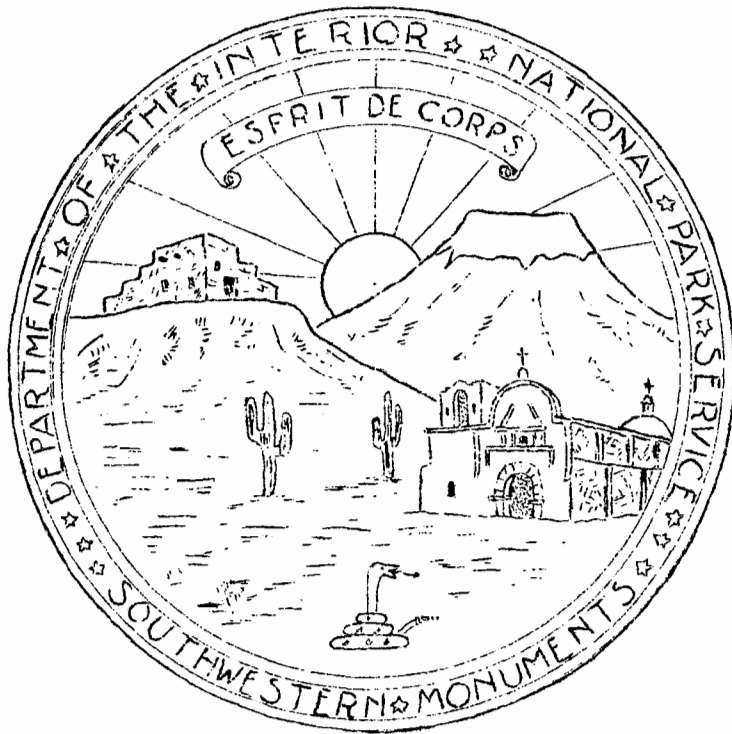


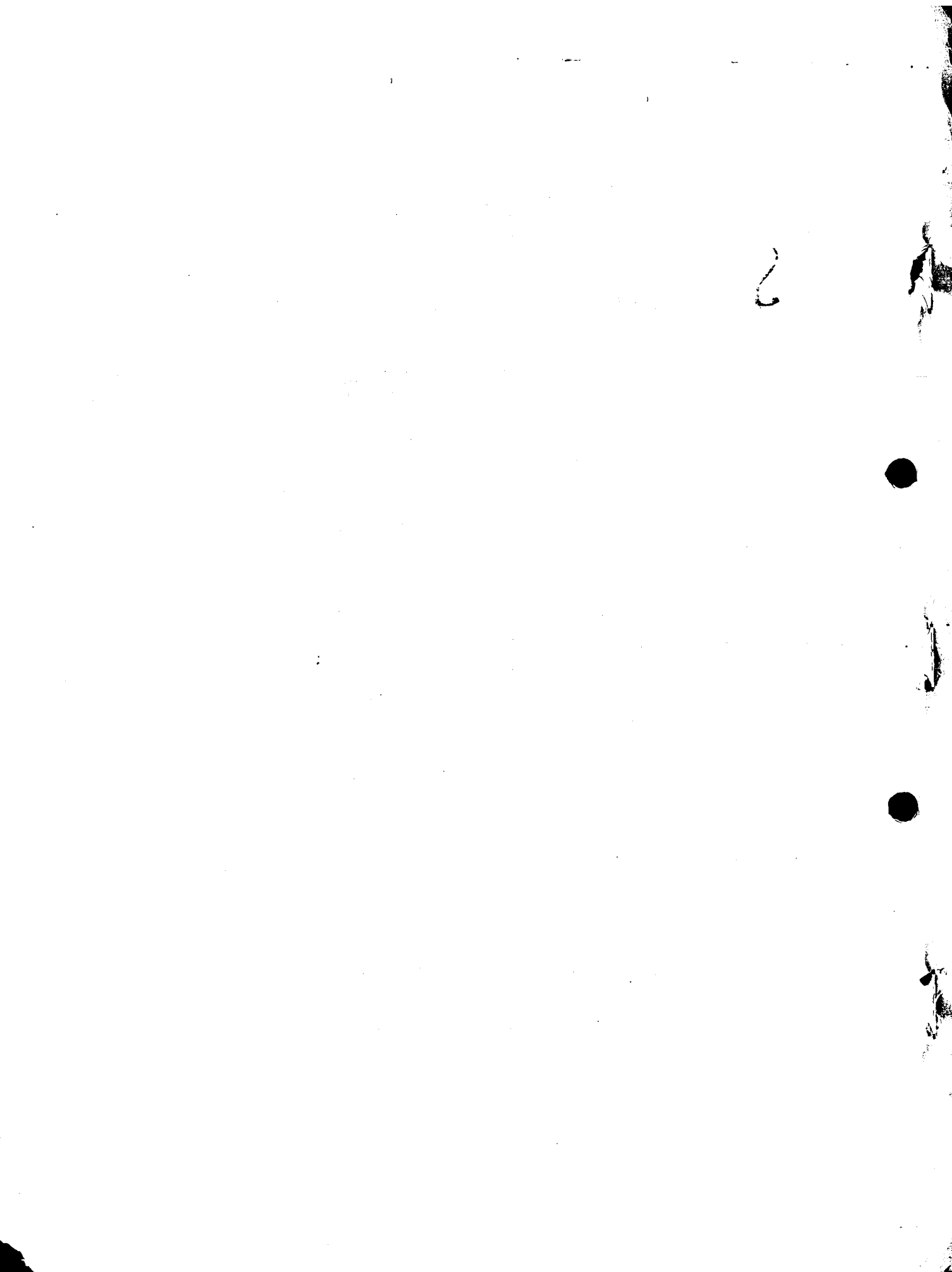
SOUTHWESTERN MONUMENTS

MONTHLY REPORT

MARCH 1935.



DEPARTMENT OF THE INTERIOR
NATIONAL PARK
SERVICE



S O U T H W E S T E R N M O N U M E N T S

R E P O R T F O R M A R C H

I N D E X

SOUTHWESTERN MONUMENTS GENERAL

Weather and Travel - - - - - 109
Field Trips - - - - - 109
Construction - - - - - 109
E.C.W. Activities - - - - - 110
Personnel - - - - - 110
Visiting Park Service Officials 110

REPORTS FROM THE MEN IN THE FIELD

Aztec - - - - -	132	Natural Bridges - - -	119
Bandelier - - - - -	130	Navajo - - - - -	111
Bandelier E.C.W. - - -	138	Pipe Spring - - - -	124
Canyon de Chelly - - -	111	Saguaro - - - - -	113
Casa Grande - - - - -	136	Sunset Crater - - -	135
Chiricahua E.C.W. - - -	126	Tonto - - - - -	131
El Morro - - - - -	115	Tumacacori - - - -	123
Engineering Report	138	Tumacacori FERA - - -	123
Chaco Canyon - - - - -	120	Walnut Canyon - - -	136
Gran Quivera - - - - -	114	Wupatki - - - - -	133
Montezuma Castle - - -	128	White Sands - - - -	125

The Supplement

Uniform Changes, by Dale S. King - - - - - 142
Museum Studies at Casa Grande, Louis R. Caywood 146
Preservation of our Ruins in the Southwest - - - 151
Educational Activities - - - - - 153
Nature Notes at Casa Grande - - - - - 155
How the Monuments get Their Money, Hugh Miller - 156
A Visit to the Gila Cliff Ruins. G. H. Gordon - - 159
Sipapu Cavern, by G. H. Gordon - - - - - 161

SOUTHWESTERN MONUMENTS PERSONNEL

HEADQUARTERS Southwestern Monuments, Coolidge, Arizona. Frank Pinkley, Superintendent. Robert H. Rose, Acting Assistant Superintendent. Walter G. Attwell, Associate Engineer. Dale S. King, Junior Park Naturalist. Hugh M. Miller, Chief Clerk. Robert Cole, E.C.W. clerk.

GENERAL FIELD MEN: Harry Langley, Assistant Landscape Architect. Charles A. Richey, Junior Landscape Architect. J.B. Hamilton, Assistant Engineer.

FIELD STATIONS

1. Arches---Moab, Utah. J.J. Turnbow, Custodian.
2. Aztec Ruins---Aztec, New Mexico. Johnwill Faris, Custodian.
3. Bandelier---Box 669, Santa Fe, New Mexico. Earl Jackson, Custodian.
4. Canyon de Chelly---Chin Lee, Arizona. Robert Budlong, Custodian.
5. Capulin Mountain---Capulin, New Mexico. Homer J. Farr, Custodian.
6. Casa Grande---Coolidge, Arizona. Hilding F. Palmer, Custodian.
Louis R. Caywood, Park Ranger.
7. Chaco Canyon---Crownpoint, New Mexico. Thomas C. Miller, Custodian.
8. Chiricahua---No Custodian.
9. El Morro---Ramah, New Mexico. E.Z. Vogt, Custodian.
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. Nevajo---Kayenta, Arizona. John Wetherill, Custodian.
16. Pipe Spring---Moccasin, Arizona. Leonard Heaton, Acting Custodian.
17. Rainbow Bridge---No Custodian.
18. Saguaro---Rt. 2, Box 654, Tucson, Arizona. Charles Powell, Custodian.
19. Sunset Crater---Flagstaff, Arizona. No custodian.
20. Tonto Cliff Ruins---Roosevelt, Arizona. Charles R. Steen in charge.
21. Tumacacori---Box 2225, Tucson, Arizona. George L. Boundey, Custodian.
Martin E. Evanstad, Park Ranger.
22. Walnut Canyon---Flagstaff, Arizona, J.W. Brewer in charge.
23. White Sands---Alamogordo, New Mexico. Tom Charles, Custodian.
24. Wupatki---Flagstaff, Arizona. J.W. Brewer in charge.
25. Yucca House---Cortez, Colorado. No custodian.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
SOUTHWESTERN MONUMENTS

Coolidge, Arizona
March 1, 1935

The Director
National Park Service
Washington, D. C.

