. I believe this is underestimated because 1216 visitors have registered this month alone. I would also be interested to know what percentage of visitors do not register. Do you have any such statistics, or must I hide out at the Crater some time and compare the registered number with the actual attendance?

Early this month I sent your office a map to be reproduced and placed in a permanent display case to help guide visitors at this Monument. Later I received a letter from Dale saying the the Phoenix Blueprint Company would send me photostatic copies of a diagram drawn by Mr. J. H. Tovrea, and that the original would be kept in Coolidge. The Blueprint Company has evidently forwarded the original to me by mistake. (I suppose the copies were sent to you.)

Since I sent you the sketch of the Monument I have obtained a much better likeness from Dr. Colton, and since Mr. Townea has not reproduced the fumeroles on his sketch I suggest we start again and get off on the right foot.

Dale also writes that Architect Kuehl is designing a case and standard to house this diagram and may I suggest that while he is about it, he also design a register stand to replace the rickety pine frame that now holds the registration book. The stand should also hold a sign reading "Visitors Are Required to Register."

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# TONTO

By Woodrow Spires, Acting Custedian

It seems like I have no more than got settled and is time to send in my monthly report, so here goes my first attempt.

### Weather

This has been one of the coolest August months that has ever been recorded. There was a mean average of 84, and a maximum of 103, with a minimum of 60. This cool weather is due to 3.31 inches percipitation. These averages are for the first 24 days of August. As there are six days left, there is a good chance of breaking the all time record of 4.11 inches.

### Hanger Service

During the month the Monument was visited by 360 visitors of which 211 climbed to the lower ruin, and 5 to the upper. This gives an average of 57% climbing to the lower ruin against 67 last month. This is

CASA GRANDE (CONT).

Temperatures have been moderately high, with a majority of days showing a maximum of 100 degrees or more. Maximum for the month was 110 on the twentieth, low score on the second with 60 registered. So far this month (this is being written on the 28th) five showers have fallen, with a total precipitation of .61 inch.

Kid Steen, the author of this letter, entered his duties as ranger here on the first day of August, just in time to be put to work on the Mimeograph in getting out last month's report. Jack Winter, who has been appointed Custodian of Casa Grande, is on his way from the Washington Office and is expected to arrive about the fifteenth of September.

During the month a truckload of museum cases and exhibits arrived from Berkeley for the Southwestern Monuments. Casa Grande's portion of this consists of a reproduction of a Hohokam 'mirror', a wax model of a human foot for sandal display a storage case for perishable materials, and a supply of stack trays.

Museum work for the month consisted principally of cleaning and rearranging and labeling the reptile exhibit jars, a minor re-arrangement of the Colonial Hohokam shelves to accommodate the mirror or flasher display, and work started on the repair of a Salado skull.

Two new reptiles were added to the exhibit. Crotalus cerastes, the Horned Rattlesnake, and Crotalus atrox, the Desert Diamond rattlesnake. Nina Javeline, a Fina woman living near Blackwater, brought in two manos and a pestle found on her place as a gift to the museum.

Bird banding activities have been at a stalemate for several weeks due to a lack of bands. A supply has been ordered from the Biological Survey, but has not arrived yet.

Boss, I very blithely agreed to fill two pages of this report, and now, with less than one page written, I am stumped. Dale has put the kibosh on several items by saying, "you can't use that, that's head-quarter's material," so I think I will sign off.

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**ARCHES** 

By J. M. Turnbow, Custodian

It has been a long time since there was anything to report from Arches until during July and August.

On July 30 we were visited by Ranger E. K. Reed. This was the first time the Arches had been visited by a ranger. He found no evidences of vandalism, but in a few places we were badly overgrazed by

TONTO (CCNT).

accounted for by a group of 50 school teachers from the East on one of the Summer School Tours, "Transylvania," which arrived late on the evening of July 30, and as there was no one on the Monument they only looked at the Ruins through Field Glasses and proceeded to their camp at Roosevelt where Charlie Steen, Ranger of Casa Crande National Monument, gave them a 30-minute talk on Southwestern Archaeology.

### Special Visitors

On the eight of August, Captain Thos. D. Teray of the Arizona C.C.C. division, accompanied by Dr. Siegfried Von Ciaciercey of Bonn University, Bonn, Germany, who is representing the German Government in the inspection of the Ferest Service, C.C.C. Camps, and Park Service stepped for a hurried inspection of the Monument. As I was cleaning the old camp ground, I almost missed them. Returning as they were leaving, I talked to them for about five minutes, but they did not have time to go back to the lower Ruin with me.

We were also honored by a visit by Cliff London and his wife who spent several hours here July 28.

### General

In the spare moments I have cleared the old camp ground which was scattered with debris. With the aid of a landscaper and a little revegetating, we will be able to destroy all evidence of this camp ground.

The Custodian's residence no longer looks like a "Shell Service Station", as all of the bright yellow has been covered with "Park Service Green," giving the building a different appearance---not nearly so gaudy.

I guess it is about time for me to sign off as my news supply is running rather low.

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# CASA GRANDE RUINS By Charlie R. Steen, Park Renger

It seems rather strange to be writing you a letter when you are standing not three feet away, and know as much as I do about happenings at Casa Grande during August.

For the edificaion of the men in the field and in the Washington Office, however, I'll record the figures that during the past thirtyone days, 1376 persons visited this Monument. This count, strangely, is exactly the same as the visitor count for last July, but in fact, indicates a heavier travel for this year, as at present the gates are shut at five o'clock and last summer cars were admitted after that hour.

NATURAL BRIDGES (CONT).

grass and flowers growing, and plenty of fresh water.

Roads are very good---never were better. I have had a man working on trails 15 days and they are now in very good shape once more. Whenever it was a stormy day and I knew nobody was coming, I got out and did a lot of trail work close by, so I could be on the job early and late while it was cool. Now I will let the rest of the trail work wait until November when I can do most of it myself. A lot of narrow bad places I will fix up.

I am now looking for some men Mr. Hamilton said he would send in to take the topography of the two camp sites he put on paper to see which one will be the best one to develop. One is down where my camp is and the other on top of the hill just south a few hundred yards. I prefer the last named.

The CCC camp at Blanding is nearly all built up, ten houses done, and 6 or 8 more to put up. The Captain expects 210 boys here in a few days. They have promised to do some trail and road work near the Bridges, but it is getting so late in the season I don't think anything will be done out here this fall.

I am trying to get them to fence the Monument for me by running a fence from White Canyon so that cattle could not get in there. I have a lot of trouble every fall with cattle that drift down on the point and can't get water and very often some of them die there. I have a nice job burning them up. About three miles would fence the whole Monument, and save a lot of trouble for me and the cattle owners. We can get the fence if we can help buy the wire. Please think about it, Frank, and let me know if anything can be done about it next spring. Too late now to get anything done this fall.

Well, Frank, I am very well and still in love with my job. I enjoy the reports of the various Custodians and when I compare them with mine, I feel just a little ashamed, but you know, boys; I was left a fatherless lad of 13 and got most of my education off the deck of a mustang pony about the subject of hard knocks, so please excuse some of my blunders, and I will close for this time.

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Zeke, doesn't need to apologize for his reports---if all were up to his standard, we'd be plenty satisfied.

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PIPE SPRING

By Leonard Heaton, Acting Custodian

Again I sit down to record the history of Pipe Springs National

ARCHES (CONT).

sheep. As soon as we get our boundary established we can keep the sheep out of the park area.

August 4-5, we were visited by Professor Larry M. Gould of Minnesota. This was the first time I had been thru the area with Professor Gould and he saw much more of the park than on his other visits here and took a number of photographs of Arche's scenes, which will be published in the National Geographic Magazine soon. I am enclosing a clipping from our local paper. I would like something published about his visit in the Park Service Bulletine if you see fit.

We were visited on August 17, 18, 19, and 20 by Engineer J. H. Diehl.

I went over the park boundary with Mr. Diehl hiking most of the time. Several changes in the boundary will be recommended and last but not least we need a highway through Arches. Please keep this in mind and help me any way you can.

Several members of the local Lion's Club visited the Monument last week and they think our scenery is much better than Zion Canyon.

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# NATURAL BRIDGES

By Zeke Johnson, Custodian

Well, here I am coming at you once more with my report---and I wish I could write better or had someone to type for me, but here I am all alone in my dandy tent. Mrs. Johnson has gone to the Lake, and I will have things all my way now for a few weeks.

We have been and will be very comfortably located for some time to come here in our big new tent-house. It is surely fine and has lots of room, and when people come in as they do almost every day and see the egg-beater and pancake turner and a lot of other cooking utensils, they say "Well, Johnson, you have a real home here now." But, of course, it will be rather lonely now for a while until Mrs. Johnson returns.

A lot of very fine people have been with us this month. Paul Wilkerson, accompanied by Paul Franke and his boy, were here making pictures with his big camera for the White House. Then Architect Langley and Engineer Hamilton were with me a couple of days—they put my little town or camp on paper and it looked good to me. Will look better on the spot, but I am so comfortably located in my big camp tent that I am not worrying any more.

Weather has been very good---some showers---just enough to keep

PIPE SPRING (CONT).

Monument for the month of August. Main events are as follows:

August 16, received a brand new steel file case; spent the next day in getting rid of the old wooden and pasteboard boxes that I had used in filing away my papers, and tucking the papers into the new Office hand. It has become a pleasure now to sit down at desk and do the work that is required of me. knowing that when I want to find something I can do so with ease and save myself a lot of worry, wondering and patience trying to get it.

Here is one that is for the new Office Hand 100%.

August 25, 2:30 P. M. a storm from the southwest came up and turned loose on us all the water that it could in about two and one-half hours, causing the largest flood that we have had in several years and doing us a lot of damage. It brought down a lot of trash, brush and sand which found a place to stop on the Monument. The head of the twin culverts were stopped up and resulted in the filling up of the new drain wash with sand, turning the water into the old channel washing out the service road to my barn and hen house, covering up or washing out most of the irrigation ditches on the east side of the fort. The damage done to the Monument in work to fix it up like it was at 2:00 P. M. yesterday amounts to about \$350.00. This I break down as follows in the 5 projects: No. 1 .- Flood drain clean out \$190.00; No. 2 .- Road & drain repairs \$25.00; Nc. 3.- Irrigation ditches repairs \$25.00; No. 4.- Service road repair \$25.00; No. 5.- Replacing of dirt washed away from the residence area \$75.00. The last, No. 5, can be cut out by dumping the dirt from No. 1. We still have \$275.00 espense.

August 17, CCC's staged a dance in their recreation hall having in attendance 140 people coming from the neighboring towns. A very enjoyable time was had by all.

For the travel this month our visitors came from the following states: Utah, Arizona, Oklahoma, New Mexico, New York, Pennsylvania, California, Texas, Wyoming, Washington, D. C., Total 256. Local travel count 593. Total travel using the Monument since last report 849, a decrease of 87 from last month and decrease of 227 from a year ago.

The CCC's have been pushing the construction of their buildings as fast as possible; this week will see most of them ready for the boys, but no word has been received as to when they will be sent in. The buildings that are erected are 8 26-men barracks, 1 administration, and recreation building, mess hall, hospital, officers quarters, showerhouse, garage, 6 smaller outer buildings, as cooler, powerhouse, cellar latrines, tool shed; 20 in all.

They have used most of the old west field down to the stockmens correll and part of the meadow, on the scuthwest corner, but little

PIPE SPRINGS (CONT).

damage will be done to it, as it is back to the meadow pond, and the grass does not grow very good there.

There will probably be some ECW buildings erected north of the moad where the old cattle ponds were. I do not know how many or the kind that will be put up.

I received the book "Birds of New Mexico" last week and was surprised to get it as I thought I would be one of the last to get one, probably next year or so; but surely I have enjoyed reading and studying about the birds. If nothing prevents me, I shall have a good list of birds the end of next season, those that nest here and those that visit here.

Our reptile families have increased both in numbers and in family species: Snakes: Black and white King, seen 7; 3 in sage; Bull, or blow Snake, seen 8; 2 in cage; Red racer, seen 5, 1 in cage; desert rattlers, seen and killed around fort and Monument 12, in in cage. The lizards I do not know so much about, but there are 3 very common kinds here and two new species that I have not noticed till this summer. I hope to become better acquainted with these creatures soon.

I will have to correct my statement of last month where I stated that the July report would be the last from me till the October one was due, but as you know the Scout Jamboree was called off, and I stayed home. Anyway we had a lot of fun getting ready and learned to take disappointment like men, It has been said the anticipation is greater than the realization.

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# MONTEZUMA

By Martin L. Jackson, Custodian

Another August and another report time has rolled around. While nothing very exciting has happened during the month, we have had a very interesting month. While I have not checked the register book accurately, I feel safe in saying that we have had quite as many out of state registrations during August as we have ever had in any one month.