Dear Mr. Director:

The first two pages of this report consist of a condensed resume of activities over the whole Southwestern district.

WEATHER AND TRAVEL

Weather taken generally for the Southwest was bad in New Mexico, northern Arizona and southern Utah with visitor travel in direct ratio to weather conditions. Rain, snow and wind kept visitors out of the monuments in New Mexico and northern Arizona while the spring-like weather of southern Arizona brought an increase in travel. Only a few days were bad in the south with some rain which started the desert regions to burst forth into bloom.

Casa Grande experienced almost a 20% increase in travel over March of last year. Both Phoenix and Tucson have had record breaking travel this winter. As Casa Grande National Monument lies on the direct route between the two cities it gets a great number of those traveling through.

FIELD TRIPS

Chief Clerk Miller left headquarters March 7th on official business for Bandelier National Monument in connection with ECW work, returning to headquarters March 14th. He was accompanied by J. H. Tovrea, Engineering aide.

Superintendent Pinkley and Junior Naturalist King left headquarters March 22 for White Sands National Monument to meet Assistant Director Tolson and accompany him on a tour of Southwestern Monuments.

CONSTRUCTION

The contract work at Aztec National Monument has been completed. The welding of cattleguards has been completed at Pipe Springs National Monument.

SOUTHWESTERN MONUMENTS GENERAL

E.C.W. ACTIVITIES

From the reports of Project Superintendents Chase of Bandelier and Hammond of Chiricahua the following itemized progress reports have been taken:

Bandelier

1. Pouring of foundations for a two car garage and a fuel room building.
2. Completion of public camp ground comfort station.
3. Planting around parking area to hide scars and landscape grounds.
4. Completion of fourth cattleguard.
5. Dismantling of sheds and corrals.
6. One hundred and fifty cubic yards of building stone quarried and delivered for wall material of buildings.

Chiricahua

1. Bonita Canyon public camp ground area:
 - a. Building of concrete septic tank and comfort station with walls of natural stone.
 - b. Completion of bank protection on highway.
2. Completion of roadside clean-up on Bonita Canyon highway over approximately 6 miles.
3. Completion of telephone line connecting Sugar Loaf Peak, Rhyolite and Bonita Canyons with Massai Point and on to a junction with the Forest line to Portal.
4. Rockwalling, bank sloping and landscaping of Sugar Loaf Mountain trail.
5. Construction of Sugar Loaf Lookout house in progress.
6. Lengthening of existing culverts and installation of new culverts on Bonita highway.

PERSONNEL

Charles E. Powell, Temporary Ranger went on duty March 4 at Saguaro National Monument.

VISITING PARK SERVICE OFFICIALS

Mr. W. H. Wirt, Associate Forester, on March 29. Mr. Frank Kittridge stopped on way to monuments in New Mexico. Mr. A. E. Borell, Wildlife Technician, March, 28 and 29.

REPORTS FROM THE MEN IN THE FIELD
NAVAJO NATIONAL MONUMENT

John Wetherill, Custodian.

Milton started with the lamb for the ruins on the first of the month. Before he arrived at Betatakin the lion had chased the lamb to his hole and it seems as though he had eaten him, as the lion has been roaring ever since. We have not had a word from Milton since he left here. We cannot get over the road with a car and our horses are out on the range. I suppose Milton is enjoying his home on the range by now as he has been getting the real thing. I will get up to see him as soon as I can and send you a report. I will be down to see you soon and thank you in person for what you have done. Milton has about three months food supply. He took a saddle horse and a pack mule with him. The truck hauled his food and equipment to the end of the road and he was to keep the stock until he could pack into camp.

CANYON DE CHELLY NATIONAL MONUMENT

Robert R. Budlong, Custodian.

This Monument has had no visitors during the month of March, and we are not surprised. Rain, snow, mud and sand, all have conspired against the wary winter visitor, and have driven him to more southerly climes and other National Monuments.

The month of sandstorms is upon us, and so are the sandstorms. One is in progress as this report is being written. Tumbleweeds are tumbling across the fields, dimly seen through the clouds of sand. Indian ponies tethered to fences stand, facing away from the wind, in dejected-looking attitudes. Occasional drops of rain and flakes of snow spatter against the windows of our room in the Indian Service Boy's Dormitory, and sand seeps through every crack and crevice. Fortunately, we are in something of a protected position here, the immediately-adjacent hills that rise up behind the dormitory acting as deflectors. A few hundred feet away, however some of the Indian Service houses are receiving the brunt of the storm, and shovels will be used to remove the sand that will have formed regular drifts on the floors, after this is over. But this is quite a mild sandstorm, and we expect bigger and better ones in the future.

Roads begin to emerge from the mud once more, the distant mesas have lost most of their snow capping, and the canyons discharge increasing volumes of water. Snow is five feet deep in the mountains, near the sawmill, between here and Fort Defiance, and I understand the Lukachukai Mountains still have much snow on them. Some of the Indians here predict the canyons will flow water until well into the month of July. If that should be the case, practically all of our visitors, until midsummer, will only be using the trail, for a continued flow of water, similar to what is now coming out of the canyons, would make car travel in them extremely difficult, if not just about impossible.

However, spring is on the way. A few prairie dogs have awakened, and are to be seen, occasionally, near their burrows. Robins pay the Monument brief visits, and fly northward again. Large numbers of bluebirds fly by, only stopping long enough to show their bright plumage. Weather grows somewhat warmer, and occasionally we have clear days, when the warmth of the sun is very welcome again.

On the 18th of March, a meeting of officials of the Indian Service was held at the school auditorium here, the object being to explain to the Indians the purposes of the Wheeler Howard Act. Mr. Shepherd, of the Bureau of Indian Affairs in Washington, was one of the visiting officials. Other officials of the Indian Service, some Soil Erosion Service officials from nearby projects, the majority of the population of Chin Lee, and several hundred Navajos attended the meeting. With time off for supper, the meeting lasted from two o'clock in the afternoon until eleven-thirty at night. Both the Custodian and the Honorary Custodian Without Pay of this Monument were present. The time for the voting on the measure has been postponed until May 31 and June 1. The meeting was not without many amusing incidents, and we, at least, thoroughly enjoyed it. One of the Navajos present at the meeting objected to the nomination of Indian judges at the polling places on the grounds that there are no honest men on the reservation, with the exception of two missionaries. The Custodian started to object, but changed his mind, and let the matter slide.

During the winter months much moisture has fallen, and much of it has soaked into the ground, softening it to a considerable depth. This may be good for the country, but it doesn't help the trail across from White House. The softening of the ground has resulted in some minor slides of rock on the slopes above the trail. At present there is one mass of rock about halfway down the trail, weighing, probably, around two tons, nearly blocking the trail. It may be necessary to dynamite it, in order to properly clear the path. Moisture and freezing also have caused cracks in the roof of the upper tunnel to widen and there have been numerous falls of rock therein. More is expected, and at present the tunnel is unsafe for travel.

Soil Erosion men are again at work in the canyons; but the depth of water in the canyons prohibits the use of cars, and the men have to get into them via the White House trail. The trail is only about four thousand feet long, going down, but several miles long when one is returning to the rim. Its length increases in direct proportion to the number of miles one has walked while in the canyons, preceding the return climb. The Soil Erosion fencing has stood up fairly well over the winter, though there are a few cases where some damage has been done to the fencing by the flowing water.

There is a report in general circulation, which as yet I have been

unable to confirm, regarding the loss of an Indian's horse in the quicksand of the wash, during this winter. It sounds very plausible, however. It seems that a Navajo was crossing the wash on horseback, below the mouth of the canyon, when his horse stepped into a patch of quicksand. The Indian managed to salvage his saddle, but was unable to aid his horse, which sank rapidly into the sand, completely out of sight. I can readily believe the account, having had some experience with the quicksand during the late summer and fall months. Patches of quicksand constitute a real menace to motorists who attempt to drive into the canyons before the flow of water has ceased, and because of that danger, we do not permit cars to drive in the canyons when danger from quicksand is deemed great.

It is hoped that the coming month will bring us an increase over the number of visitors who came to the Monument this month.

SAGUARO NATIONAL MONUMENT

Charles Powell, Ranger.

The privilege of introducing Saguaro to the rest of the family is appreciated. This monument, which is noted principally for the Saguaro, or Giant Cactus (*Carnegie Gigantea*), the largest of which are estimated to be from two hundred to five hundred years old, is reached by the visitor by traveling due east from Tucson fifteen miles over two very good roads. Since this monument became a member of the family July 1, 1934, I think it may be called a twin of the Chiricahua National Monument, and as sponsor of both, I feel more that honored.

A visitor asked me how I managed to keep busy in such an isolated place so I showed him around a little. I called his attention to the fact that he came directly through a maze of roads to a stop in front of the Ranger Station, because of small signs, which he had followed without giving the matter a thought. Then I showed him some of the signs being painted. When we reached the top of Observatory Hill, I showed him the camp which I called the 'Hermitage', where I keep house (after a fashion) and explained that I haul water, gas and oil from Tucson, a total of twenty one miles, and that it is necessary to drive twelve miles to obtain five cents worth of salt, or a gallon of coal oil.

As we strolled along up to the hill, I pointed out some twenty varieties of the cacti which grows naturally in this part of the monument, and several specimens which I have transplanted, the latter including the 'Rainbow' which I brought from home and the bisnaga which will be further classified when Dr. Thornber comes out next Thursday. This visitor remarked before leaving that he could see why I had no time to be lonely.

The study of cacti becomes more fascinating as one delves deeper into its mazes. While I am trying to avoid the use of Latin names which
SOUTHWESTERN MONUMENTS 113 MONTHLY REPORT FOR MARCH, 1935

I am learning, with the aid of the University of Arizona Bulletin on Arizona Cacti by William P. Stockwell and Lucretia Breazeale. As soon as I get a specimen definitely classified I am tagging it with a label bearing the Latin name and all of the common names by which it is known.

Just at this time several interested visitors have joined in the search for a specimen of the night blooming cereus (*Peniocereus greggi*) several of which have been reported near the Ranger Station, but which are very hard to find because of their protective coloring.

It begins to look as though we will have a place to put all of the labels Mr. King has ordered as soon as they arrive, and I think we can add a few to the list soon. There are a number of plants other than cacti growing on the Monument and I think we should label them too.

I wish some of the automobile manufacturers would put out a car like the 'one hoss shay' which would wear out all at once. This pick-up of mine was a disappointment to me at first, but now that I have it repaired in half a dozen places, I am beginning to like it. In fact, I feel like Mr. Lee Hart remarked yesterday, "She's a mighty good car for the shape she's in". I have worried a great deal about the expense of repairing the car, and have written two letters to you asking advice, only to find that the repairs were so imperative that the car would be ruined if driven while I waited for your reply. She's all right now and as I look back the expense does not seem so much considering that the car is so handy and that I would not exchange it willingly for any other car you have.

I do not want to forget to mention our visitors. Average for medium dull week days, twenty. Sundays, ninety. Twenty one states have been represented. Three visitors were from England, and two from France. Visitors from other states outnumbered local visitors two to one. Local visitors are mostly cactus fans. There will be an increasing interest from now on as the cactus blooms appear. The local newspapers are promising publicity. Dr. Caroline E. Furness of Vassar, Dr. and Mrs. E. F. Carpenter and Mr. and Mrs. J. D. Williams of the University of Arizona, all astronomers, held a weiner and marshmallow party on the summit of Observatory Hill Friday evening, March 22, 1935.

One more item. Dr. J.J. Thornber promises to spend a day with me next week placing temporary labels. Also he will go to Chiricahua as my guest next June to place out permanent labels.

GRAN QUIVERA NATIONAL MONUMENT

W. H. Smith, Custodian

Again I find it time to submit the monthly report of the activities of the Monument for the past month. I find my register contains 293

visitors who entered the Monument in 68 vehicles. I notice that most of those registered were local people, only six states being represented with New Mexicoans heading the list. This number shows a decided increase over last month, but is slightly under the registration of March, 1934.

Weather conditions have not been favorable for travel the last month. There were several small snows the first of the month that kept the road in bad shape and the last part of the month was the worst for sandstorms that I have ever seen; it blew almost every day. Despite these sandstorms the weather is warming up gradually and it looks like Spring is not far away. The grass is beginning to get green and weeds are coming up; so if we do not have a killing frost things will soon be green. There was enough snow and rain during the winter to put plenty of moisture in the ground; it being wet about three feet down now. If too much wind doesn't dry it out, the lookout for the stockmen and farmers will be more promising than it has been for some time.

I hear that the road from Mountainair to the Monument has been made a State Highway and there is some talk of getting it worked as a PWA project. They plan to run the road on to Carrizozo; so if they go ahead and fix this road as they are talking of doing, and connect us up with two main highways, it will stimulate travel through the Monument considerably. I understand the road will be divided into five mile sections and the people on relief in each section will put the road in shape and gravel it.

I have spent the last few days rearranging the Museum since it was robbed. I moved the empty cases toward the back and the desk nearer the door where the light is better. I hired two of the local boys here a couple of days and made a general cleanup of the grounds in the ruins and around my living quarters. We moved the unsightly refuse down into one of the arroyos and buried it. I had quite a collection of weeds in some of the Indian dwellings after these few days of wind. These I had the boys gather together and burn.

EL MORRO NATIONAL MONUMENT

E. Z. Vogt, Custodian

The Ides of March came in with ten days of snow and storm making it an even worse month than February. Frost came out of the ground leaving the roads the worst in history. For a time this village was entirely snow and mud bound, no travel being possible except by horse in either direction. Even telephone conversation was reported to have been bogged down on the phone line connection with the outside world.

Visitors to our Monument were absolutely lacking until the 21st when a party of four from Denver, came, conquered and saw the old Spanish inscriptions, walking ankle-deep in snow around the shady north side of the cliff to study the "escrituras" of Gov. Eulate 1620, Gov. Nieto 1629 and

Gov. Martinez 1726.

We regret that Hugh Miller, Chief Clerk, and his Engineer companion did not make it through on the 18th. But who would not have turned back when in the middle of the road a 60 HP caterpillar was encountered buried in the mud up to the lettering on the radiator ?

Desperate conditions bring action. The town people here got so "het" up over the road conditions that they sent a committee of us to Gallup to meet Mr. L. G. Griffin, Project Engineer for seven counties in New Mexico for the FERA. To him we put up such an appeal for rural road betterment that he promised to build and gravel with FERA labor the road from Gallup to Ramah even over the Zuni Reservation to the Valencia County line -- a distance of 50 miles -- provided we can get the State Highway Department to furnish a supervising engineer, the machinery and fuel for the same. We are now waiting for a telegram from the State Highway Department giving us an appointment. When the wire comes at least five of us including an Indian Service official, perhaps Mr. Trotter of Zuni, are going to swiftly make the 200 mile trip to Santa Fe. There we hope to get the State and the FERA started off on an actual construction program which will forever end the desperate road conditions which have faces this country since Coronado got his solid wheel wagons bogged down in bottomless "barro" in 1540. Our appeal and effort extends to El Morro and on past to connect with Highway 66 at Grants.

When I am away from El Morro more than a few days, I get worried about the chance of some vandalism there. After the storms of the early part of the month had subsided I decided that I could not let a visit be postponed any longer. So saddling up Short, whose back was getting too springy anyway, I rode out to El Morro on him. The ground was still covered with snow on the 12th, but the warm sun had melted the snow on the cliff. This had run off in the reservoir and filled it within three feet of the spill-way. I was fearful lest the reservoir had filled and ran over, with resulting erosion damage to the great 15,000 cubic yard dirt fill we put in last winter under CWA. Being satisfied with that, I rode slowly around the area of the inscriptions. Everything was all right. Erosion dams were doing business nicely in the arroyos. The Ranger cabin and blacksmith shop had not been touched. The trail I did not examine since I had to unsaddle, let the horse roll, water and eat his oats which I had packed in a 'morrall'.* Starting back about 2 PM, I stopped at the Lookout Ruin, a large and important prehistoric ruin three miles north of El Morro. No signs of fresh vandalism were seen for the last month. Four or five rooms had previously been dug in, but of course there are literally hundreds of rooms which have never been touched.

* Spanish meaning feed bag.

A sharp wind drove me into the timber so I took the trail along the mesa top where several of my Navajo friends live. At Chato's hogan there was an outdoor shelter in which a dozen squaws were cooking blue cornmeal tortillas on a sheet of iron over the hot cedar and oak coals, roasting mutton on heavy wire broilers and making good smelling coffee. After dismounting I heard the chant of a medicine man coming from the hogan. Being invited I joined the circle around the fire and regaled myself with the fine roast mutton salted with hand ground Salt Lake (Catron County, N.M.) salt, tortillas and coffee.

Inside the hogan I witnessed the bathing of the nude body of Mariano Chato with sacred water from a tightly woven medicine basket. The washing was done by himself assisted by the Medicine man Sam. Even his turquoise beads were purified in the warm yucca or soap weed suds before the water was poured into a pile of sand upon which the basket bowl rested. After mixing with the sand, the little brown pile was carried out on the skin side of a sheep pelt by Chato, the father of the sick son who had been suffering with dropsy.

There were three singers, Patricio, Frank Martine and old Dick Jose Pino, besides the chief physician who sat before his fetishes, buck skin bags of herbs, medicine and feather wands. Patricio handled the gourd rattle which furnished the time for the long earnest chants which were to continue through another night. Kay-chee, Petaga, Chato el Viejo and Navajo Jake graced the side of the camp fore opposite the doctor's chorus while Mariano conducted his ablutions back of the fire opposite the door of the small but cozy hexagonal hogan not over 20 feet wide within.

After carrying out the sand I talked some with Chato who I had asked to watch the Lookout Ruin about two miles from his home. He told me that a Mexican by the name of Esteban Baca had been coming horse back with a pick and shovel to do the digging. That information was a shock to me as I knew Esteban well, he having been one of my finest carvers on the stone steps at El Morro last winter. But after second thought as I was riding home through the woods I recalled that last summer Esteban told me that he, in company with Adon Gonzales, had worked for the long-deceased ethnologist, Frank Cushing, way back in the 80's. When he was gone a week from the excavation, Cushing had left rather suddenly. The Navajos had told him that Cushing had taken a number of heavily loaded gunny sacks from some ruin high up in the cliffs by lowering them by ropes to the ground. He told me he thought Cushing had discovered an important cache of old Spanish gold and was lowering the same to his companions who quickly broke camp and went to Zuni and then to Santa Fe. Esteban has the lost treasure bug and that apparently has made him do the digging. I am certain he will not return since my inquiries have gone to him and will be enough to stop further damage to the ruin.

During the month botanical labels were mounted on small boards and placed on the trees, bushes, etc., which are found along our trail. We need labels for the pine, oak and two more species of cedar as well as a number of the bushes and grasses.

Through Chief Engineer Kittridge we received two gallons of the #46 preservative solution perfected by Mr. Frederick T. Martius at Stanford University. On the 23rd I went to the Monument with my son to look things over and to make the initial test of this new protective material which we hope will be more effective than Dri-wall. We selected the least known inscription, the one I first found in 1920, to the south and some 50 feet from the water cove. This reads, "On the 12th of December of 1701 passed Arellano as inspector". Penciling with black lead very carefully we then painted the old Spanish words with the new solution. Our impression of the effect was very promising, but, of course, it was too early yesterday to know how stainless, and how perfectly the inscriptions will be protected.

In view of the forth-coming visit of Assistant Director Tolson, Chief Architect Vint, Resident Architect Richey and others, a visit I am looking forward to with great expectancy, I was very anxious to get a test made the Martius solution so as to get it passed on by the triumvirate now coming this way for Monument inspection. We note also the coming of Big Jim Hamilton, Assistant Engineer, whose cheerful face we hope soon to see.