While the total number for the month is far short of 1930, the loss is in Arizona people which we are still away behind on. The total for the month is 1910, as against 1654 for August 1934.

We were favored with a long delayed rain on the 13th, while the roads leading in to the Monument were damaged some, they were not too bad. On the morning of the 24th we had a regular cloudburst that washed the roads out very badly and am sorry to say they are not repaired as yet and probably will not be for several days. Still they are barely passable, so please do not route any visitors away because of the roads.

MONTEZUMA CASTLE (CONT).

Visitors coming in have quite a lot of grief to unload. But with two of us here and both being blessed with broad shoulders, we can stand a lot of grief.

I am sure that it is 'old stuff' to you to hear me rave about what a wonderful class of people our visitors are. Am going you one better this time by saying that they are still the very best. And further that they even have the best dogs in the world. Several have confessed as much to us this season and quite a number have been perfectly willing to turn their dogs wild---loose among the wildlife on the Monument, and have no fear for what they might or might not do. So far we have gotten away with insisting that they all be kept on a leash.

Hugh Miller and wife spent the night of the 5th on the Monument as guests of Ranger Fish and wife. Due to an accident on the highway they arrived rather late and we did not get to visit with them on their arrival, but got in a few words with them the next morning before they left. Come again, Hugh, when you have more time. We know a lot of people and things that ought to be talked about.

One of Doctor Colton's representatives from the Museum of Northern Arizona was in during the month and requested that they be permitted to study some of the speciments in our museum. I referred them to you for the authority and have since been notified of your approval. And we will be glad to cooperate and extend every courtesy to them that we can. We think they are doing some mighty fine work. And more power to them.

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### CHIRICAHUA

By Wm. Stevenson, Project Sup't.

In the absence of Mr. Powell I am submitting herewith his report for the month of August.

Coninuous heavy rains during the month of August have made travel to and from the Monument slightly disagreeable, and the number of local Arizona visitors has decreased, but the out-of-state sight-seers are still coming as strong as ever.

958 visitors arrived in 225 automobiles bringing the total registration since June 1, 1935, to 2744. All spectators, both Arizona and out-of-state, expressed enthusiasm despite the inclemency and washed roads. The showers have brought out to the fullest extent the natural beauty of the Monument's wooded growths.

Arizona tourists miss Charles E. Powell, the Chiricahua's champion. While wishing him the best of luck in his new pesition, they hope to see him again at Chiricahua. All are grateful that he left trained CCC guides

CHIRICAHUA (COMP).

to carry on his work, and the boys are doing remarkably well.

There has been more travel than usual over the trails of the Monument, especially over the Moho Canyon Trail to the bottom of the canyon, and into the Echo Park area. The next most popular travel route is up the Rhyolite Trail to the heart of the Rocks. Both these trails are under construction by the camp's work crews, but this has not hindered the hikers from clambering ower the rough spots and making their way through with expressions that soon they will be able to stroll with talons of the thick mountain brush.

Many campers are already using the new fireplaces in the cleared portions of the public camp ground site. These units seem to satisfy the cooking needs, and we hope to soon have them all installed.

We were visited this month by Bob Rose who gave us two lectures on the points of interest in our Western Parks and Monuments. We all enjoyed Bob's talks and hope to have him with us again in the hear future.

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### CHIRICAHUA ECW

By Wm. Stevenson, Project Sup!t.

I herewith submit the following report for the month of August.

The Monument water system is rapidly nearing completion. The 10,000 gallon reservoir is complete and the trench for the 4-inch pipe line into the headquarters area is dug. A pool for the wildlife of the Monument has been created near the spring area.

The headquarters Comfort station is complete except for installation of fixtures and plastering.

Kip No. 2 in Bonita Camp ground is finished and 300 feet of Camp ground road grading completed. Fifteen stone fire places have been constructed. A number of man days have been spent on general cleanup and Bonita Camp ground is assuming a finished appearance.

Two thousand feet of Old Roads have been obliterated this month.

Heavy construction is being encountered on the Echo Trail, the entire months work consisting of rock wall and heavy fill. To date 2500 feet of this trail is finished.

Construction was started on the Sara Deming Trail August 26.

Work is progressing on the Forest Service projects. The Ranger Cabin at Rustler Park is 40% complete and all materials are on the ground

CHIRICAHUA (CONT).

for the Cabin at Fly Peak.

We were visited this month by Mr. Coffman, Mr. Cook, and Mr. Wirt of the Forestry branch of the National Park Service, Al Cottoneur, Master Mechanic of the National Park Service, and Mr. Curtes, Mr. Smith, and Supervisor Fred Winn of the Forest Service.

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### YUCCA HOUSE

BY ERIK REED, ROVING RANGER

During the first week of August 14 visitors registered at Yucca House; during the second week of August none. Among the 14 registrants were T. C. Miller and his wife and son and L. N. Goodding of the U. S. D. A., my first boss, and his son.

At present the fence is more or less up all around the Monument though rather battered in places; both gates are wired.

There are a large number of sites all around the Monument; many of them appear to be pit houses, presumably of Basketmaker date although most of the sherds found on them are Pueblo 3, with some Pueblo 1 and 2. A surprisingly large percentage of the painted sherds on these pithouse sites are of Chaco type, 1 to 3.

The burial ground mentioned by Mr. T. C. Miller in the June issue of the Coolidge Clarion is part of a quite nice little Pueblo III site northeast of Yucca House--at least fifteen rooms, apparently only one kiva. The building is badly iroded and the refuse mound considerably potted, but it still would be rather interesting to excavate.

These pithouse sites are more to the point, however --- a few excavated and restored (roofed) Basketmaker dwellings would make a good complement to the great pueblo of Yucca House.

I want to reiterate that the building just north of Upper House extends north beyond the fence perhaps 50 feet and that this small area should become part of the Monument.

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## **OLAVAN**

By Milton Wetherill, Acting Ranger

Report for this month is as follows: July 18, 1935, to August 18, 1935, Be-ta-ta-kin 107, Keet Zeel 33.

For the year August 18, 1934, to August 18, 1935, Be-ta-ta-kin 387, Keet Zeel 79.

#### NAVAJO (CONT).

Dr. F. W. Hodge, Southwest Museum, Los Angeles, California, was in August 10, 1935, with a small party.

Dean Cummings was in with his summer class August 11, 1935, going to Keet Zeel August 12, 1935, leaving for the Rainbow Bridge August 13, 1935.

Mr. Mike Shepard Bylas, Arizona war veteran, made the trip into Be-ta-ta-kin with three legs (two Wooden).

Some work is needed at Keet Zeel in front of trash pile on the northwest side, as it has washed badly the last two storms.

#### Birds meen and noted July 18, 1935 - August 17, 1935.

Turkey Vulture Western Red-Tail Sharp-Shinned Hawk Desert Sparrow Hawk Western Mourning Dove: White-Threated Swift Broad-Tailed Humming Bird Costa Humming Bird Black-Chinned Humming Bird Red-Shafted Flicker White-Breasted Woodpecker Ash-Throated Flycatcher Cassin Kingbird Say Pheebe Northern Violet-green Swallow

Long Crested Jay Woodhouse Jay American Ravin Pinyon Jay Clark Nutcracker Mountain Chickadee Lead-colored Bush-tit Canvon Wren Rock Wren Mountain Bluebird (Tsegia) Western Gnatcatcher Western Tanager Rocky Mountain Blackhead Grosbeak Spurred Towhee Western Warbling Vireo

Black-throated Gray Warbler

### Birds banded to date at Be-ta-ta-kin Ruins

June 12, 1935 6 young Chickadee in nest 34/49551-56 Aug. 3, 1935 Woodhouse Jay  $\frac{1}{2}$  - - - - 34/339641 Aug. 5, 1935 Woodhouse Jay - - - - 34/339642 6, 1935 Woodhouse Jay - - - - 34/242126 Aug. Aug. 6, 1935 Woodhouse Jay - - - - 34/242127

Woodhouse Jays 34/242126 and 34/242127 have acquired the trap habit.

#### \*\*\*\*\*\*\*

By John Wetherill, Custodian

Milton has just come in with the report from the rums. I cannot help by adding anything more. I will be down to see you as soon as I can get away. The roads have not improved with our last rains. I am surprised that anyone would have the nerve to drive over them as they

NAVAJO (CONT).

are. Hoping you can get up this way soon, I am yours truly.....

# BANDELIER

By Earl Jackson, Custodian

Follows the monthly report for August 1935:

#### Visitors

Visitors numbered 2475, arriving in 648 cars. Thirty-sever states, the District of Columbia, England, Scotland, the Federal District of Mexico, and Canada were represent. Canadian visitors were from Alberta, Bristish Columbia, Ontario, Nova Scotia.

The six highest states by travel were: New Mexico, 900; Texas, 447; Oklahoma, 317; Kansas, 112; Colorado, 97; Missouri, 94.

The largest travel month in the history of Bandelier National Monument brought a much more restricted regional representation than less busy months, but this is not surprising when we realize that in August the South literally takes to wheels to avoid summer heat, and comes through our way in great throngs.

The remarkable feature about our travel this month is the fact that it is the heaviest ever in spite of far more stormy conditions than usual.

#### Weather and Roads

Precipitation for the month since July 25 was 5.33 inches. There has truly been "water, water everywhere," and then some to spare. The heaviest rain was on the afternoon of the 20th, when two and a half inches fell in five hours. Another single rain produced over an inch.

These torrential downpours, while greatly helping the country, have wrought havoc with roads. On three or four occasions the road to Santa Fe via Pojoaque (the most traveled route) has been impassable because of high water and quicksand in Tesuque and Pojoaque arroyos, so that much tourist travel has been lost for Bandelier, and those coming during such times had to take a route through Espanola, which is 15 miles longer.

U. S. Highway 66 was washed out at one point between Santa Fe and Albuquerque and is still completely closed to travel. Four people were drowned in this flood, when an arroyo became so full it had to assume the proportions of a river.

State Route 4 from Bandelier to the highway (26 miles) is very rough and quite dangerous for high speeds. The road leading out of Frijoles Canyon stood up well as a whole, but some of the shoulder sections were SCUTHWESTERN MONUMENTS

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BANDELLER (CONT)

deeply cut.

Frijoles Creek is running very briskly now. There is plenty of water, and everything is looking greener than I have ever seen it.

#### Special Visitors

July 26 the Kit Carson Camp for Boys, Tres Piedras, New Mexico, sent in a very interested group of seven boys under the direction of adviser Bateman Hardcastle.

Billy Carmon and party, radio and vaudeville performers, spent an interested two hours with us.

July 28 - From the Texas Institute of Technology came Professor W. C. Holden and 28 archaeology students for an afternoon. This place is becoming quite popular for student parties from Texas Tech, and I have found them all to be a good bunch.

August 5 - Adrey Borell, Regional Wildlife Technician, was in for a ten-day stay.

August 10 - Jack Diehl arrived for a two-day stay.

August 11 - Chief Forester Coffman and Associate Forester L. F. Cook were in for a brief inspection trip, leaving on the same day.

August 12 -- Mr. and Mrs. A. E. Demaray, Mr. and Mrs. Howard Baker, and Charles Richey, were in for a short stay and out the same day. ( I was exceedingly sorry to have missed seeing Messrs Demaray, Coffman, Cook, Borell, Diehl, Richey, and Baker. I was away on annual leave from August 3 to August 19. Have never had the pleasure of meeting Mr. Demaray or Mr. Coffman).

August 25 - Hugh and Christine Miller arrived for a two-day portion of their vacation. It seems to me that Hugh is just about as busy as ever though, vacation or not.

#### Forest Fires

Again we have been very fortunate on fire problems. The one fire of the season so far was from a lightning snag, and burned less than half an acre of duff and litter and some small yellow pine and juniper. I took Logan Horne (a very competent C.C.C. leader) and a crew of five men, and we had the fire taken care of in two hours from the time it was reported.

#### Nature Notes

The tent caterpillar has again succeeded in stripping the upper halves of a great many cottonwood trees. Jim Fulton's bug crew has been hard at work with our new Hardie sprayer attempting to give the pests

BANDELIER (CONT).

lead poisoning, but the sprayer hasn't enough power to reach to the treetops. The result is, many of the trees are quite green about the lower portion, but the foliage appears to have been shaved off at about the mid-section. We are not fearful for the lives of the trees this year, for the attack was late, but will be thankful when this insect cycle is over.

General

The Custodian took himself away on August 3 to the teeming civilization of the East and Connecticut to fetch himself a wife. She was Miss Elisabeth Morris, of New Haven. Now she is one of the Gang.

We drowe West, via New York City, Washington, D. C., Virginia, Tennessee, Arkansas, Oklahoma, and Texas.