During the month El Morro was favored along with Chaco Canyon, Canyon de Chelly and Zuni with very fine mention in the Ford Motor Co. broadcast from Denver about Gallup, the Land of Enchantment. We note the coming historical broadcasts by the Standard Oil Co. from Phoenix to which we intend to listen.

In Radio Series No. 2 of Historical Subjects sent out by the Washington office it is noted that El Morro is still located in Central New Mexico and that De Vargas came in 1695 to put down the effects of the rebellion in 1679. Governor Eulate's 1629 inscription is still attributed to Governor Francisco Silva de Nieto. The latin inscriptions have no modern supporters though when Simpson came in 1849 I believe he thought a few of them were in latin.

During the month we have cooperated by furnishing material for publicity to the Billings-Chapin Co. of Cleveland, Ohio, whose house organ will soon publish an illustrated article on this Monument. Solomon Alvarez of Las Cruces, N. M. has been helped with pictures and historical data for a lecture to be given by him. Dr. F. W. Hodge of the Southwest Museum at Los Angeles has been put in touch with Mr. Ellsworth of the Visual Instruction Department of the Park Service for a complete set of the wonderful pictures taken by Mr. George Grant, official National Park Service photographer, last fall.

I am always glad when the monthly report of the Southwestern Monuments arrives and I eagerly devour every sentence it contains. I like to hear what people and custodians are doing and note the progress and improvements that are being made to take care of people and show the many wonders, both natural and historical, that abound in the Southwest. The reports of the various custodians are interesting and all seem to have about the same ring, all wishing for about the same things and all anxious to do their jobs well; and most of all are like myself -- still begging for financial help and longing for improvements at the various Monuments. I guess we are all alike in this regard; all in love with our job and wishing to put it over in a big way. But it seems terribly slow the way the mills of the gods grind.

I have been working all winter, trying to get something in the way of roads and improvements for the Natural Bridges. The State legislature has been in session and I am acquainted with nearly all the bunch, also the state senators and I know they are all in sympathy with me and my desires. There have been speeches made in both houses and the projected hook-up between Mesa Verde National Park and the southern Utah parks via the Natural Bridges. I have written both of our senators, also both congressmen and Mr. McDonnell, Chief Engineer of the Bureau of Public Roads, and they all report to me that they will do all they can to help promote the project. Also the State Road Commission are very kind to me and my desires. It seems like the very air is full of enthusiasm over it and it is talked in every lobby, but will it ever get started?

The present road from Blending out to the Monument is in about as good condition as it has ever been, but it is very poor at best and I am anxious for spring to come so I can make it passable for the coming season. How I long for better roads and a little cottage or custodian's quarters and a water system. I believe I would be the happiest man on earth with just that much.

I was just reading this morning my report and that of yourself about me in the December issue of 1933 and it made me laugh. I was then begging for roads and a cabin to live in and still am but with more fight than ever and I learn that both of these improvements were projected for 1936.

The short piece of road at the approach of the Monument that was surveyed by Mr. Hamilton is a bad thing and very hard to navigate and some cars have trouble on it and it seems that I can't make it any better without money for what I can do to help washes out every time it rains and it sure is an eyesore to me but I am powerless without some help from somewhere. You know the good book says; Ash and you shall receive. Well, I am still asking and am trying to get some help from the National Forest by putting some CCC boys out there this spring.

I was surely interested in Custodian Budlong's plans for a museum in a recent issue of your report. I too will need a museum building some day, but not as large as the one he contemplates. There are many possibilities in this region of the San Juan and the Bridges, but I do not disturb them nor will I until I get a place to put the things one can find. I had a very fine lot of specimens of sandals and pottery with other things which I had thought were hidden, but someone found them and took the entire lot.

Since I started this report the Salt Lake Tribune called me up for pictures and data on the Natural Bridges and the San Juan scenic wonders, to take up a full page in an issue to come out early in June.

If I live until the 16th of next month I will celebrate my 66th natal day. I am getting to be an old man in years, but am still very young in body and ambition.

CHACO CANYON NATIONAL MONUMENT

T. C. MILLER, Custodian

The approach roads for the first time in many days are dry enough to travel, but are very rough because of so much rain and snow and rain during the first part of the month. March has been a very busy and satisfactory month with lots of action and new things to see and do. Associate Engineer Walter Attwell arrived on the 27th and departed on March 1st for headquarters. I accompanied him in order to bring back a Dodge truck that has been assigned to this Monument.

Enroute to headquarters we went through the Petrified Forest and I had the pleasure of visiting my old boss, White Mountain Smith, Mrs. Smith and the entire staff. The Petrified Forest has so many new improvements that I hardly knew the place. There are new parking areas, a new hard surfaced road and in general it is a fine looking Monument. After having a delicious meal with the Smiths and Mr. Attwell and Mrs. C. M. Bell, we drove on to Winslow where we spent the night. On the 2nd we visited Walnut Canyon and found the road freshly graded with heavy travel through the monument. We had lunch in Phoenix and arrived at the Casa Grande National Monument at about 3:30 PM. On the third I spent the day talking with the Superintendent, the Chief Clerk and the entire staff. I made the ruins trip with Ranger Caywood and a party of visitors and heard a fine lecture on the Casa Grande Ruins. Upon visiting the new museum it surely made me envious to see all those fine artifacts displayed and have them explained in such a fine manner by Naturalist King. I also learned something about their problems in handling visitors. On March 4th I visited Tumacacori and heard a good line on missions by Custodian Boundey. I met Mr. Paul Beaubien and looked over his excavations at the Monument. In all it was a splendid trip, both inspirational and educational. On the return trip I visited Saguaro, another of our wonders of the Southwestern Monuments. I returned to headquarters and de-

parted for Gallup and Chaco Canyon on the 15th. If other custodians of the Southwestern Monuments have not made this trip, it is one I can highly recommend.

TRAVEL:

308 visitors arrived in 98 cars coming from the following states and foreign countries: Arizona, California, Colorado, Minnesota, Nebraska, New Mexico, Utah, Texas, Wyoming, Washington, D. C., England and Germany. Among special visitors were the following: Mr. Henry Vance, Senior Forester of the Indian Service, Superintendent Stacher of the Eastern Navajo Reservation, Walter G. Atwell, Associate Engineer from Coolidge, Mr. Stanley Morse of the Landscape Division, Mr. Charles Quintence, Wildlife Technician, Chief Ranger and Mrs. C. R. Markley, all of Mesa Verde National Park. Mr. F. Morgan Pryse, Indian Affairs, Washington, D. C., Mr. T. Marion Wilkes and Mr. C. S. Rust, all Indian Service Officials of Albuquerque, N. M., Mr. Ed. Sargent of the State Highway Commission and Mr. Gene Gordon, Assistant Engineer from Coolidge.

WEATHER:

The maximum for the month was reached on the 15th at 62 and the minimum 16 on February 26th. There were 11 clear days, 6 part cloudy and 11 cloudy days. Precipitation was .58 of an inch of rain and snow.

TELEPHONE SERVICE:

Telephones were installed at this monument March 1st, one phone at the Chaco Trading Post and one at the Custodian's residence.

RUINS STABILIZATION:

A party of engineers under Mr. Howard Leslie arrived on March 14th for the purpose of mapping ground floor plans, side wall elevations and contour elevations of Chetro Kettle and Pueblo Bonito. Because of the complicated ancient construction and the fact that a second occupancy of entirely different construction and formation was built over much more ancient ones will necessarily require much time to complete the work. At Present the work is progressing satisfactorily.

LAND MEETING:

The Gallup Chamber of Commerce called a meeting on the land situation of the Chaco Canyon National Monument March 8th. Mr. Hugh Miller, Chief Clerk, Mr. W. G. Atwell, Associate Engineer, Mr. J. C. Tovrea, and Custodians T. C. Miller and Johnwill Faris of Chaco and Aztec National Monuments, were the representatives of the Park Service.

San Juan County was represented by the Chambers of Commerce from Farmington and Aztec. U. S. Land Commissioner Mr. Frank Vesley and Assistant Mr. Carl B. Livingston, Santa Fe, New Mexico. The School of American Research and the University of New Mexico were represented by Doctors Hewett and Zimmerman.

YUCCA HOUSE NATIONAL MONUMENT

Also by T. C. Miller

I have visited this Monument twice, once with Mr. W. G. Atwell on February 1st and again on March 21st. The road from Highway 666 to the

Monument was dry but very rough. I found Mr. and Mrs. Ray Ishmay at home and very busy with their farm and stock. Mrs. Ishmay reported but one car for the month. It contained four visitors. The road has been almost impassable because of so much rain and snow. Now that old Sol is doing his duty again the prairie dogs are out, the wrens, robins and meadow larks are back and spring is just around the corner. The Yucca House National Monument approach road has no sign to direct visitors into the ruins without signs, I think it is a good idea not to put up signs until some much needed improvements have been made on the fence, gates and some erosion work done on one arroyo that is sure to take out one corner of the ruins if it is not fixed real soon. A warning sign is needed to help convince pothunters that there will be no vandalism of any kind allowed. One of the attractions on that monument is the fine cool spring of clear water that comes out of the hill under the ruins. There has been no work done on the Monument and it is well worthy of protection and maintenance. The prehistoric ruins are now a cluster of mounds with very little signs of walls rising above their surfaces, but because of their large size and extent there is every reason to believe that when excavated they will prove to be of the greatest educational and archeological interest. The mounds of the village rise to a height of at least 18 feet above its foundation, surrounded by many smaller mounds. I believe Yucca House will be one of the finest archeological units in the Southwestern Monuments when it is fully excavated and developed.

Now Boss, along with this new monument to report on I would like to tell you about our increase in personnel in these monuments. On March 19th a son was born to Custodian and Mrs. Carroll Miller.

CONGRATULATIONS TO THE CARROLL MILLERS AND THEIR NEW RANGER!!!