New York was too hot and too big. The buildings were so high I couldn't see the North Star, and so got lost. Driving down the Hudson River from the Bear Mountain Bridge to New York's skyline is wonderful.

Washington was so hot one's shoe soles curled, but we had a wonderful time there. The reason can be laid at the door of the National Park Service offices. Mr. Tolson and Charley and Mrs. Brill took it upon themselves to treat us like visiting royalty, and they certainly made that Washington visit fascinating and enjoyable. Had the pleasure of meeting Mr. Cammerer, renewed acquaintances with Carl Russell and Louis Shallbach, and met several other Park Service folk. That Washington bunch is all right, and believe me they do the work. If any of you fellows have the idea they don't work in Washington, you have two more thinks coming.

Going west we visited Shenandoah National Park and the Luray Caverns, and met Superintendent Lassiter. We left the park by the famous Skyline Drive.

In Tennessee we drove through a corner of Great Smoky Mountains National Park. That is one of the most beautiful places God ever made. Every foot of that country is fascinating to one who has always been able to count the trees in his own state.

We reached Bandelier just twenty minutes before the commencement of the heaviest rain storm I have ever seen. We must have brought it back with us from Tennessee.

And so, back into the traces, and glad to be there. The new H.C. W.P. has decreed that all work makes Jack a bright boy, and so hopes to raise my mental status.

## BANDELIER E.C.W.

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

Work this month on the headquarters comfort station has been confined to the interior installation of all rough plumbing and wiring, with the completion of the roof and some work started on the portal connecting headquarters building with the comfort station building.

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An additional 175 feet of stone guard rail along the entrance road has been completed this month.

All fire places in the camp ground extension area are now complete in place; in addition five of the new approved fireplaces have replaced the less substantial fireplaces in the old camp ground area. This replacement work will continue until all camp sites are equipped with the new approved style or plan.

Practially all activity in the utility area this month has been confined to the warehouse building, all walls to flashing height are complete with roof deck in place. Plumbing of the toilet room started today. The building throughout is ready for plaster, floors and opening trim.

Additional spraying of trees for control of the tent caterpillars has been carried on this month.

Obliteration of old trails, roads and open areas has gone forward under landscape direction.

A timber crew cutting and trimming viga and lintel material for utility area buildings hasbeen working all month, the work being completed this date.

The usual large crew has worked continually in the rock quarry this month quarrying and shaping rock for the guard rail and buildings.

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## ENGINEERING

By J. H. Diehl, Park Engineer

The survey crew in the field under Andy Clark, has been busy all month at Walnut Canyon National Monument, on topography mapping of the proposed headquarter and camp ground areas. They also followed out the proposed boundary extension line along the north side of the canyon, in order to definitely ascertain that this proposed extension will cover the area desired.

ENGINEERING ACTIVITY (CONT).

In the headquarters office at Coolidge J. H. Tovrea has been busy plotting cross sections of the Bonita Highway, Chiricahua Monument, and attending to other mapping work.

From the 6th to the 27 inclusive, I have been in the field visiting the various monuments, getting acquainted with their engineering needs, checking proposed boundary extensions, and investigating the proposed boundaries of an area southwest of Gallup, New Mexico, which is being considered as a possible national monument. Cwing to heavy rains, we were unable to complete this investigation for a report at this time. With prehistoric ruins and spectacular red and white sandstone formations, this area appears to have features that justify inclusion in our monument group.

Progress on construction of the various ECW projects in Bandelier National Monument and Chiricahua National Monument, has been somewhat retarded owing to many of the old experienced CCC enrollees being discharged, with the new replacements not yet acquainted with their duties, nor quite up to the physical caliber of those released.

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# NATURALIST DIVISION By Robert H. Rose, Park Naturalist

#### Staff

The staff of the Naturalist Division during the month consisted of Junior Park Naturalists Dale King and Louis R. Caywood and the Park Naturalist. Mr. Caywood has been on special field assignment during most of the month at Canyon de Chelly. Toward the end of the month he changed his field station to Aztec where he will do relief duty in the absence of Custodian Johnwill Faris.

Mr. King has been at Headquarters during the entire month. Except for a brief field trip to Chiricahua to which reference will be made later, the Park Naturalist spent the entire month at the Headquarters Office.

### Junior Naturalist Dale King Report

GUIDED: 3381 minutes --- more than 8 8-hour days

MUSEUM WORK: Prepared a few miscellaneous labels for Casa Grande,
Prepared labels for Aztec Stratigraphy case.
Checked and helped unload Berkeley shipment alluded
to above.
Ordered from Berkeley: Wupatki relief maps.

MISCELLANECUS: Planted 30 mesquite trees.
Painted Headquarters bookcase.

#### NATURALIST DIVISION (CONT).

OFFICE WORK: Sent to field: 64 publications and books
Mimeographed: 18 Office Memorandums
Copy read and lettered headings for August Report
Sent supplies to Tonto and Wupatki, Bird Banding files
and Natural History files to Walnut.
Continued listing of Headquarters Library during rest
os time.

Report of Junior Naturalist Louis Caywood

"Following is a resume of my activities since I left Headquarters, covering the latter part of July and all of August to date (August 23).

On July 20 I left Coolidge accompanied by Assistant Director Dr. Bryant and arrived at Canyon de Chelly National Monument the following day. Enroute we visited Petrified Forest National Monuments

On July 22 I made a trip into Canyon de Chelly with Dr. Bryant. The following day was taken up in travel from Chin Lee to Grand Canyon National Park where Dr. Bryant continued his trip by train. July 25 and 26 were spent on the return trip to de Chelly.

On the following two days Custodian Robert R. Budlong showed me about Canyon de Chelly and White House Ruin. On July 29 I accompanied Dr. and Mrs. John Deur of Long Island University on a horseback trip to Antelope House in Canyon del Muerto.

The Soil Conservation Project Superintendent was in de Chelly on August 5 on an inspection trip and I accompanied him into Canyon de Chelly and del Muerto in a Soil Conservation car.

From July 28 to August 22 I personally contacted 57 visitors and accompanied them into the canyons on four horseback trips to Antelope House; one car trip to Mummy Cave and three ruin and rim trips to White House. The remainder of the time was spent in study and exploration of the canyons and the rims.

On August 23 I left Chin Lee during the morning, via Gallup, for Aztec Ruins National Monument.

#### Field Trips:

On August 6 Mr. Rose left for Chiricahua National Monument returning to Coolidge'on the 8th. While at Chiricahua he gave two illustrated talks, one on the night of August 6 on the National Park Service in general, and the other on the evening of the 7th entitled "National Monuments of the Southwest."

Attendance was 150 on the first evening and 175 on the second. These boys seemed to enjoy the pictures and program and were among the best audiences from standpoint of attention one could ask for,

### NATURALIST DIVISION (CONT).

Two trips were made to the U. S. General Land Office in Phoenix during the month in regard to land matters relating to proposed Kofa Mountains and Organ Pipe Cactus National Monuments. Final reports on inspection trips have all been received and assembled. These assembled reports, together with recommended boundaries, have been forwarded to Superintendent Tool.

#### General Personnel

Last month we referred to the position of travelling ranger in the "Four Corners" region. Mr. Erik Reed who has filled the job most capably for several weeks received an ECW assignment toward the latter part of the month. We regret to lose Erik but during his few weeks tenure he has collected much data of value to us in that region.

Temporary Ranger Lewis of Aztec left on August 20 for his teaching position in Texas. Mr. Lewis seems to have put forth his best efforts at Aztec and did his share to make the summer in public contacts at that monument a real success.

Temporary Ranger Chas. E. Powell left Chiricahua early in the month for a position with the Army under his Reserve Commission. We regret to lose "Charley" at Chiricahua and at Saguaro and wish him best of success in his new assignment.

### Supplies: materials and exhibits received

During the month the following materials and exhibits were received from the Field Division of Education, Berkeley:

225 stack trays for museum storage

- 7 museum storage cases for bird study skins and other perishable objects.
- 8 government sparrow traps
- 6 woodpecker traps
- 3 wax casts of human feet to be used in footgear displays
- 650 aluminum labels for cactus species
- 1 set of prehistoric pyrite mirror reconstructions

# WILDLIFE DIVISION

By Regional Technician
Adrey Borell

Bandelier National Monument, August 5 - 12.

(1) Weather: cool, cloudy, several showers.

(2) Scientific Studies: Hiked the full length of Frijoles Creek to gather data on fish and stream conditions and to look for beaver which were supposed to have been planted there several years ago.

About 30 dams were put in the upper portion of the creek during the spring of 1934. The majority of these have been washed out. However, the remaining ones are functioning as they should. The pools above the dams have filled with silt but the water falling over the dam (about 22 inches) has dug out quite a large hole. Each of these holes was the home of one or more fair sized trout. Further information gathered is recorded in a special stream report which is attached.

No trace of beaver was found.

Recorded the Following birds.

- \*1. Turkey Wulture, one August 12.
- 2. West-rn Red Tailed Hewk, one, August 8, mesa.
- \*3. Spartfow Hawk, one, August 10.
- 4. Merrian Turkey, Yew Teathers, upper Wrijoles Creek, August 8.
- \*5. Mourning Dove, few in Canyon, Aug. 8-11, many on mesa, August 12.
- \*\*6. Pacific Night Hawk, two or three each evening.
- \*7. White-throated Swift, twenty, August 7 and 11, about cliffs below headquarters, apparently nesting.
- \*8. Broad-tailed Humming bird, two, August 7, one, August 9.
- 9. Rocky Mt. Hairy Woodpecker, One, August 7.
- 10. Red-shafted Flicker. two, August 7; two, August 9.
- \*11. Ash-throated Flycatcher, one, August 8, mexa.
- \*12. Flycatcher, Sp.?, one, August 11.
- 13. Long-crested Jay, one or two each day, two immature on August 12.
- 14. Raven, one, August 10.
- 15. Woodhouse Jay, one or two each day.
- 16. Clarke Nutcracker, one, August 8, head of Frijoles Creek.
- \*17. Pinyon Jay, flock of six, August 7, mouth of Frijoles.
- 18. Mountain Chickadee, six, August 8.
- 19. Rocky Mt. Nuthatch, one. Aug. 12.
- 20. Red-breasted Nuthatch, two, August 8, head of Frijoles.
- 21. Canyon Wren, two, August 7, one, August 11.
- \*22. Thrush, sp.?, one, August 6, one, August 10.
- \*23. Chestnut-backed Bluebird, six, August 12, on mesa.
- 24. Robin, two, August 7, one, August 9, two, August 12.
- \*25. Gnatcatcher, sp.?, two, August 7, mouth of Frijoles Canyon.
- \*26. Western Warbling Vireo, two, August 7.
- \*27. Western Tanger, two, August 7, mouth of Frijoles.
- \*28. Rocky Mt. Black-headed Grosbeak, few adults and immatures seen each day.
- \*29. Arizona Blue Grosbeak, two. August 6 and 7.
- \*30. Arkansas Goldfinch, four, August 7, three, August 9.
- \*31. Spurred Towhee, two, August 7, one, August 9, on mesa.

32. Junco, sp.?, two, August 8, head of Frijoles Creek.

All were observed in Frijoles Canyon unless otherwise stated.

Eighteen of these (marked with \*) are new to the list which I recorded between November 5 and 15, 1934. Scientific names are not given as no specimens have been collected and therefore identification cannot be positive.

(3) E. C. W. Supervision: With Camp Superintendent Chase, Chief Forester Coffman, Assistant Chief Forester Cook, Forestry Supervisor Wirt, Landscape Architect Morse and Forestry Technician Fulton, went over all Fifth period projects, and looked over a proposed fire trail route. At present there is no trail along the west boundary and no good trail leading west over the mesa. The forestry representatives were strong in their opinion that one good trail should lead from headquarters across the mesa along the west boundary to the small canyon beyond Capulin, about 18 miles of new trail. This trail would join the old river trail making it possible to ride or hike completely around the monument. The Foresters feel that this new piece of trail is essential and it would be valuable for patrol during the deer season.

We also discussed a truck trail from headquarters to Capulin Canyon. I believe that this truck trail is not essential. Furthermore this road would pass near the Stone Lions and the Painted Cave and for this reason there would be constant pressure to have this road open for tourist travel. If this project is proposed, I believe it should not be approved.

Tent caterpillars are doing serious damage to trees in the lower three miles of Frijoles Canyon. Cottonwoods are most severely damaged but in some places, willow, alder, Gambel Oak and boxelder are being defoliated. Some of the trees do not have a single green leaf left on them. Forestry Technician Fulton is spraying the infested trees about headquarters.

I was disappointed in not being able to see Custodian Earl Jackson.