CAPULIN MOUNTAIN NATIONAL MONUMENT

Homer J. Farr, Custodian

For March I am glad to report approximately 611 visitors and for some unknown reason a large percent of these came from Alabama. One might guess they do not hibernate as long as we do. A rather unexpected but pleasant visitor was Paul Wilkerson who came in the early part of the month to take some moving pictures of the old Volcano and as Paul put it, "It is hard to get a moving picture of a dead volcano," so we procured some 500 school children from the Capulin Schools and from surrounding towns in this manner got some action in the picture.

Weather has been rather warm, no moisture and much high wind. All roads are open and in fair condition but mighty dusty.

Beetle control has been in progress for about two weeks and about two thirds of the beetle infested trees have been removed. I am in charge as Foreman of the project which is being done by FERA labor. Upon close examination some of the insects were found to go below the stump and attack the roots and for this reason it was decided to remove the infested trees roots and all. I find there are about two hundred trees that have been killed by the beetles. This control project and clean-up has already beautified and added a certain degree of safety to the Monument, as a dead pinyon tree in the center of a thicket of trees is almost as much of a fire hazard as a gasoline can in the kitchen. A full report on the Beetle Control project will be submitted at the close of the work which probably will not be before April. Compliments to the Coolidge office for the splendid arrangement of the February report.

TUMACACORI NATIONAL MONUMENT

George L. Boundey, Custodian

Visitors for march were 1837. The month started out with quite a snow storm, but fortunately we have had very little dust. Several nights we had quite low temperatures, but no injury was done to the fruit trees. This will be a wonderful year on the desert as we have had enough rain to bring out those blossoms which need considerable moisture. The Vermillion Fly-catchers were not discouraged with the snow, for they were all here on the first of March according to schedule.

We enjoyed the visit of Mr. Art Woodward from the Educational Department at Berkeley. I took him for a trip back in the mountains to see a collection of early spanish weapons. We were caught in a snow storm on our return trip.

Mr. W. G. Attwell and some of the Engineering Department paid us a short visit and surveyed the foundation walls which had been excavated by Mr. Beaubien during the month.

It takes about three times as long to take an interested party through the Monument than a disinterested one. This winter tourists have been very interested so this has been a busy month. I will be glad when we have a suitable museum to display material in. It will add to our number of visitors.

Work at the Monument has slipped along lively this month just as it always does after a visit from the Boss. We are only sorry that he does not come oftener.

TUMACACORI FERA

PAUL BEAUBIEN, Foreman.

I began the month by excavating along the south side of the patio.

Here as everywhere else many walls have been destroyed and large holes dug through the brick floors wither by treasure hunters or the curious. One of the latest finds was a brick drain leading from the tanks in front of the mission to the inside of the patio. A problematical structure four feet by sixteen feet was found in the orchard. Open at the rear end and with a constricted outlet, it probably served to raise the water level in an irrigation ditch. A raise in the floor at the downstream end with a corresponding dip near the other suggests a secondary purpose. There is a description, dated 1860, in your booklet of Tumacacori which speaks of a bathing pool and washing vat in the orchard.

The lime kiln north of the grave yard was re-excavated that the engineers might make a detailed drawing. Several mounds in that vicinity were trenched without results. Three test trenches were made in vain west of the mission where an early drawing by J. Rose Brown had located a large group of buildings. Several rooms have been excavated southeast of the patio without contributing any important information.

I have reached one conclusion that may be of importance. I believe the black decoration in the present mission walls was made of over-fired bricks and are not slag from the smelters as is commonly supposed. Most of the slag here contains some copper and might discolor a white plaster wall. It might be a mistake to use the slag in a building program which calls for that type of decoration.

Mr. Arthur Woodward was here a few days to inspect my work and make suggestions. I wish that he had come sooner before so much had been refilled. Perhaps he could have solved some problems that are still puzzles to me.

PLPE SPRINGS NATIONAL MONUMENT

Leonard Heaton, Acting Custodian

The past month has been regular March weather with its snow, rain, mud and cold and warm days, mixed up so that one could not say we have had too much of one and not enough of an other.

We have not had any out of state visitors to the Monument this month. Our local travel has been about the same with an estimated total of 195. I do not look for an increase in travel until the later part of April, as the road to Grand Canyon National Park is blocked with several feet of snow.

The work that has been done this month is some that I had planned to do in February, but because of storms I had to put it off until now. I had the Richfield welders do the work on the cattleguard on the 6th and 7th. It took them an average of two hours and twenty minutes to so the welding on each seven foot section. I then hired three men to place the guards and grade the road. They also placed the gates and fence on either side of the

guards. The fence around the Monument is now almost completed with only about 250 yards to be done on the northwest corner, where there are plenty of rocks which will need a lot of powder to blast out post holes.

On March 16th I had two men help transplant evergreen trees. There were 14 pines and 26 junipers set out in the southeast quarter of the Monument.

While doing the grading of the road I had the good luck to find a part of an old hinge that was used to swing the big gates. At first I thought it was just an old rusty bolt, but after it had been cleaned there was unmistakable evidence that it had been hand forged.

The following birds were seen during the month of March:

Redwing Blackbird	Bluebill Duck
Rusty Blackbird	House Wren
American Raven	Western Mockingbird
Pinyon Jay	Shrike
Robin	Gilded Flicker
Killdeer	Stilt Sandpiper
Meadow Lark	Crested Flycatcher
Junco	
Northeastern Crow	
Mountain Bluebird	
Several species of Sparrow	
Desert Horned Lark	
Cassin Kingbird	
Western Horned Owl	
Red-tailed Hawk	
California Quail	

Our animals and reptiles are coming to life again, the little striped chipmunk can be seen running over the old houses and rock walls most any time and cottontails and jacks make their appearance out in the meadow at night. Mice and longtailed rats can be found getting into most everything in the house.

I am leaving for a tour of some of the Monuments in Arizona on April 5th and expect to be gone until April 14th. While I am away I have secured the services of Grant Heaton to look after the place.

WHITE SANDS NATIONAL MONUMENT

Tom Charles, Custodian

This has been a bad month for the White Sands, at least from the standpoint of freakish winds. Our prevailing southwest wind is a joy, it piles

the drifts into high, pointed ridges with curves and ripples, it sweeps the floor of the canyons clean and gives the Monument a brand new coat of white. But when the old "wind debble" executes a flank movement and comes in from across the highway it is awful. The sand doesn't BLOW in, it pours in. We have had plenty of these cross winds this month. I could not keep the sand off of the road at one of the drifts, let alone four of them. I tried a few of the old time snow sheds to see if I could not start eddies in the wind which would sweep the highway clean. It worked at one place but at the others it did not help. Only a few cars got stuck in the sand and we tried to be around there from time to time to help them out.

In the past month there were 702 tourists registered out in the "heart of the sands". There were four stormy, wet days on which we did not have a visitor and two days on which we had only 7 visitors, so we had an average of about 30 registered for the days on which they could get over the road. As only about half of the visitors register, we estimate that we had approximately 1500 visitors the past month or 60 each day during permissible weather. Three fourths of these came from an area within 150 miles of the monument. Of this registration there were 274 from New Mexico, (123 of whom were from towns other than Alamogordo); 253 registered from Texas and 175 from 26 states and six foreign countries.

The event of the month was the visit of Associate Director Hillory Tolson, Superintendent Frank Pinkley, Chief Architect Thomas Vint, Chas. A. Richey and Dale King. Plans for future development of the monument were discussed on the ground. The party also visited the proposed Artesian Well addition.

A. E. Borell, Wildlife Specialist, spent a week here studying the Artesian Well area which is proposed as an addition to the White Sands, to be purchased under the sub-marginal program. Mr. Borell counted 240 ducks on the lake one morning. He identified mallards, pintail, baldpate, cinnamon teal, greenwinged teal, ruddy, shoveller, Gadwell and bluebill. He also found 10 white pelicans and two ringbilled sea gulls. There were some 25 shore birds including Wilson snipe, stilt, snowy plover, greater yellowlegs and two species of sandpipers. He found a total of fifty species of migratory birds there at the lake in the six day visit. Mr. Borell also had a report from Mr. Garton, the present owner of the lake, that 200 ducks and a few longbilled curlew nested there last year.

The White Sands broke into good company this month when they had their picture printed in the Teacher's National Magazine, the Instructor, under the title, "Teacher's Travels in the U. S. National Playgrounds". The Carlsbad Cavern is the only other New Mexico attraction featured.

CHIRICAHUA NATIONAL MONUMENT E.C.W. ACTIVITIES H. O. Harmond, Proj. Sup't.

During March, Chiricahua Nat'l. Monument experienced considerable belated winter weather and a generous quantity of snow and rain. This has started water running in many of the canyons and particularly in Bonita Canyon. With the quantity of snow falling on the higher slopes the water resources should be vastly improved over last year's.

Two new projects have been started on the Public Camp Ground Area in Bonita Canyon. These consist of the concrete Septic Tank for sewage disposal and the Comfort Station, which now has the masonry walls well advanced and a sufficient quantity of rock for its completion has been hauled to the site. Lumber has been received for the camp tables and construction of them has commenced. We are trying to have all improvements in shape for the summer visitors and campers.

A great deal of progress has been made on the rock-walling, bank sloping and landscaping of the Sugar Loaf Mountain horse trail. The end of this month should find us pretty well completed here and the trail crew about ready to start construction on the Echo Canyon section. The latter (now under survey) when completed will lead through Echo Park and tie us into the Rhyolite trail, already constructed.

Construction of the Sugar Loaf Lookout House is proceeding. The mule pack train for the past two weeks has been hauling up cement, sand, lumber, etc. The excavations are completed and the boys are working on the forms for the footings and cellar foundations. A good supply of water for the concrete was derived from melting the snow and storing it in barrels thus gaining some on the amount to be brought in by pack animals.

Three projects to be completed this month are: (1) Bank Protection on the Bonita Canyon Highway, where some 8500 linear feet of rip-rap and revetment was laid, averaging 11 feet wide, (2) Roadside Cleanup on Bonita Canyon over approximately 6 miles, and (3) Telephone Line connecting Sugar Loaf Peak, Rhyolite and Bonita Canyons with Massai Point and on to a junction with the forest line to Portal. This should serve us until we build the new line connecting the monument direct with the Mountain States' line at Portal, a distance of around 17 miles.