State Game Commissioner Elliott Barker and State Game Expert Stockley Ligon at Santa Fe, August 9, discussed the following subjects:

(a) Proposed Federal Game Refuge or National Monument surrounding the Big Hatchet Mountains of Southern New Mexico. Barker and Ligon were violently opposed to Federal control of that area. Said that it is already a State Game Refuge and that they have been giving special attention to it for several years. They said that they are getting fine cooperation from local ranchers and that the Taylor Grazing Act administrators have agreed to exclude domestic sheep from the area. A large proportion (40%, I believe) is State land. They maintained that if the

Federal Government took over the area and lost the cooperation of local ranchers, through elimination of grazing or through the lack of control of predators, the ranchers would shoot sheep at every opportunity. They said that there are sheep in the Guadalupes and San Andres Mountains which they would be glad to have the Government take over but they will fight the Big Hatchet project to the end. They favored extending the boundaries of White Sands National Monument to include the artesian well area for waterfowl and a portion of the San Andres Mountains for mountain sheep protection.

- Barker and Ligon suggested that since the Ramon Vigil Grantadjoins Bandelier National Monument the Park Service might be able to encourage the Indian Service to enforce the State Game Laws on this recently purchased area.
- (6) Regional Engineer John H. Diehl regarding a possible boundary extension at Walnut Canyon. He said that Ralph M. Hussey, Supervisor of the Coconine National Forest seemed amenable to an extension and was quite willing to establish a buffer area around the monument.
- (7) Wo Peen, Indian artist at San Ildefonso, New Mexico. Mr. Peen said that if the Ramon Vigil Grant were turned over to the San Ildefonso Indians, he thought that geme regulations could be worked out satisfactorily. Wo Peen is well educated and a fine man. He would be a good one to work through if that grant is turned over to the San Ildefonso Indians. Covernor Montoyo was away at the time of my visit. Regulations on this grant would be especially desirable in order to save the game species of Bandelier.
- (8) Chief Forester Coffman, Assistant Chief Forester Cook, Forestry Supervisor Wirt, Forestry Technician Fulton, Regional Engineer Diehl, Camp Superintendent Chase, regarding fire roads and trails, caterpillar control and E. C. W. projects at Bandelier.

#### Bandelier National Monument

- 1. Puncture Vine: Assistant Chief Forester Cook called our attention to an invasion of the exotic puncture vine near headquarters. He suggested that we attempt to eradicate this very undesirable exotic. This project should be encouraged.
- Truck Trail: There has been some agitation for a truck trail to lead from headquarters to Capulin Canyon. If this project is proposed, I think it should not be approved. See page 8 of this report.
- 3. Trout Planting: I recommend that future plantings be made after the summer rains and that no trout be planted in the lower six miles of the stream. Most of the planting should be done in the vicinity of, and above, the upper crossing. See stream survey report which is attached.

Most of the recent planting has been done near headquarters (3 miles from the mouth) since that is the only place where a road leads to the stream. A car can be driven to within one mile of the upper crossing and to within two miles of the head of the stream and the trout packed in by horses or C.C.C. boys.

STREAM SURVEY OF RITO DE LOS FRIJOLES

BANDELIER NATIONAL MONUMENT, NEW MEXICO

This is a small, clear creek, flowing at a medium rate. It is about 23 miles long, of which the lower 11 miles are in the Monument, the upper 12 miles are in the Santa Fe National Forest. Its source is in a heavy stand of yellow pine, Douglas spruce, white fir, alder and aspen at about 8500 feet elevation. The stream is fed from natural drainage and several springs. The upper 15 miles are quite well suited for trout as there is an abundance of food and shelter and many small pools, one to three feet deep during low water.

Record of past plantings as supplied by the New Mexico State Fish and Game Commission which has furnished all the trout for this stream:

1926 - 5,000 Brook trout

1929 - 10,500 Brook trout and 2,500 Rainbow

1932 - 500 Rainbow

1933 - 500 Rainbow and 5,000 Cutthroat (native in Northern New Mex.)

1934 - 11,000 Cutthroat

1935 - 21,000 Cutthroat: 1,000 of these were from 5 to 8 inches long.

In the light of these plantings it is of interest to note that of the thirty trout which I took (and released) on August 8, 1935, all were brook trout except one rainbow, no cutthroats. The largest of these was 8 inches but few were over 6 inches. By far the best fishing is in thee upper ten miles of the creek. The reason for this is twofold. The lower part is fished heavily as the road strikes the creek three miles from its mouth and a good trail follows down to the mouth and up about 8 miles. Furthermore, the lower 6 or 7 miles are subject to rather violent floods in the late summer. Two miles below headquarters are two falls; one about 60 feet high and the other about 50 feet. Regional Engineer John Diehl and I visited these falls on August 11, a week after two violent floods. Below these falls we found 6 dead and I injured trout. Six of these were cutthroat and one rainbow, all were between 4-3/4 and 5-1/4 inches long, apparently from the recent planting.

I have a feeling that if plantings were made after the summer rains, (say September), that the young trout would have an opportunity to become adapted to the stream before they were forced to contend with flood waters. Furthermore, I think that no trout should be planted in the lower 6 miles

of the stream. The upper part of the stream is much better adapted to fish and is less subjected to floods. This summer's planting was made near headquarters and shortly after two floods occured. I feel that a large percentage of these small trout were carried over the falls and killed and most of those which were not killed were carried into the muddy Rio Grande. At least there are very few trout left in the lower 7 miles of the stream where 21,000 were planted this spring.

I am not in a position to say which species of trout is best adapted to the stream since the recent plantings of cutthroat were made in the spring in the lower portion of the stream and did not have a fair chance. I should like to see a planting of cutthroat in the upper ten miles of the creek. A car can be driven to within one mile of the upper crossing and within two miles of the head of the stream. From either of these points fish could be taken to the stream by pack horses or C.C.C. boys.

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## ENGINEERING DIVISION J. B. Hamilton, Associate En

Associate Engineer.

#### General

I seem to have neglected the Southwestern Monuments of this section this month as I have only visited Canyon de Chelly and Natural Bridges National Monuments once each. With work at Aztec and El Morro held up for lack of approved plans in the one case and money in the other, to my sorrow I could not find an official excuse to go to either.

I was very pleased to have a few minutes chat with Engineer Diehl one evening here at Mesa Verde.

### Canyon de Chelly National Monument

I went over on August 8 and returned on the 10, going by way of Gallup and Ganado and returning by Lukachukai Pass. Recent floods made the road somewhat rougher than usual. I was lucky in dodging local showers.

Most of the time at de Chelly I spent in checking over costs with Foreman Brown, which I was enabled to do closely, as Mr. Hugh Miller's ledger sheets came in while I was there. I found the job costing more that had been estimated not only because of the flood but generally running high.

A fine water and sewer system will result if we can finish it.

I was lucky enough to be able to attend a Navajo "Squaw" Dance the night of the 9th. As I was short of change I had to hide in the auto, after my last nickel was spent, until the rest of the party was ready to leave.

ENGINEER HAMILTON'S REPORT (CONT).

#### Natural Bridges National Monument

August 13 at 6:15 A.M. I left Mesa Verde National Park and drove the 180 miles to Natural Bridges National Monument, arriving just fifteen minutes before noon. There I found Architect Langley and Custodian Zeke Johnson.

That afternoon while Mr. Langley looked over the headquarters area and dreamed his dreams of the future, Zeke guided Mr. Yeager, Forestry Technician, attached the CCC Camps at Mesa Verde, and myself over the eight mile circuit past the three bridges. Needless to say to those who have been there we were greatly impressed when we reached Augusta Bridge, the climax of the trip. The stupendousness of the spectacle combined with the lesson in geology makes the trip eminently worthwile for anyone.

Of course, Zeke pumped me on the trail problem. Problem is the word advisably. The long stretch in the canyon is so sandy and so likely to be washed out that it will take a tremendous amount of effort to put in anything of a permanent nature.

The trail out of Whites Canyon at Augusta Bridge to the point between White and Armstrong Canyons is almost the problem of the Canyon de Chelly Thite House trail over again, but probably somewhat more difficult. The same as across from the White House we have the talus covered amphitheater with the rock cliff at the top and bottom. Across the point between the Augusta and Edwin Bridges is comparatively easy work, but even so much labor is required at two or three small canyon crossings. To cross Armstrong Canyon at the Edwin Bridge with a standard trail is a large undertaking.

I can see about two summers work for a full CCC camp on trail work alone. The camping spot at the Caroline Bridge should be given protection against erosion, the parking area and roads about Headquarters Area built, water system and sewer installed, if the Monument is to be built up to the standard it deserves.

While I should like to see a CCC camp there I realize the difficulties of getting one established. The cost of a water supply and of sewerage disposal would be very great and the distance supplies would have to be hulled, largely from Grand Junction, Colorado, lead me to believe that the Army would never approve a camp in that location. I hope I am wrong.

That evening and the morning of the 14th some of the above problems were discussed and the area to be surveyed determined upon. While at the Monument I had the pleasure of meeting Dr. Hodges of the Southwestern Museum, Los Angeles, and some of his party, who are visiting points of interest in the southwest. I returned to Mesa Verde the afternoon of the 14th.

## CLOSING

It has been a great month, Chief, and we hate to bid it goodbye though there is probably just as good a month ahead of us for business is on the up grade in the Southwest and we are having more and better visitors than for several years. Also we are heading into our winter season which is always a busy season with us at these headquarters and we are looking forward to a lot of new schemes and experiments.

The so-called "Roving Ranger" experiment conducted by Erik Reed was intensely interesting and we consider it highly successful for as long as it lasted. The theory about it is that we have some outlying monuments in our district which are not yet heavily visited but are valuable from research and other angles. Vandalism should be prevented; fences should be kept up; drainage should be studied and changed; local sentiment should be built up against destruction; and so on.

Erik Reed went out in the "Four-States-Corner" country with a car, a camp outfit and a page or two of general instructions, and in the course of a month or six weeks turned in a lot of paper which is pretty valuable. He caught up the fences at Yucca House, got an adequate idea of the location of the ruins on and off the monument, studied and reported past vandalism, which, by the way, was nothing very serious I am glad to say, posted signs showing ownership and forbidding vandalism, and made local contacts in which he told the neighbors what it was all about and why we were operating in that country.

He located and visited the various subdivisions of the Hovenweep National Monument, studied and reported the needs for repairs and protection, suggested means of handling in the future, contacted local people and turned in a lot of information about ruins in that vicinity.

He visited Moab and the Arches National Monument, met a number of people in that vicinity, gathered much information and made some suggestions on enlargement of the monument and the possibility of future monuments in that country.

In moving from one of these places to the other he made a general archaeological survey of the country, visiting ruins reported by the people of the locality, finding if they were on Gowernment land, warning the neighbors to let them alone if they were, and turning in much valuable and interesting material to us in the way of reports.

About the time he got settled and going good, you folks back there sent through a promotion for him to a higher paid job in ECW work and we lost him. It is too late in the season to try to replace him and we are letting the experiment go over until next spring.

Given the right man, I am enthusiastic about the results we can

CLOSING (CONT).

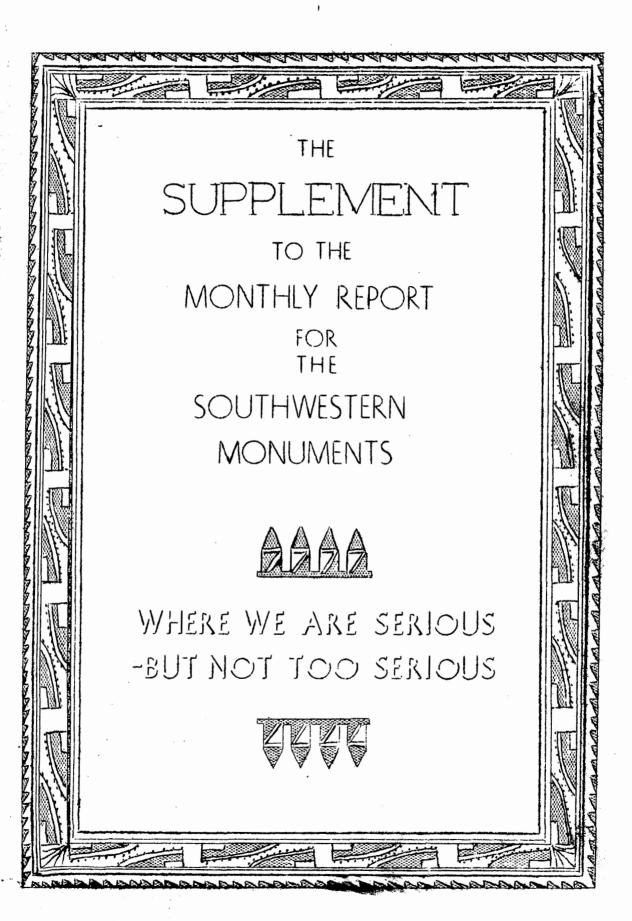
obtain from this kind of a job and I am quite sure it will well repay further experimentation.