Mr. Harry Brown's crew of P. W. A. workers are making continued progress on lengthening many existing culverts and installing new culverts on Bonita highway, raising masonry headwalls and building drainage flumes.

The heaviest rock slide so far sustained on this road occurred on March 12th, estimated at around 250 cubic yards of material. However traffic was blocked for only 3 hours, when the bulldozer cut a way through. This gave us all a clear idea of what may be expected from time to time, until the proposed "back-sloping" can be accomplished. We all hope this may take place in the Fifth Period, just ahead.

Chiricahua was visited during the month by Mr. A. H. Kottbauer, mechanical inspector sent out through the courtesy of Chief Engineer Kittredge to inspect all motor vehicles and heavy machinery. He was with us March 7-9.

Ass't Engineer G. H. Gordon visited us the 13th and 14th inspecting various

work projects. Other official visitors included Forest Supervisor Fred Winn on March 24th, and Mr. T. H. Wirt, Forestry Inspector for National Park Service out of the Berkeley office, on March 25-26.

A moving picture program given by Mr. W. A. McDowell of the Forest Service on the 28th had as a new feature one reel with sound pictures.

The Army has been busy installing new lockers, one for each enrollee, which are a very acceptable addition to the comfort of the men in barracks. They have also commenced the construction of a septic tank and expect to start the sinking of a new well. These latter improvements should raise very materially the sanitary standard of our camp.

Our sincere congratulations to Superintendent Pinley and the others connected with the enhanced edition of "Southwestern Monuments" which greeted us with the February number. From now on we may all strive to keep it on the "up and up".

MONTEZUMA CASTLE NATIONAL MONUMENT

Martin L. Jackson, Custodian

GENERAL

Stormy weather prevailed during the greater part of the month resulting in very poor road conditions. In fact on the Oak Creek Canyon Road maintenance crews were so busy that a special guard was posted in Flagstaff to keep visitors off of the route. This caused a large drop in the attendance at Montezuma Castle. New construction work is being carried on around Jerome, Cottonwood and Bridgeport to the Sedona Sections of State Route 79 making it more difficult to reach the monument. There is an F E R A crew resurfacing and straightening the road between Cottonwood and Camp Verde. There is also a petition afoot to turn the road from Roosevelt Dam to Route 79 over to the state for maintenance. Many of the signs placed by the Park Service at road intersections have been mutilated or destroyed and visitors are finding it increasingly difficult to reach the monument for that reason also. There have been several complaints in the past ten days. Snow and rain have benefited the range conditions in the surrounding country appreciable. It is even rumored that steers are selling for 7¢ per lb. in New Mexico--over twice the price paid last year. While stormy weather is not so good for the monument business, it does help others.

VISITORS

There was a sharp drop in the number of visitors this month over last, caused, no doubt, by the conditions listed under "GENERAL". Total count for the month was five hundred and ninety-seven (597). Foreign visitors: Ireland, Germany, Austria, and three parties from England. Special visitors for the

month were: Mrs. H. M. Miller, wife of Chief Clerk Miller at Casa Grande, and Lt. May of Fort Logan, Colorado, who by the way, gave Charlie Steen of Tonto National Monument quite a boost.

WATER

On March 6th, the engine running the water pump broke down resulting in the need for some parts. Although the order was sent off immediately, we have not received said parts to date. This has made it necessary to carry water from the creek for washing purposes and to operate the rest rooms. Drinking water is being carried from the nearest neighbor over a mile away. One of the main needs of this Monument is an adequate water system. Since camping has been prohibited for the last two years in front of the Castle, we have not had an attractive place that appeals to the visitors. Until enough water is available to do some extensive planting this condition will never change. With the present water system, it is not even practicable to do any planting around the existing buildings.

FLOOD WATERS

Last month, we reported the sinking of the revetment wall at the west end resulting in the loss of a large quantity of silt. This month the flood waters have been even higher and have washed the gravel covering from the septic tank built just last summer. With a few more high floods it is quite possible that the tank will be washed completely away.

SPRING CLEANING

At idle times the Ranger and Custodian have been cleaning the grounds of the Monument around the buildings and picnic areas. Mrs. Jackson, the concessioner, is at present wielding a wheelbarrow herself.

BIRD NOTES

About two weeks ago we noted the arrival of the robins. They are usually here long before this but possibly the bad weather has hindered their arrival. Most of them have migrated toward the northern part of the state by now, however. During the early part of the month, hundreds of bridled tit-mouse were observed in the sycamore trees along the Castle trail. But they, like the robins, have gone north with the first touch of spring weather. We have very rarely seen ducks on the creeks of the monument before other than the common Red-Breasted Merganser, or fish-duck. This winter, however, I personally saw several Mallards and possibly some Canvas-Backs. The most prevalent bird on the Monument this winter has been the Purple Finch or the Cassin Finch. These birds are here in hundreds all during the year, winter and summer alike, and are constantly singing. We list these birds among our most valued. About a week ago, a number of Ruby-crowned Kinglets were noted in the brush along

the northern boundary of the Monument. As soon as the trees leaf out there will be many more varieties of birds with at least three species of Hawks. These I shall try to classify and submit in future reports.

BANDELEIR NATIONAL MONUMENT

Earl Jackson, Custodian

VISITORS

427 visitors came, in 22 cars from 28 states, Washington D. C. and four foreign countries. British Columbia, Quebec, China, Scotland, and Patagonia were represented. Our travel figure compares with 280 visitors for March of 1934. The four highest states in order were; New Mexico, Colorado, California and Texas. These state figures are from auto licenses and number travelling in each car.

WEATHER CONDITIONS AND ROADS

The month has been, as was to be expected, very windy and dusty. Precipitation was negligible, being .10 inch. Several days were cloudy, but rain was only a promise. Roads are very dry and dusty, but in fair condition.

While eastern Colorado, Oklahoma and Kansas have been nearly suffocated by dust, this section has had little trouble from violent dust storms. Frijoles Canyon is well protected from strong wind currents, as they break up in other canyons before reaching here from the Rio Grande Plains.

SPECIAL VISITORS

On February 25, J. F. Zimmerman, President of the University of New Mexico, was a visitor to the ruins and March 1, we greeted Mr. A. C. Hill, Jr., Chief of Communications, N. R. A. March 10, Hugh Miller arrived for a two day stay and at the same time, Mr. Al Kottnaur, Master Mechanic for the Park Service was in to check over E. C. W. heavy equipment.

March 18, Mr. and Mrs. W. H. Wirt arrived for a four day stay and I believe Mr. Wirt was well pleased with the E. C. W. progress here. Bandeleir was the scene of much Park Service activity on March 25. Mr. Hillory A. Tolson, Assistant Director, and Mr. Tom Vint, Chief, B. O. P. A. D. arrived as per inspection tour from Washington D. C., accompanied by Chuck Richey. Mr. Pinkley, with Dale King, Junior Park Naturalist for Southwestern Monuments, arrived at the same time.

When these men were joined by Project Sup't. Chase, Resident Landscaper Morse, Bill Shape, and the custodian, a visit to the ruins was taken in and immediately thereafter followed inspection of construction activities in the

canyon, and then all heads went together in a huddle. As a result, ye humble scribe was delighted at the decisions the visiting officials rendered.

All was quiet on the western front by nightfall of the 25th, but it was felt by all that momentous things had been accomplished.

IMPROVEMENTS

See Construction Report, by H. B. Chase.

NATURE NOTES

Spring is on its way. Buds are bursting, the weather is warming up, the deer and birds tell us that romance is in the air.

GENERAL

Travel has made one of the most phenomenal rapid jumps here in the last ten days I have ever seen. If visitors increase at this rate through the coming season, we are really going to have some heavy crowds to handle.

The first camper since last fall tried our camp grounds a few nights ago, and three or four parties have spent the night there since. We can well rejoice, in anticipation, that we have a good sized camp ground, for it is going to see plenty of use this year. From the end of October to the first of March, the weather is too cold for any campers here, as the camp ground is on the shady side of the canyon and seldom thaws out in that period.

TONTO NATIONAL MONUMENT

Charlie Steen, Ranger

Another busy month on the Apache trail ! 749 visitors made their appearance and of these 515 saw fit to climb the trail and eleven took the trip to the upper ruins. Traffic on the highway has been very heavy -- more cars are going through now than ever before. The new signs seem to be doing their part in enticing a proper percentage of these travelers to the ruins.

This has been a very beautiful month. For the most part the weather has been perfect, however, on March 3rd I opened my eyes to see three inches of snow on the ground. The saguaros looked very peculiar with caps of snow. The abundant rains since January first have caused a profusion of flowers in the mountains -- the Monument is alive with color. At present we seem to be at the peak season for the small annuals. The cacti and larger plants are beginning to show signs of budding, but I understand they wont flower for another month.

During the past ten days the State Highway Department has kept a FERA

crew on the entrance road blasting out the larger rocks and putting the road in shape. The local foreman said that he will run a blade over the road once or twice a month from now on to keep it in shape.

I took two days off to go to Chandler to see friends and the 'dig' at Snaketown. While I was away Tom McCurdy of the Gila Pueblo came to take some borings from the beams in order to get dates for these ruins. Dr. Haury will come up sometime in the near future to do this. Mr. and Mrs. Gladwin were also visitors during the month. Mr. Gladwin has offered some Salado pottery for the museum here as soon as it is completed.

On the 13th the engineers almost walked on the first rattlesnake of the season. On the 15th I found the first Gila Monster and two days later a wild honey bee backed up to me and stung me on the upper lip.

AZTEC RUINS NATIONAL MONUMENT

Johnwill Faris, Custodian

The later part of February and most of March has constituted practically all of our winter. Visitors for the month total 282, which is a decided increase over March of last year. Those passing through have been very liberal in their praise of our new unit and we are certainly proud of the reception it is receiving.