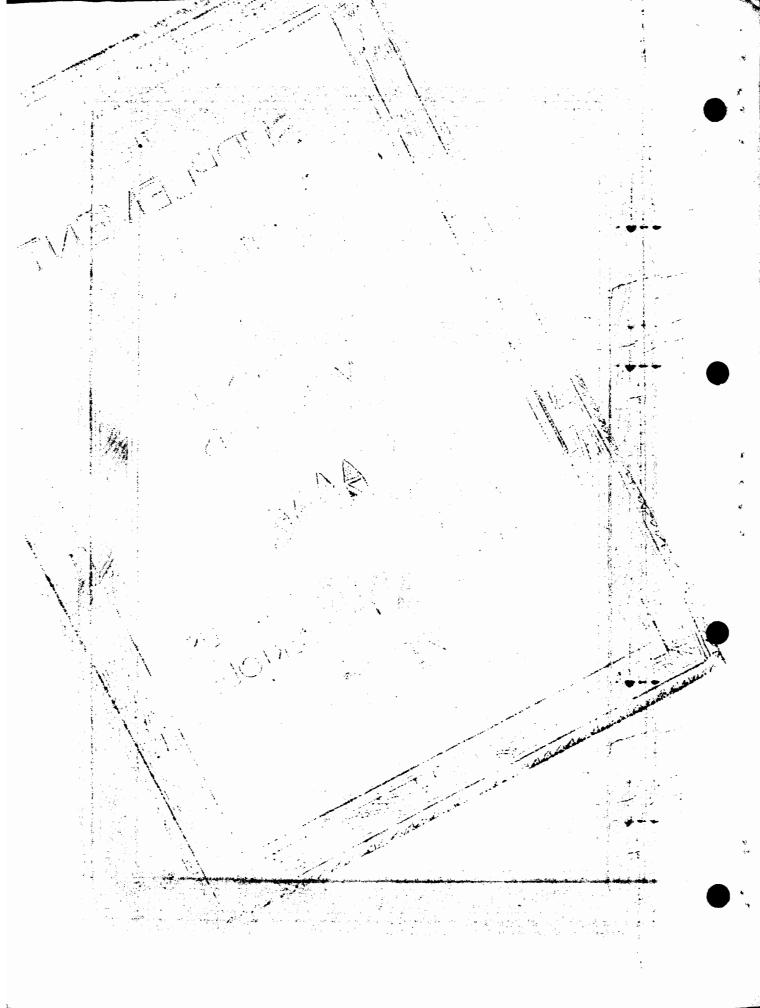
In case you have missed the personal items and gentle spoofing dealing more particularly with our own organization, I might say that we have gradually withdrawn most of that from the Monthly Report and Supplement and are circulating it among ourselves in the form of a letter once a month which we call the "Broædcast" principally because it isn't one. We are getting a lot of fun out of it and it is serving a real need. The only people who get a copy without asking for it are those on the pay rolls of the Southwestern Monuments. There are no exceptions to this rule. Anybody else must request us in writing and we will consider the application without guaranteeing favorable action. We want to keep that mailing list as short as possible. We run about fifty copies now. Thus far, at least, the Broadcast is another experiment which has worked out well.

Cordially,

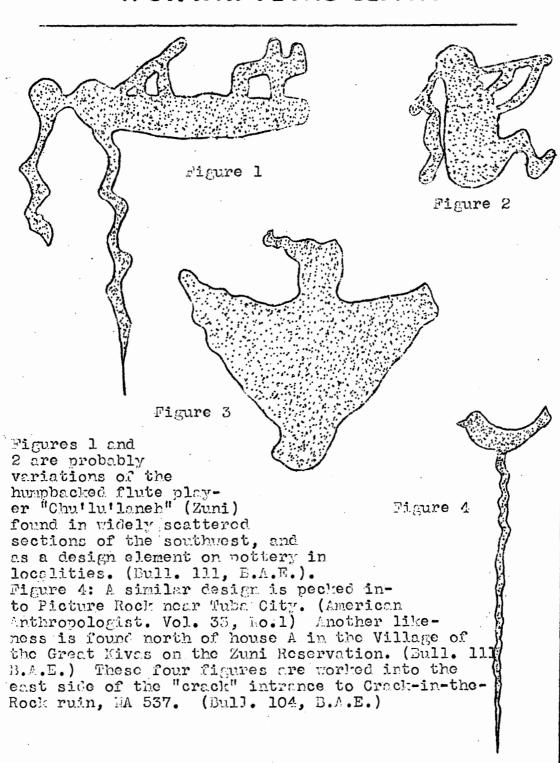
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Frank Pinkley Superintendent





## WUPATKI PETROGLYPHS



# WUPATKI PETROGLYPHS

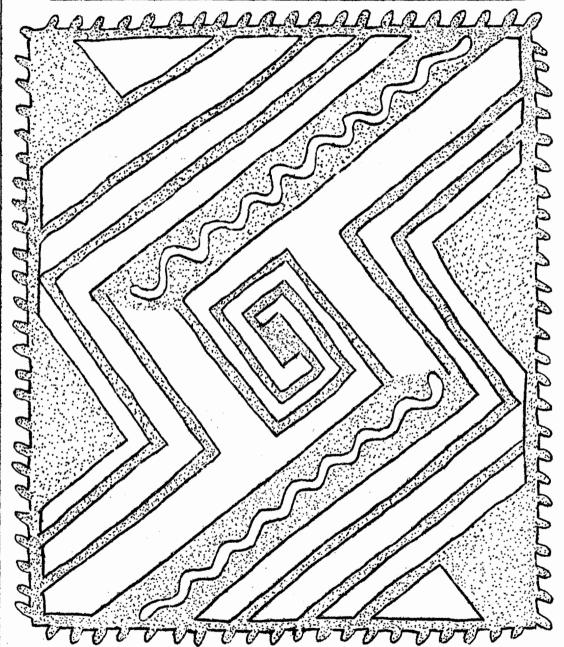


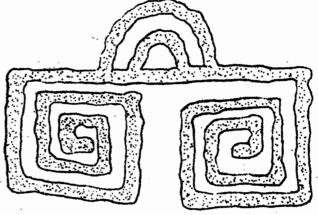
Figure 5: This elaborate petroglyph occurs on the a east face of a cliff upon which Crack-in-the-Rock ruin stands. The design is so well preserved it gives the appearance of having been done recently. However it was obviously executed from the now fallen roof of one of the basal rooms.

# WUPATKI PETROGLYPHS



Figure 6 (left): The coiled snake (?). This occurs in several places on the Homment with verying diameters and numbers of rings. It also occurs in the Village of the Great Fivas.

Figure 7; Looks somewhat like a combination of Figures 6 and 6.



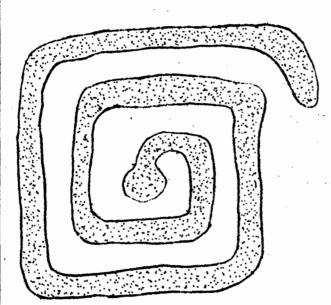
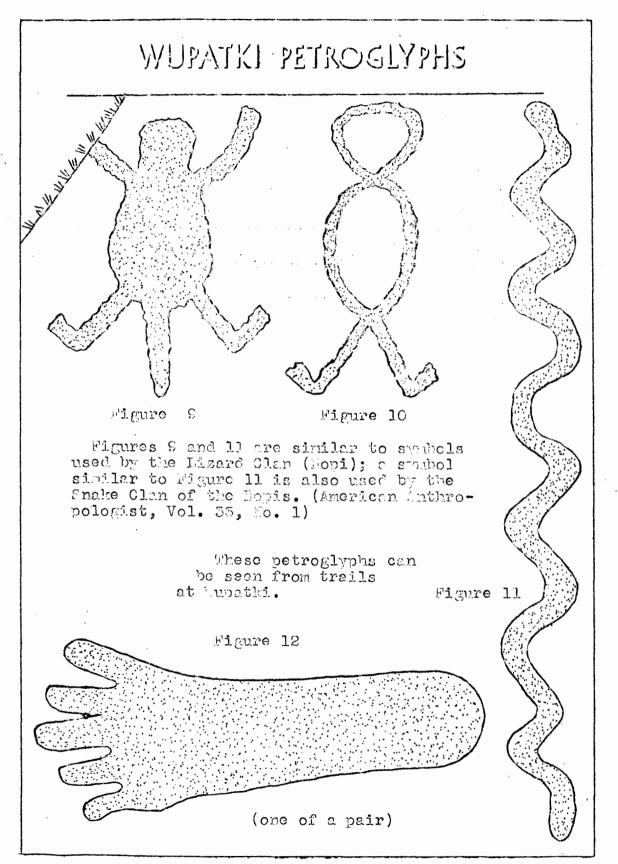


Figure 8 (left): / conventionalized form of the coiled snake.

If these are symbols of prehistoric class might "igure 7 be the result of class of 6
and 8 grading into
each other?



# NAVAJO SAND PAINTING-DE CHELLY

#### By Betty Budlong .

It was on the morning of July 5 that I started up into Canyon de Chelly on horseback with a party of three from Pittsburgh, armed with an invitation from Cozy to meet him at a hogan a little beyond the forks of the two canyons and witness a sing with sand paintings.

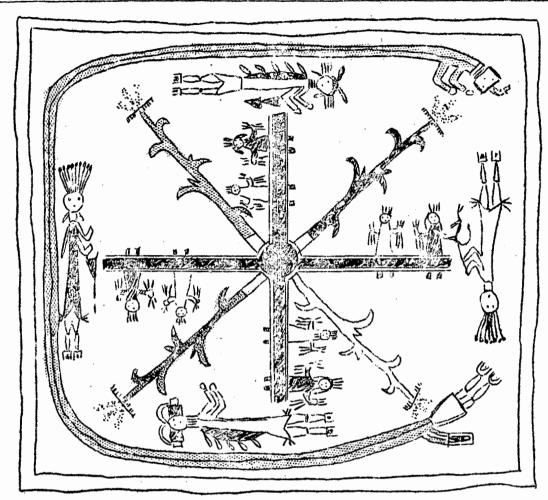
The day was warm, so we rode at a leisurely pace, halting at neon in the shade of some ccttonwoods for a bite of lunch. As we were in the act of burying the remains of our hasty meal, Cczy, accompanied by Mrs. McSparron and two guests, drove around a bend in the canyon and called to us that the ceremony was to start at one-thirty. So we mounted quickly and cantered through the deep sand for a distance of half a mile.

The hegan stood on a little rise of land about one hundred feet from the wash. We tied our horses to a fence and walked up to a small shelter where Cozy and his party were sitting in conversation with several Navajos. Indian women eyed us curiously, and I began to suffer a few qualms---fearful that we might be excluded, ultimately, as witnesses to what bid fair to be a very unusual ceremoney. The three young people from Pittsburgh were as anxious as I, and when Cozy finally emerged with the others and beckoned surreptitiously to us, we all heaved great sighs of relief!

An old quilt was hung at the door of the hogan to keep the wind from disturbing the completed sand painting, and there were shouts of indignation when a dog wandered too near this opening. The signal was given at last, and one by one we filed in.

The remains of a fire stood directly in front of the door way, and we were cautioned not to step on this, since the charcoal derived from the burned out coals had been used in the making of the sand painting. The sand painting, a glorious work of art, the many colors for which had been made by crushing colored rocks, covered the entire floor of the hogan, allowing us just room enough to squat crosslegged on the edge. Feathers on sticks were planted at intervals around the painting. The medicine man sat opposite the door; he was a wrinkled old fellow with a kindly, dark face, and in one hand he held a gourd on a stick. It was interesting to note that he wore wide, flowered trousers. These were adopted by the Navajo from the Spanish, and are now no longer used.

It took us a few moments to get settled, since most of the available space was occupied by Navajo men and women. When all was quiet, the medicine man began his chant, shaking the gourd vigorously, and accompanied, in low monotones, by a young Navajo brave who sat just behind him. Simultaneously, we head a wild cry from outside———"Wahwah-wah-wah-wah-wah-wahoooooooo!"——the quilt was pulled aside and the



"Silne'ole" sandpainting design from the Night Chant. Actual colors: red, yellow, green, black, orange, white, on tan ground. (After blanket figured in Amsden's "Navajo Weaving").

Coyote entered. He was quite tall and slender, and the entire upper part of his body, his arms and legs, were covered with a substance resembling white clay. A strip of velveteen cloth was wrapped around his waist to form a short skirt, and to this was tied the tail of a Box. Long colored streamers fell from one shoulder, and a Yei-bei-chi mask covered his face. He placed his hands on the east, south, west and north sections of the sand painting in turn and then picked up a feather which was lying beside a small, clay dish. This vessel contained a clear fluid into which he dipped the feather and, with short, quick movements of the wrist, he sprinkled the sand painting; the drops of fluid sparkled brilliantly in the light that streamed through the opening in the roof of the hogan.

When he had repeated this several times and had laid the feather down, a very pretty Navaje girl, of about eighteen, stood up and walked out into the center of the sand painting. She wore only a full, dull

#### NAVAJO SAND PAINTING (CONT).

skirt, the upper part of her body and her legs being bare. With the help of the coyote she sant down so that the east half of the painting stretched between her and the door, extended her legs straight out in front of her, and allowed her hands to lie limply in her lap; she wore no ornaments of any sort. Her manner was extremely listless, and we later learned that she suffers from epilepsy, and this sing was being held as a curative measure.

When she was ready, the Coyote picked up the shallow dish from which he had sprinkled the sand painting and, with the same wild cry of the coyote, brought it to her lips and she drank from it. This he repeated three times.

Then followed the evocation of the evil spirits which are believed to make the girl ill. The Coyote placed his hands, palms down, on a section of the sand painting, being careful not to touch the figures themselves. His hands were now covered with the "good medicine," and he grasped her right leg, beginning with the foot, and pressed it at intervals, emitting the cry; his voice mounted in crescendo, until he reached the thigh, when he flung his arms high above his head. This he did in turn to her left leg, both arms, her chest, and lastly her head, each time placing his hands on the sand painting before touching her, and always reaching a made crescendo as he flung his arms high. He touched her head after each contact with the other parts of her body, since the evil spirit presumably leaves the body by way of the head.

An Indian, who I learned was an uncle of the girl, occasionally directed the Coyote to place his hands in various sections of the sand painting, pointing, and speaking to him in low tenes. This he did because it was the first time this particular Indian had taken the part of the Coyote, and the uncle had seen the ceremony before. As a final invective directed against the evil spirit, the Coyote took the girl's head between his hands and called loudly, first in one ear and then in the other. He then dipped his hand in a little three-cornered bowl that was partially sunk in the very center of the sand painting, and daubed the girl with a black fluid on every exposed part of her body, even her hair. She did look badly in need of a bath, when, this concluded, she moved again to her place on the sidelimes.

The Coyote left the hogan and the medicine man arose. He began a chant, very similar to the one he had sung throughout the ceremony, and, with a coyote's claw, he erased the sand painting. A fine dust arose and filled the hogan with a golden haze as he ran the claw swiftly down each perfectly executed figure, and then knocked over the standing feathers. It was all done with amazing speed, since the song he sang and the erasure of the sand painting had to "come out even," and he was coughing and panting a little when he finished and sat down. I am free to confess that it was a great blow to watch the exquisite work of art being reduced to ordinary sand particles. Scarcely a trace

NAVAJO SAND PAINTING (CONT).

of the colors was left. Immediately, several young Navajos brought in a blanket and placed the sand in it, and carried it out of the hogan. Later I learned that they returned it to the spot from which it had been gathered.

As we moved out of the hogan, I glanced at the faces of my companions, and was not surprised to note expressions of awe and incredulity stamped on their features. There had been something so beautifully simple and faithful, yet utterly pagan, about the entire ceremony. These people believed without a shadow of doubt that the girl would be greatly benefited by this weird rite.

The next day, a new sand painting was made, and the same ceremony was performed, and on the day following, two Yei-bei-chi dancers danced in front of the girl's hogan. The medicine man's fee for these ceremonies was fifty dollars, which amount was paid him by the girl's parents. Other sings have been held over the girl in the past, in the hope of curing her, and if she continues ill, other sings undoubtedly will be held for her in the future.

We stood outside the hogan for a few minutes, thankful for the peace-ful setting in which we found ourselves—the canyon walls rising majestically around us, and a wonderful calm pervading our whole, small world. The medicine man thanked us for attending the sing, and his face broke into a thousand little wrinkles as he smiled at us.

Cozy told us then that we had seen a very rare ceremony, one which many of the Navajos themselves have never witnessed.

Still with the feeling that we had recently returned from a world of unreality, the three and I mounted our horses and rode thoughtfully back to Chin Lee.

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# INDIAN HOLY WEEK AT TUMACACORI

By Luis Gastellum

for a number of years I witnessed Indian celebrations in the Tumacaf cori Mission. Besides the scenes that I actually saw, I have acquired data for this article from those who sponsored these festivals in order to have a thorough understanding as to the reasons for holding these festivals and the reasons for holding them in Holy Week.

In the year 1929 the last of one of the most celebrated festivals of Indian customs was held in the Tumacacori Mission. The discontinuance of these festivals was brought about by the death of one of the last of the Opata Indians in the valley who carried the customs and traditions of

### INDIAN CELEBRATIONS AT TUMACACORI (CONT).

his ancestors. This Opata Indian was reported to be over a hundred years old. He seemed to have a great deal of faith in the Tumacacori Mission and seldom passed a day that he didn't visit the Mission.

For many years, possibly dating back for hundreds of years, the Indians held their annual Holy Week imitation of the assassination and resurrection of Christ, according to their belief. In later years, however, these festivals were carried on by Mexican people in the valley through the sponsorship of the old Opata Indian above mentioned. For many years, according to data gathered from people of Tubac, these celebrations were held both in the old Tubac Church and the Tumacacori Mission, but since the erection of the new church at Tubac, people were no longer allowed to use the church for their masqued festivals. Present day Catholics are strictly against these Indian customs and will not allow them to be held in active Catholic churches.

The Holy Week festivals began on Monday morning, as one of the army of men representing the rebels of Judas disguised. He was appointed by the Indian who sponsored the festivals and acted as First Captain of the men who would later be disguised. No one but he was allowed to disguise the first day. To distinguish him from the rest of the men, he wore a mask with a high headgear. He reamed the country as an announcement of the ferthcoming celebration.

On the second day, Tuesday, a second man, appointed by the First Captain was disguised. He was dressed somewhat like the first and acted as Second Captain. They both roamed the entire vicinity by themselves until Wednesday evening when anybody bould disguise.

By Thursday evening, there were usually as many as forty to fifty men disguised. After they were once disguised, they were not allowed to withdraw until the closing of the festivities at the end of the week.

Many took great pride in their dress and took weeks to prepare their dress and masks, while others dressed as ragged as they possibly could. Their masks were made of canvas cloth, card board, and sometimes of furns or skins of wild animals. To disguise their voice they used bamboo whistles——a piece of thin skin membrane between to small pieces of bamboo. They tried to cover every piece of their skin, for any little scar might have identified them.

Early each morning they left the Mission with a lunch basket to beg for food. Everyone was supposed to give them something, but the rules were that they were not supposed to eat anything until they returned to the Mission. While in the Mission, they could eat, run, wrestle, or do anything contrary to Catholic beliefs. While they were out collecting food, they always carried switches with them and did not hesitate in the least to use them on anyone who attempted to remove their masks.

#### INDIAN CELEBRATICNS AT TUMACACORI (CONT).

On Thursday evening at three o'cleck the masqued men get together and went through the imaginary assassination of Jesus. After these ceremonies, a statue of Jesus, representing the immortal Saint, was placed on the altar of the Mission and guarded by three or four of the disguised men, shifting every four hours, to see that none of the true Christians, who were ever on duty, tried to steal the statue from them.

The statue was usually stolen, for this was one of the features of the celebration. Organized parties of four or five men, who were not not disguised and who represented the true Christians, would try to steal the statue and hide it within a short distance of the Mission.

While on duty the disguised men were free to use their switches on the men who tried to steal the statue, but the offenders were supposed to use nothing but their hands and prefit by getting the guardians off guard. After once getting possession of the statue they usually got away with it, for they were so organized that they could pass the statue around until someone could get away with it. Even when only one man attempted to do the trick, he was usually successful. If the statue of Jesus was not found within twelve hours, by those who were on guard at the time it was stolen, they were punished by being tied for a number of hours and beaten by the Captains.

On Saturday morning before eight o'clock the imitation of the resurrection of Jesus took place. The resurrection of Christ caused all the supporters of Judas to change their minds against him, and they promised that henceforth they would believe in the Lord and support him. But before the Catholics would accept them as true Christians, they had to ask forgiveness, receive punishment for the wrong they had done during the sacred days, and be baptized.

In the meantime the Tumacacori Mission front yard was prepared for the ceremonies which took place in forgiving the offenders of Christ. A ragged-dressed, man-like object was used to represent Judas. It was placed on a big cross directly in front of the entrance to the Mission. Arches of green willow and cottonwood branches were placed around the yard of the Mission, where people would later march through.

On Saturday morning all, or most of the people of the community, attended the ceremonies. The ceremonies began with the burning of Judas. After Judas was cremated, praying ceremonies in the yard of the Mission through the arches of green willow and cottonwood followed. Children between the ages of eight and twelve, dressed in black and w white and carrying lighted candles and a cross, lead the parade. Women and men who led the praying and singing ceremonies followed. The disguised men and the rest of the participants followed behind. After concluding this program, the disguised men were beaten.

### INDIAN CELEBRATIONS AT TUMACACORI (CCNT).

Boyes between the ages of eight and fifteen with one switch on each hand were placed on both sides of the hallway inside the Mission. The number of boys on each side was usually ten to fifteen, standing about four feet apart in order to allow enough space so that they could get a good swing with their switches. The masqued men then lined up in front of the Mission, were inspected to see that they carried no heavy clothing on their backs, and then marched in, with their hands up stretched, by the right side of the hallway, turning by the front altar, and returning by the left side of the hallway. They marched back and forth four times, while the boys would beat them as hard as they could.

At the end of the last round, they lifted their masks, and those who could get one of the boys would do so and take him to the altar, where they knelt and asked forgiveness to the Lord for their erroneous belief in him. The child was considered a godson to the man who picked him up after these ceremonies. This was the punishment they received for having violated the Catholic rules during Holy Week, and was one of the first steps in their forgiveness.

On Saturday night they prayed a rosary and usually went to confession. These exercies lasted until midnight. On Easter Sunday they went to communion and were baptized. This, the Indians believed, was sufficient sacrifice to erase all evils from the souls of the rebels.

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# EL MORRO MUSEUM

By Evon Z. Vogt

can be changed but in the main I think the line of display showing those features would be most absorbing to the visitor.

I had in mind getting a letter of introduction from Director Cammerer to the Director of their Museum and by such an approach perhaps we could get acquainted and after plenty of time to get them interested, might be able to get some fine material from them. I expect to be working some next winter again in Mexico and will sooner or later get to the Capitol.

Would like to have your ideas.

- 1. Our Museum should be predominantly of the Spanish Colonial Nature.
- 2. Any old printed records of government, church or history of 1500 to 1800, relaciones of travelers tales, maps, orders, deeds or contracts printed in the old Spanish would be most interesting.

### EL MORRO MUSEUM SUGGESTIONS (CONT).

- 3. The guns, armor, saddles, bridles, blankets, clothing, spurs, tools, dishes and even an old solid wheel carreta of those years would be greatly studied by all.
- 4. A map of the Southwest showing Mexico with the courses followed by the various expeditions of conquistadores would enable the visitor to visualize the part and the records left on our Monument.
- 5. Three or four dioramas set into the walls of the building showing diminutive but life-like scenes of (1) Early Indian life perhaps both pueblo and Navajo. (2) Spanish expedition approaching El Morro. (3) Onate carving his inscription or De Vargas surrounding by his soldiers, some following the work closely, others more interested in finishing off a roasted deer rib or saddling his horse.
- 6. An archaeological exhibit comprehensive enough to cover the values of this Monument but not nearly as extensive as that at Chaco Canyon or Mesa Verde.

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# WHY TOPOGRAPHIC MAPS?

By Andrew E. Clark and J. H. Tovrea

-, o the average person a topographical map is a mysterious maze of lines which engineers look at long and thoughtfully pretending to gather knowledge therefrom. Mr. Average Person marvels at the engineer's ability to decipher this puzzle and concludes that he, the engineer, is a pretty smart hombre.

Then there is a non-technical group of above average people who by various ways and means have learned to untangle the seeming network of contour lines which appear on the topographical map. This group by stretching the imagination a bit can vaguely visualize mountains, valleys, streams, etc. It is this non-technical group which is somewhat confused as to the actual value of the topographical map. Having graduated from the hero worshiping average class they begin to wonder if perhaps the engineer isn't spoofing the public on this topography business. This group usually asks: "Why topographical maps? Why spend money and time shooting topog when there is a road to be built or a campground or trail to construct? Why not just go out and build these things instead of chasing rodmen all over the hills finding contours which in turn must be securely penned up within border lines by draftsmen? Why not quit fooling around with fancy maps which do nothing but show the hills, valleys, streams, etc., which can be seen just as well by the engineer locating the read if you would just sic him on it?"

WHY TOPOGRAPHICAL MAPS? (CONT).