During the early part of March it was my pleasure to attend a conference in Gallup where many important National Park problems were discussed. I particularly enjoyed the reaction of some of our State officials toward our efforts in behalf of the tourist and natural resources over which we preside. The press in recent weeks has been quite liberal in its praise of our service and in view of the fact that New Mexico is planning an elaborate celebration in honor of the 400th anniversary of the coming of Coronado. They are naturally expecting a considerable influx of visitors and I feel that it behooves our service to not only offer every cooperation, but we should take it upon ourselves to see that our National Parks and Monuments in New Mexico be the outstanding attractions in this state for the celebration.

Shortly after my return from Gallup it was our pleasure to entertain both Hugh Miller and J. H. Tovrea. We were especially glad they could make the visit after we had elaborated on our attractions here. We hope that it will be possible for each and everyone in the Southwestern Monuments organization to see this unit. Our new building completed under PWA is ready in almost every detail. We will be able to present the unit earlier this year than any year during my administration. I still plan on a few buckets of paint bring out some of our features but am pleased with the appearance even now.

While it is still freezing at night and our weather is somewhat un-

settled, we have an excellent prospect of a superabundance of weeds and I can almost work up up a sweat in this sub-zero weather thinking of the hoeing that will of necessity come our way within the next few weeks. I am somewhat disturbed over the proper handling of our unused area and if at all possible will let some competent individual grow light garden produce on the area in exchange for keeping it in a presentable condition. Of course, I realize and shall make it quite clear to any individual that this will not obligate us in any way to carry on in a like manner but that it will be only for the summer and the crops must be of such a nature that they will be entirely removed in the fall of the year and his relinquishment of the area complete. It will be understood most emphatically that the Park Service has a number of trees that will be guarded most carefully. I will make every attempt to get our area seeded to grass at which time its care will be reduced to a minimum.

While it may seem somewhat distant, we would especially desire that your consideration be given to an early provision for the completion of our parking area. As you realize, our crushed gravel is passable and very much superior to the past status of our parking area, yet in its present condition, and as a first impression, the visitor gets that incomplete and half finished picture. We have exerted ourselves in our Great Kiva and Administration features and invite the public with great pride, but many remark with horror at the sight of our front yard as compared with the unit otherwise.

The City at the present time is establishing a stone crusher where it would be possible for us, if we could act comparatively soon, to obtain sufficient gravel to finish all walks to and from the ruins proper. Your personal acquaintance with our area in wet seasons enables you to realize the importance of definite walks and since our Master Plan provides the features I felt it imperative to mention the possibility of their cost being lessened due to the chance to obtain crushed rock at a reduced cost.

WUPATKI NATIONAL MONUMENT

J. W. Brewer, Ranger in Charge.

WEATHER:

March was March -- and the wind blew hard and often. Temperatures; Maximum 68 and Minimum 21. Precipitation; unmeasurable trace on March 5th.

TRAVEL AND ROAD CONDITIONS:

The Monument entrance road is in its naturally poor condition, not much changed by winter. 33 visitors used it, 8 of whom came no farther than the Citadel. Work is progressing on the new highway 89, and a handsome cattle-guard (about 12 feet wide) has been placed at the entrance road turn-off.

VISIT OF NATURALIST TECHNICIAN:

Mr. A. E. Borell, of the Wildlife Division, arrived the evening of
SOUTHWESTERN MONUMENTS 133 MONTHLY REPORT FOR MARCH, 1935

February 27th to check up on feed and water conditions for antelope on sections east of Heiser Wash, with regard to the advisability of their inclusion in an enlarged Wupatki National Monument. Because he was a stranger to our unmapped back roads I guided him. The first morning was spent in inspecting range conditions on Black Mesa, part of the area in question. That afternoon we drove and hiked along the Little Colorado River trying to locate the township line which would be the eastern boundary of the area. The second morning we drove to Grand Falls and approached the township line by driving downstream along the river. Eddie McKee, Naturalist at the Grand Canyon, suggested the advisability of including Grand Falls in an extension of Wupatki National Monument. Mr. Borell was impressed with the scenic and geologic interest. We also saw the Long Fort, a ruin on an island of the river, four miles below Grand Falls and approximately three miles upstream from Wupatki. The morning of the third day we made a tour of Antelope Prairie, and the country around Citadel and between that country and Crack-in-the-Rock. Mr. Borell then returned to Grand Canyon. We greatly enjoyed having Mr. Borell and agree with Earl Jackson that he does cover the ground.

PLANT LIFE:

Two interesting observations Mr. Borell made were tumors on the Rabbit Brush caused by wasps; and, in some areas, the rodent destruction of yucca. Leaves of the yucca are chewed off almost to their base, giving the plant a pineapple-like appearance. It might be well to note here, too, that Mr. Borell identified as striplex the plant which is locally called "chamiso".

One of the earliest plants of the Monument is pretty well along. It is the one that Hopis prepare and eat much the same as we do spinach; they call it Kwee-ee-vee. This word, like lots of English words, has other meanings, applying also to a "dandy" and an ester of good things". Incidentally, the experimenting modern dwellers of Wupatki have eaten their first mess of Kwee-ee-vee and survived! It is similar to spinach, without the sand. The plant is a variety of bee-weed.

ANIMAL LIFE:

A raccoon was taken March 2nd by Dan Fernandez west of Wukoki (NA 203) Ruin. Elevation 4800. Length 29 inches, tail 11 1/8 inches and hindfoot 4 7/8 inches. Soil association is Moencopi Sandstone and windblown cinders. Grassland phase of Upper Sonoran Zone.

I am informed by Mr. Borell and Mr. Hargrave that this is an unusual specimen from that area. To my knowledge no raccoon has ever been recorded from San Francisco Peaks or Painted Desert regions.

After Mr. Borell's earlier visit I obtained further information regarding the number and location of dead or slaughtered antelope near the

Monument. Eighty dead antelope were reported to have been seen within the last year; I was able to locate only six at this time. This information was written to Mr. Borell, who stopped by to see some of these carcasses on his way to White Sands. He visited and photographed two carcasses, both of which had been butchered for the meat.

Miscellaneous:

Gene Gordon visited us twice this month, the first time bringing with him Howard Leslie, Ray Hitson and Mr. Williams who all stayed a week mapping Citadel and Wupatki wall areas.

Hugh Miller paid us a short call on his way east; we were very glad to see him at Wupatki and gave him directions for the short-cut through the crater dotted land to Winslow. This country is very humpy, but we trusted Mr. Miller's familiarity with this type of formation would prevent them confusing his route.

Richard Van Valkenburg, archeologist with 1934 CWA at Wupatki, now with the Soil Erosion, spent the night with us last week. Dick has many friends among the Navajos near Wupatki; so we spent the evening calling at hogans. At Peshlakai Etsetti's camp we learned the Navajo name for Wupatki. It is (spelled as it sounds to me) Ah-nah-sch-b'kin or the House of the Ancient Enemies.

SUNSET CRATER NATIONAL MONUMENT

J. W. Brewer, in Charge.

The total travel figure since December 23rd is 53 registered visitors. On and after December 30th entries were written in assorted pencils and various colored inks, indicating the removal of the pencil and chain that were put there for those who came without the means to register. On my way back I will install a new pencil on a length of picture wire; but never will we know how many visitors were unable to register.

On the 13th of January O. W. Moore of Williams, Arizona wrote, "snow up to your neck". The date of the next entry is February 22nd, more than a month later. A party of 5 registered the following day, and then one month elapsed before the next entry by Dean Eldridge (Dean Eldridge Museum) who wrote, "could not make it around, too much snow". on March 23rd.

The entrance road is very badly gullied and wind-blown in spots. Generally it is in very poor condition. Today the road was free of snow except along the north slope where we ^{were} stuck last month; here are still the remains of a large drift. A drift fence along this short stretch might make the Monument accessible during more days than is now the case.

WALNUT CANYON NATIONAL MONUMENT

J. W. BREWER, in Charge.

With the exception of deeply rutted roads and windblown pines things look good at the Monument. The ranger cabin is still intact and apparently unmolested. Between the screen door and the wooden door I found this very tragic sounding cry for help; "Dear Ranger -- I'm stuck in the mud one-half mile back toward #66. Have you any suggestions? Gone to see the cliffs now. Stanley Feitler". Then: "Back from the canyon. Very interesting. I'm westward from here. If you can help I'll be much obliged. Thank you". Boss we know he didn't get any help from "dear ranger"; and he was 6 miles from the nearest telephone. What he did, or how, I don't know, but it would have been swell if someone had been there to help him.

The right fork road from the parking area is obstructed by a windblown pinyon, and a small pine has been uprooted near the trail above the registration house. Everywhere there is evidence of terrific wind storms. Some clean-up work should be done before the summer trade swoops down on Walnut Canyon.

The registration sheets are gone! The binder Paul made is still nailed down, but the sheets are gone! I am hoping that Walt Attwell got there and took them, because otherwise I'm afraid the wind has blown them away. New ones are now securely nailed down with a pencil attached.

CASA GRANDE NATIONAL MONUMENT

Louis R. Caywood, Park Ranger

TRAVEL:

Travel for this month was greater than it has been for any March since 1929 and 1930. The total number of visitors who were contacted through guided parties to the ruins and the museum was 3335. There were 315 guided trips through the ruins and 292 guided trips through the museum. This is an increase in registration of almost 20% over the total of 2785 for March, 1934. Besides these contacted visitors there were 422 who used the facilities offered at the Monument. In main these were people who came to use the picnic and playgrounds.

Every state in the union was represented except Maryland and Delaware. Arizona led with a total of 1450, California second with 563, Illinois 143 and New York 115. Tourist travel through Phoenix and Tucson, according to the Arizona Daily Star (Tucson), proved to be the heaviest in the history of the two cities. (March 8, 1935)

A number of noted visitors were taken through the ruins and museum. Mr. Charles M. Schwab, steel magnate, from Pennsylvania and Mrs. Davenport Galbraith dropped in on us for a brief visit on March 2nd.