Now that really is an intelligent question even though it might not seem so to the engineer at first glance. It can be compared to similar questions on different operations which some engineers might ask such as: Why make a budget—why not just go out and spend the money—there is only so much to spend anyway? He wouldn't ask this one but some people do: Why draw plans for a building—why not just go out and build it? He might ask his wife, though I doubt it, "Why bother with a recipe for that cake—you have all of the stuff here to make one—why not just keep mixing them up until you get what you want?" "Why keep books on a business—you have the money you made—what more do you want?"

Now let's try to answer this question by comparing the engineer and his task of locating a road to a task that almost every married man encounters off and on throughout his life.

Did you ever have the "Honorary Custodian who gets all of the Pay" make you move furniture all over the living room until every possible arrangement had been studied and you, exhausted, were at the point of going home to father? If you are married and haven't had this experience you either are just married or haven't got any furniture or living room. If the latter is the case you are probably an engineer. Your wife in having you move the furniture around was seeking the best arrangement and she has made you the locating engineer even though you think the dray horse would be a more fitting name. But she has made you do the job without a topographical map so that all you could do was to use the trail and error method so perhaps you were the dray horse after all.

Now suppose you could have had a little map or drawing to scale of the living room together with little cutouts of the furniture to be arranged therein. You would sit down with the drawing before you on the dining room table and move the cutouts here and there until the best solution of the problem was arrived at. Lets also suppose that at the same time an engineer sits down with a topographical map on which he has to locate a road.

On your drawing you have all of the features of the living room, doors, windows, projections and alcoves. The engineer's drawing has all the features of an area of land, trees, rocks, buildings, railroads, telephone lines, canyons, mountains and streams.

You study your map and observe that the divan can't go here on account of a window or door. The engineer looks at his map and notes that the road can't go there on account of a fine group of trees or a building.

"Let's see," you muse, ---"the piano won't fit in this alcove where Mary wants it but it will go in this corner which is her second choice. Boy, am I glad I found that out without having to push it all over the joint."

WHY TOPOGRAPHICAL MAPS? (CONT).

Jumping back to our engineer we find him saying: "The road can't go up that canyon where the Boss wants it because the grade would be too steep but this canyon can be used and he said it would be 0. K. also. Boy, am I glad I found that out without having to run a line all over the country."

Now you see, Mary and the Boss, or we might as well say the two bosses, have a job he wants done and both jobs can be done two ways. One way is by trial and error. If you think you would be classed a sissy by playing with cutouts this dray horse method is recommended as it involves moving furniture all over the house until the proper arrangement is found. For the engineer this method would involve running survey lines all over the country until the best road location was found.

The second method is the topographical map of the area involved, be it the living room or Bandelier National Monument. By using this method you and Mary find out exactly what is to be done before you do it and the furniture is located only once and moved only once to its proper place with minor adjustments. We and the Boss do the same thing with our topographical map of Bandelier National Monument. After a study of the map our road can be located in its proper place in the field subject also to minor adjustments.

Then, too, we must remember that with the map Mary and the Boss could solve their individual problems if their living room and road were in Arizona and they were in Africa. When you are the boss you can't be in all of the places that your problems are but these places can be brought to you in the form of topographical maps.

So we must conclude that the Topographical map is almost indispensable to not only the engineer but also to all supervisory personnel connected with construction. The landscape architect relies on these maps in making his studies for appropriate building sites, trail locations, and camp ground layouts.

It is quite evident that the day of mapping large areas of several hundred square miles is almost a thing of the past as far as the plane-table is concerned. This type of mapping is now being accomplished at a much lower cost by aerial surveys. For comparatively smaller areas, however, where more detail is required the plane-table method is still the best.

It is our aim in making topographical maps of the monuments to include enough area and to show enough detail to take care of future needs. If further development is desired on a monument at some future date it will not be necessary to send in a field party from some distant point to get the topography of some three or four acres.

## PARK FORESTRY

Extract from Feresty Circular No. 2, by Forester Fred H. Arnold

orestry is the science dedicated to the protection and provident treatment of the forest for the continuous production of its products and uses, both tangible and intangible, for the benefit of manwhind.

The production of the tangible products of the forest such as saw timber, pulpwood and naval stores, is the concern of the commercial phase of forestry.

The protection and preservation of the forest in, or its restoration to a natural state for its asthetic, recreational, inspirational and educational benefits is the province of park or recreational forestry. Park forestry also includes special preservation and repair treatment of important individual trees.

The objectives of the two fields are essentially diverse and may often conflict, though in some cases they have been made to go hand in hand. It is essential that the distinction between them be recognized and understood fully.

Proper park forestry does not sanction the blind pursuit of forestry practices or systems merely for the sake of practicing forestry or of having a system. A definite purposeful objective must be the motivating force that initiates and guides the progress of all forestry projects. A thorough analysis of the problem and the preparation of a working plan is an essential basic preliminary step that should precede all field work. Proper project planning is as imperative in forestry work as it is in all other types of projects.

When dealing with vegetation the principle must be recognized and fully considered that conditions in the forest are never constant, but constantly changing. Natural forces are continually at work producing decay and death as well as reproduction and growth. Conditions that are created in the forest today will not remain static but will change as time goes on. This fact has a most important bearing upon the practicability of certain operations from the maintenance standpoint. The value of present work in many instances depends largely upon the extent to which its effects can be maintained in the future. Repeated reworking at regular intervals may be required if the benefits of the initial accomplishment are to be preserved. If conditions will be allowed to revert quickly to those or to worse than those which obtained before any work was done, the value of the initial work is questionable. An important consideration is to prevent burdening the future with a heavy maintenance liability, for projects that produce highly temporary results require continued upkeep.

PARK FORESTRY (CONT).

Above all, park forestry aims to protect and preserve natuarl forest conditions or to foster their return where they have been destroyed, and to prevent the introduction of artificiality into the woods. This is the park forester's contribution to the development and management of the park. Through a mutually sympathetic and a cooperative attitude this objective and the objectives of wildlife, aesthetics, history, and all others must be coordinated into a unified effort for the successful accomplishment of the whole. All interests must center upon that singleness of purpose which is for the greatest and most lasting good of the park and that to which it is dedicated.

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# TALUS UNIT MON, CHETRO KETL

By Margaret S. Woods

Another season of excavation has drawn to a close in Chaco Canyon, and the Talus Village presents new crop of problems as well as a certain number of satisfactory results. Our finds have not been lacking, although they have been less sensational than those of last year.

Tallus Unit #1 is a small house site northwest of Chetro Ketl and close to the North mesa wall of Chaco Canyon. In plan it presents a general T plan; its West and East wings are continious and parallel to the Cliff, and the central wing with its prominent "buttress" wall projecting toward the south. To date the excavations have indicated that it is a Pueblo III house site.

The first two seasons of excavation were spent mainly in clearing debris from the East wing, and from the Eastern side of the "buttress." This summer we have concentrated on the rooms around the "buttress."

We cleared enough debris from the top of the mound behind the "buttress" to trace a long wall from the central wing well out toward the west end of the village. Whether this really represents the back wall or not we must dig farther before we can be sure.

At the south and of the central wing we cleared two or three small rooms and a small Kiva (D). The letter is an especially fine example of a small Kiva. It is about fifteen feet in diameter with a single bench incircling the wall inside except at the south. A "ventilator" Shaft enters under the south wall, with the vertical shaft opening to the outside and the horizontal to the inside directly south of a well burned fire pit.

The adobe floor originally covered all of the horizontal part of the shaft leaving only a square vent close to the fire pit, which was REPORT ON TALUS UNIT #1 (CONT).

apparently covered with a fine thin metate. Our greatest delight in Kiva D was derived from the remarkably well preserved plaster on the top and sides of the bench and continuing a foot or more up the Kiva wall. We counted at least ten layers of fine white gypsum plaster, paper thin, and eight or nine more layers of sandy plaster between them.

At the very end of the season a slab fell out of its place in the stone flooring of the "ventilator" shaft, revealing a hollow below, and another wall in line with the upper Kiva wall, continuing deman into the debris. We cannot know yet what this is; quite possible it is part of another Kiva which was filled in and used as a foundation for the later Kiva D.

Such construction is common in the Caryon, witness the East tower Kiva in Chetro Ketl, with its four or five identifiable Kivas built irregularly one above the other. At all events that must be left for the future to decide. Room #10, enclosing Kiva D, is the room in which the fine burial of last season was found at an upper level, above the topmost levels of the Kiva wall.

At the same level in a nearby section of this room we discovered a fine olla of corrugated ware of Characteristic Chaco type. It stood about 15 inches high and measured close to 3 feet in circumference. A heavy stone disc served as a lid, and was largely responsible for the damage done to the rim and for a large crack down one side.

The western slope of the "buttress" offered a new problem. A circular wall suggested another Kiva, and we named it Kiva E, but as we cleared further down into it we found it to be a circular room built over the eastern portion of a rectangular room of two stories and probably more. None of the characteristic features of a Kiva were present except the circular wall. Bench, slpapu, fire pit and ventilator were entirely lacking. The eastern end wall of the rectangular room had been partly torn down, and part of the north wall, and the circular wall built over them, utilizing the lower part of the east wall for a bench or platform.

A number of bone Awls, metates and other artifacts, and a quantity of animal bones, many large enough to be of Elk or antelope, or other animals of considerable size were found there. It has been suggested quite plausibly that this may have been a sort of club room, not intended for ceremonial use, but as a gathering place where the man might do their handiwork——weaving perhaps or painting or making beads, or whatever they had to do. That it was not an ordinary Kiva was quite evident.

The "buttress" itself remains an unsolved problem; it stands at least two stories high, and the upper portion is probably of cruder masonary than the type 2 masonary below. It must be admitted, however, that the weathering of the exposed masonry tends to make it appear cruder than it actually is. A doorway leads into the lower portion in

### REPORT ON TALUS UNIT #1 (CONT).

the south wall, from room #10. When we cleared this out, hoping eagerly to find a roofed room within the buttress, we found it filled to the top with heavy rocks and a quantity of adobe, evidently intended to support the upper structure. A neat little passage runs along the west wall at the middle level, divided into two parts by a short wall near the center, and once roofed over.

So far no explanation of the purpose of the buttress has presented itself except that it might have served as a sort of watch tower. It commands an excellent view along the canyon in both directions. A similar wall has been noted further down the canyon against the north mesa a short distance west of Pueblo Bonito; this also commands an unhindered view of the Canyon to east and west, and southward through the gap, and an Indian stairway ascends the mesa directly behind it.

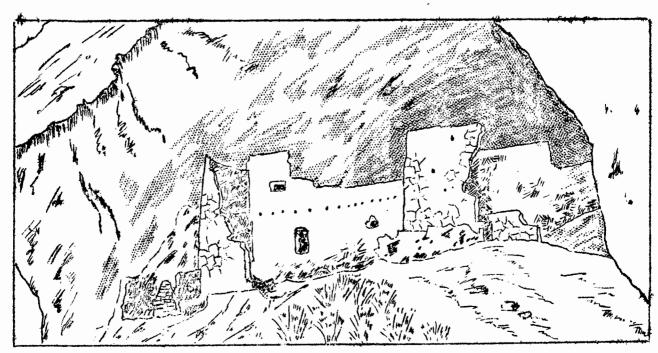
I have said that the finds of this season were less sensational than those of 1934, but they are spectacular enough, especially as compared to the usual finds of Chetro Ketl. In proportion I believe they considerably exceed the numbers of Chetro Ketl finds.

Eleven arrow-points, some of which are of exceptionally fine handi-work, a large number of bone awls, fragments of two stone rings, (quite possibly finger rings) and miscellaneous Manos, Metates and other stone tools roughly describe the list.

The pottery appears to be of the characteristic Chaco types, possibly with importations from Kayenta, Mesa Verde, the Little Colorado area, etc. Corrugated ware was found in large quantities, perhaps as much as 50% of the total number of sherds belonging to this type.

We were fortunate in securing a small fragment of finely weven cotton textile; it was light brown in color, considerably stained, and ravelled on all four sides. After it had been brushed free from loose dirt and carefully washed in cool running water, a design was clearly visible. Two dull stripes, each consisting of seven small ones ran the length of the fragment. Other tiny bits of cotton textile were found elsewhere in the Talus village but of coarse weave, and too small to identify any design on them.

The Talus unit is far from complete as yet. A test shaft sunk in what appears to be a Plaza east of the "buttress" shows other walls at a depth of six feet or more, and the west wing has not been touched. We are looking forward to at least one more year and perhaps two years of further excavation, and hope that our results will continue to prove as satisfactory as they have so far.



Sketch of Lower Ruin of Tonto National Monument, as of about 1910.

# TONTO NATIONAL MONUMENT

In 1909 President Roosevelt created the Tonto National Monument, as area of 640 acres five miles east of the Roosevelt Dam.

This reservation contains four prehistoric cliff dwellings and several surface houses, all of which were occupied during the same general period.

One reaches the Monument from either Globe or Phoenix by way of the Apache Trail. An entrance road runs one mile from the highway into a canyon to the Headquarters Area. From here the lower cliff dwelling may be seen.

A half mile trail which climbs an elevation of 325 feet leads to this dwelling, and, from here, another half mile trail with an additional rise of 300 feet climbs to the second major ruin of the Monument. The other house remains are not important enough to warrant trail construction.

During the early part of the fourteenth century the Pueblo Indians of the Little Colorado River valley were seemingly subjected to a series of raids by nomadic Indians or went through a period of stress due to other influences which we haven't recognized. Large groups of the Pueblos seem to have become so discouraged with their lot that they abandoned their villages and drifted south. These migrating bands wandered principally into the valleys of the Verde, Tonto and Salt Rivers and established new homes. A few colonies continued south until they emerged

TONTO NATIONAL MONUMENT (CONT).

from the mountains and settled in the lower Salt and middle Gila valleys. In order to distinguish this phase of Pueblo culture the term Salado was coined, being a contraction of Colorado and Salt.

The cliff dwellings of the Tonto National Monument were built during this period. As the Pueblos were farmers they built in easily fortified positions near the rivers, and in consequence, there are many prehistoric sites of this period on the hills bordering the bottom lands of the river and, wherever suitable cliff shelters were available, cliff dwellings were built in the mountains. The latter are well protected from the elements, hence walls are still intact and normally perishable materials well preserved, while the adobe and roofing materials of the surface houses have been destroyed so that only low mounds and the outline of walls remain.

The Salado people raised their maize, beans, squash, and cotton in the river bottoms. Diversion dams (probably of poles and brush) were thrown across the stream and canals dug to carry the water to the fields. Up to the time the Roosevelt Reservoir was created many of these canals were still visible in the valley. In addition to the cultivated food the Indians gathered nuts fruits, and seeds in season and hunted game animals. The principal native vegetable foods are pinyon, walnut and jojoba nuts, cactus fruits, barberries, elder berries and Indian wheat.

As wealth in those prehistoric days was estimated in terms of food, these Indians were rich; and in the manner of all men who acquire wealth a means of conserving it was sought. The logical solution was a combined dwelling and granary which could easily be protected, and the cliff shelters of the mountains of the region are the perfect answers to the problem. Houses were built in the shelters, the cliff itself was utilized for back and side walls, and a solid wall constructed across the mouth of the shelter with usually only a single entrance.

The lower cliff dwelling, seen from the headquarters area, is an excellent example of this type construction. A two story house of twenty-nine rooms was built into the cliff shelter. The front wall was blank with the exception of several port holes for defensive purposes and the single entrance at the southwest end of the building could be reached only by a twenty-foot type construction. Three faces of the house were automatically eliminated as points of attack and the cactus-covered hillside in front would offer little cover and plenty of discouragement to an enemy.

The upper dwelling, largest on the monument, is much more irregular in construction than the lower. Three major periods of building are to be seen in the walls of this structure. No plan was followed and the resultant dwelling is a rather hit-and-miss affair insofar as shape and form are concerned. Defense was achieved however, by means

TONTO NATIONAL MONUMENT (CONT).

of the building's greater elevation and the very steep hillside below it. The outer walls have deteriorated to such an extent that entrances are not discernible at present, this house very likely had more than a single entrance. The upper dwelling originally stood four stories high and contained sixty or sixty-five rooms.

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#### Flora

The more prominent plants on the monument are the saguaro or giant cactus, several varieties of prickly pear and cholla, palo verde, mesquite and mountain laurel. In the canyons, near water, sycamore, walnut, hackberry and elder are common, Smaller shrubs are barberry, a shrub honeysuckle and the very common jojoba.

For the greater part of the year hillsides in this region have a rather sere appearance but after a rain the evergreens brighten up and the resurrection plant makes a brilliant green carpet over what previously had been bare patches. After the winter rains and until warm weather sets in, that is from February until May, this region is gay with the color of flowering annuals.

Early in the season the California poppy is most abundant but gives way to the Lupine which forms a solid mantle of blue over large areas. During this period of the year as many as thirty-five different species of floers may be seen along the trail to the lower ruin.

#### Fauna

The visitor to the Tonto cliff dwellings rarely sees any of the large animals of the district; nevertheless, at close hand are coyote, javelina (a form of Peccary), Mexican mule deer, black bear and cougar. The only mammal seen frequently is the Colorado rock squirrel. To make up for the lack of mammals are large numbers of birds, ranging in size from the tiny Costa Humming Bird to the Turkey Vulture.

Seasonal variation of bird life is very slight as most of the species spend the entire year in the district, although a few come down from the higher mountains for the winter. During the fall and spring months large numbers of migratory birds stop for a day or two at the springs in order to rest a bit, then pass on to their winter or nesting grounds.

Birds which are seen most frequently are the Cactus Wren, Canyon Wren, Gila Woodpecker, Ash-throated Flycatcher, Arkansas Goldfinch, Gambel Quail, American Raven and Western Red-tailed Hawk.

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# WANDERINGS IN MONTEZUMA COUNTY, COLORADO

By Erik Reed, Roving Ranger

1. There is a group of interesting sites at the head of Ruin Canyon, Colorado, (a tributary of Cross Canyon in the eastern drainage of Montezuma Creek; not the Ruin Canyon in which one group of the Hovenweep National Monument is located), of which one has been excavated by Dr. Paul Martin.

The cleared site is a small pueblo about 15' by 75' in quite passable condition on the west rim of the canyon not far below its head.

Southwestward (down canyon) from this there are several unexcavated sites close together on the west rim of the canyon and on the canyon floor west of the arroyo. Two of these are quite large. All are badly eroded but only slightly potted.

On down Ruin Canyon there are numerous scattered small sites. None of these strike me as sufficiently large, unusualor especially important to necessitate the creation of a reservation or monument, though it would be well to somehow protect the group at the head of Ruin Canyon from vandalism. If the Lowry ruin were by chance to be made a National Monument these could be included.

2. There is an abundance of sites, mainly small and in poor shape, in the upper Hovenweep and its tributary side canyons. Worthy of particular mention are: The large site beside a draw just south of the Hansbury property, which is twelve miles by road from Ackmen; the large site on the south slope of Hovenweep Canyon beside the Cooper house, pretty well torn to pieces; the standing tower in the canyon floor about two or three miles south of the latter on the property of Dr. R. W. King.

All other sites close by seen (and those heard of) are ordinary smallish pueblos in not very good condition. There are none, certainly, justifying creation of a reserve monument or other especial attention.

Risley Canyon, Ligleman Canyon, and Piel Canyon, a little further down the Hovenweep, are reported to contain especially large or especially interesting and well-preserved structures; these will bear looking into.

3. The Goodman Lake "reservation"---Section 4 of Township 36, Range 17, as far as I can discover, which has never been opened to homesteading---contains one tremendous ruin, at Juarez Springs. Otherwise the sites in and near this section are ordinary unit-type pueblos, except for a large depression near the center of the section---possibly a large kiva.

### WANDERINGS IN MONTEZUMA COUNTY, COLORADO (CONT).

The Juarez Springs ruin is an unusually extensive pueblo surrounding the head of the draw in which the spring is located, a minor tributary of Goodman Canyon. It is of course pretty well shot, a huge rockpile merely with few standing walls, but would certainly be worth excavating and preserving. There has been very little digging in it. The Juarez Springs ruin certainly should be brought under the control of the Park Service.

Goodman Lake, by the way, is a pretty poor imitation of a small pond.

4. There are several sites at and near the head of Sand Creek Canyon, which is a few miles west of Goodman Lake and has been referred to previously. The open sites on the flats east and north of Sand Creek Canyon merit no special consideration; the excavated site at the head of Sand Creek proper similarly——it is an interesting small pueblo, but there are thousands like it.

The ruin at the head of the first draw below the canyon head on the northwest side, however, is a horse of a different coloratura. It is almost as extensive as the Juarez Springs ruin; of the same general type exactly, it stands two stories high at least, in a few places, as does the Juarez Springs site. This draw and its spring are unnamed; are evidently in the NE  $\frac{1}{4}$  of Section 12, T. 36, R. 18 (on Government land).

5. Averaging all reports, the sites at Moki Lake do not amount to much and are hardly worth visiting; the same probably applies to West Rock Creek and middle and lower Goodman Canyon---many small sites.

### DAILY DUDE DECLAMATIONS

By Alfred Peterson, Ranger at El Morro "This is some Rock. How high is it?"

Why doesn't the government do something about these roads?"--since the government is blamed for everything from the depression to
fallen arches.

"Don't you get lonesome away out here alone?"---with from one to six cars parked near.

"Do you really drink this water?"---when looking at the famous cove.

"Oh! Look at the fish---they're catfish."---when they see the 'water dogs" in said cove.

"Where is Coronado's inscription?"---and sometimes want to argue because they read somewhere that there is one.

### CORRECTION

An error appeared in the July report relative to the derivation of the name for Tonto National Monument. The article in question stated that the area was name 'after the Tonto Apaches', and that Tonto is the Spanish word for Fool. Only the last part of the statement was correct.

Early settlers in south central Arizona noticed long spur of the Mogollon Rim which gave the impression that it might be the true divide. This was named the Tonto, or false, rim and in turn gave it's name to a large section of country. Below the rim are found Tonto Basin, the creek of that name, a National Forest and a Monument. The Tonto Apaches are a band of the Western Apaches living near the Tonto Rim and are not a group of Indians with a low I.Q.

Charlie Steen

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Just as we go to press, Headquarters has received a shipment from the Field Division of Education of 2,000 metal standards to be used in affixing botanical and other labels along our Monument trails.

The design was worked out by the Berkeley Office after we had made the order due to a suggestion of Custodian Earl Jackson at Bandelier. They seem to be very satisfactory, from trials we have made here at Headquarters.

The standards come in different sizes for the various-sized labels, so when you make your orders to us be sure to stipulate the various sizes of labels you have, and how many you wish of each.

We have also received from Berkeley 650 excellent cactus labels. If you have any of the following species of cacti which you wish to label, send in your orders:

Lophocereus schottii
Ferocactus wizlizeni
Opuntia bigelovii
"laevis
"hystricina
basilaris
"chlorotica
delicata
"engelmanni
"canada
"fragilis

Echinocereus polyacanthus Echinocereus engelmanni Opuntia polyacantha

- " · discata
- " erinacea
- " acanthocarpa
- " echinocarpa
- " vivipara
- " leptocaulis
- " clavata
- " versicolor

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## RUMINATIONS

In going over this report as it has been coming out of the 'hay baler', which is our affectionate name for the new mimeograph, I am impressed with the amount of valuable material we have put out in this Supplement which is mighty well worthy of preservation. Jimmie and Sallie have done a good job on the Wupatki Petroglyphs and point out some interesting similarities. By the way, they cut their own stencils on that article.

Betty Budlong, who, of course, is the wife of Custodian Robert R. Budlong, of Canyon de Chelly National Monument, gives a most interesting description of a rare ceremony, not, I believe, elsewhere described in southwestern literature.

Luis Gastellum, who is temporarily filling a clerical position here at headquarters, was born and raised at Tubac, a few miles from the Tumacacori National Monument and is not writing from hearsay evidence or something he has scratched out of books in his description of the ceremony at Tumacacori. As a boy he actually went through that ceremony. The subject came up one night out in the 'Bull Pen', which is the circle of chairs out in our back yard, and I asked Luis why he couldn't give us this story of it. The result is well worth keeping for future generations to read.

Who could better start the discussions of an El Morro Museum than Evon Vogt who has been Custodian at that Monument so many years? This is only the beginning of the discussions of this particular museum and Mr. Vogt is leading off with some basic ideas. More will follow in future editions of the Supplement.

Andy.and Tov. come in with a pretty pertinent discussion on a subject which comes to the front once in a while in our District. While they touch the question lightly as it were, they are both experts on the subject. I asked the boys for this article because I occasionally have heard this question raised among our men who think topography maps are, to say the least, not very essential.

The report by Miss Margaret S. Woods, who was the leader of the party working on Talus Unit No. 1, Chetro Ketl, in the Chaco Canyon National Monument, during this season, is another case where we are not getting second hand evidence. We are very glad to be able to put this report into the files of so many Institutions and field men as are on our mailing list so soon after the work has been done.

The short article on Tonto National Monument is filed here for future reference and a separate of it will be used for distribution to visitors at the Monument itself.

RUMINATIONS (CONT).

And so we drop another edition of the Monthly Report and Supplement into the waiting mail bags and turn back to a desk well loaded with September problems. History? Sure we like to read it, but it is more fun to make it.

Cordially, Just