F. D. Richey, E. C. Auchter and K. A. Reison, all of the Department of Agriculture, Washington, D. C., asked to be remembered to friends in the Park Service at Berkeley. Ex-president Charles Gates Dawes and party were conducted through the ruins by Superintendent Pinkley. Two neices of Judge 'Kenesaw Mountain' Landis of baseball fame spent an enjoyable hour on March 25th.

Park Service officials who visited the Monument were:

Carroll Miller, Custodian of the Chaco Canyon National Monument spent considerable time at the Monument from March 3rd to March 5th.

Mr. A. E. Borell, Wildlife Technician, looked over the Monument noting the number of birds and animals. He said it was truly a wildlife sanctuary.

Mr. and Mrs. W. H. Wirt stopped in on their way from Chiricahua National Monument to Mesa Verde National Park. Mr. Wirt is Forest Inspector.

Mr. W. Wehber of the Chief Engineer's office at San Francisco spent a very enjoyable day visiting the Monument and adjacent country on March

Mr. and Mrs. Frank Kittridge and daughter dropped in on their way to New Mexico. Mr. Kittridge is Chief Engineer for the Park Service at San Francisco.

Several of the staff of the Gila Pueblo at Globe have been visitors here on their way to and from Snaketown. Mr. and Mrs. H. S. Gladwin had a picnic on our grounds and then were taken through the ruins by Superintendent Pinkley.

WEATHER:

Except for a few days of bad weather at the beginning of the month when almost an inch of rain fell weather conditions here have been favorable for traffic. The total precipitation for the month was 1.42 inches, .95 of an inch fell on the 2nd and 3rd with the remainder falling on the 8th, 9th and 10th. The maximum temperature for the month was 87 on the 30th and the minimum was 30 on the 21st.

While the northern Monuments are complaining of snow, rain and mud, we are basking beneath the pleasant skys of sunny Arizona. Gentle breezes waft the scented pollen of thousands of desert flowers right to our door step and into our windows. Yellow and orange poppies literally cover a number of nearby hillsides. The cacti are beginning to bud; so before the month of April is over one of the most gorgeous sights ever to be presented to Arizonians will be seen on our green flower strewn hills. Old timers say the desert is the greenest that they have ever seen it.

Pouring of the footings of a two car garage and fuel room building at the Ranger Station area was completed March 5. Wall construction of tufa building stone was started immediately and at the time of this report is approximately 35% of the walls are in place.

The public camp ground comfort station has been completed with all the fixtures in place and plumbing completed and tested. Inside partitions have been painted and with the exception of small parts of the window grill work the building is ready for public use.

Baring unexpected complications, the barn will be completed with the close of this enrollment period. All wall and roof work is complete in place, there remaining only the exterior openings to complete, and the built in doors and the necessary clean-up work to finish the job.

Considerable planting has been done this month. The island within the parking area is now completed with considerable tree and shrub planting in the vicinity of the proposed headquarters building. Additional planting has been carried on along the entrance road.

The fourth cattle guard located on the Los Alamos School road passing through the Detached Section was completed this month.

Additional cow sheds, corrals and hay barn formerly used by the concessionaire have been dismantled and the areas cleaned up. This leaves only one small barn to be torn down. This will be done before the expiration of the period.

A rock quarry operation has been in progress all month supplying building stone for the buildings under construction. In addition approximately 150 cubic yards of building stone has been quarried and hauled to the site of the proposed office building for use immediately upon the arrival of the proposed plans.

Excellent weather conditions for work has prevailed the entire month at this camp. *****

ENGINEERING REPORT

G. H. GORDON, Ass't Eng.

The first two days of the month the field crew was at Casa Grande. From the 3rd to 15th they were at Wupatki. The work at the Monument consisted of mapping Citadel and the taking of wall elevations at the Wupatki ruins.

On March 15th the crew moved to Chaco Canyon where a map of Chetro Ketl was started. This work continued until the end of the month. This covers the field crew and myself. No personal changes were made.

ENGINEERING REPORT (Cont.)

March 1-2 At Casa Grande, working up field notes and making out monthly report.
March 3 Left Casa Grande at 1:00 for Flagstaff and arrived 11:30.
March 4 Went to Wupatki and went over Stabilization Plan with crew.
March 5 With Dr. Colton nearly all day. Made a trip out to Wupatki
March 6 Left Flagstaff for Casa Grande
March 7,8,9,10, 11. Casa Grande working up Stabilization Reports.
March 12 - 14 Chiricahua National Monument.
March 15 - 18 Gila Cliff Dwellings.
March 19 - 20 Casa Grande National Monument
March 21 At State Highway Department getting information in regard to proposed road from Flagstaff to Cameron.
March 22 At Flagstaff getting land ownership adjacent to proposed entrance roads in this territory.
March 23 - 28 Chaco Canyon National Monument working on Stabilization.
March 29 - 30 Exploring limestone caverns on Wupatki National Monument.
March 31 Left Flagstaff at 9:00 AM and arrived at Casa Grande at 8:00 PM.

Report of Associate Engineer Walter G. Attwell.

March started in with me in the field at Chaco Canyon for an inspection of Chaco, Hovenweep and Yucca House.

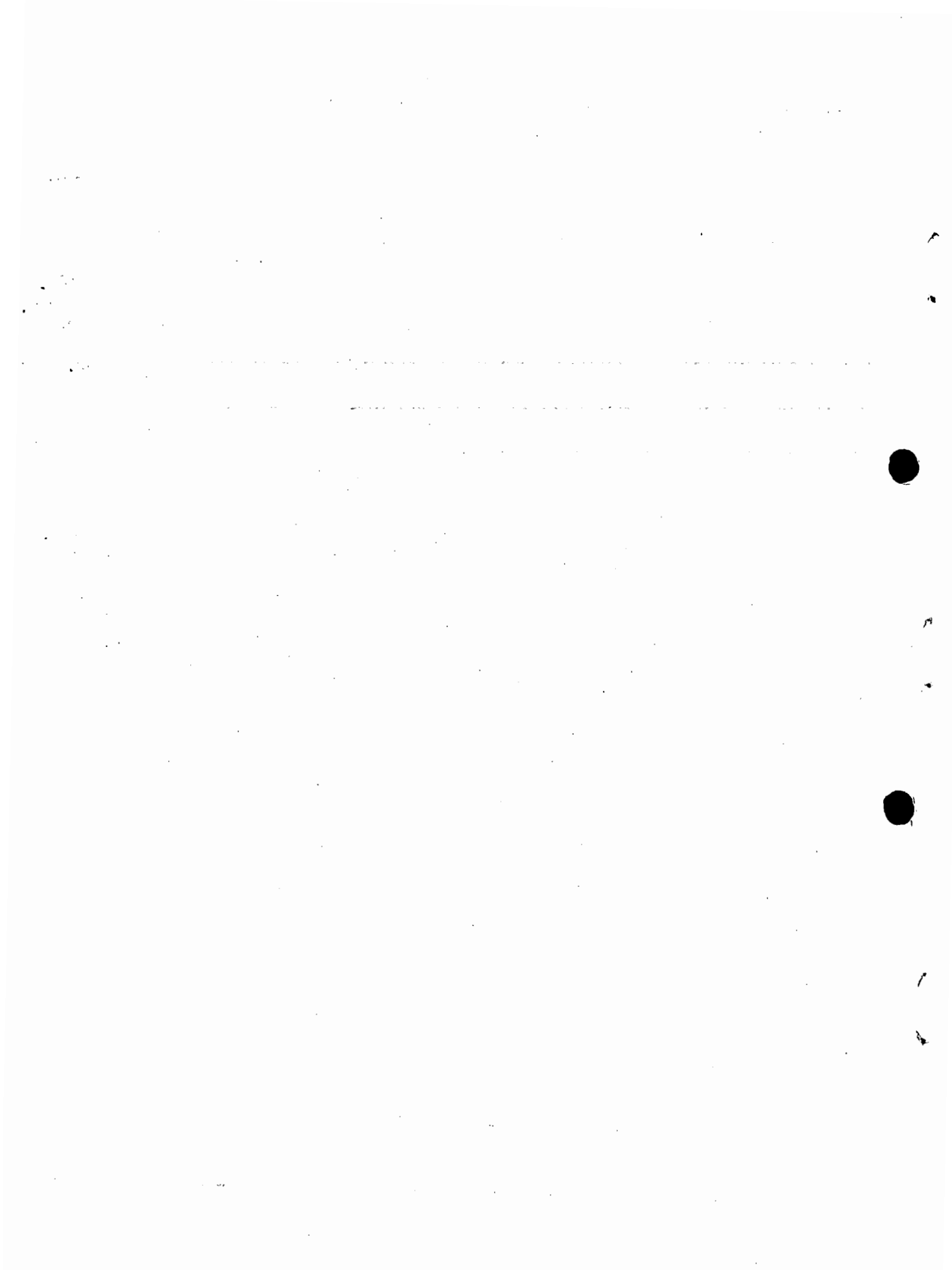
During the month I visited all of the Southwestern Monuments where construction work is in progress.

At Tonto and Bandelier topographic surveys are nearing completion.

Plans and programs have been prepared for the ECW camps at Bandelier and Chiricahua and the tow prospective camps at Saguaro and Wupatki.

Engineering study has been made of the projects in the proposed new PWA bill and many of the plans are already completed.

Every project at the present time in my district that has funds is under way.



THE
SOUTHWESTERN
MONUMENTS
SUPPLEMENT
TO THE
MONTHLY REPORT

BEING THE PAPER EQUIVALENT OF THE TAURIAN SESSIONS SO OFTEN HELD WHEN SOUTHWESTERN MONUMENT FOLK GET TOGETHER.

SHOP TALK, GOSSIP, AND OTHER INTERESTING THINGS ABOUT THIS AND THAT: THE WHOLE CONTAINING SOME INFORMATION AND NOT MUCH MISINFORMATION ABOUT WHAT GOES ON IN THE SOUTHWESTERN MONUMENTS.

UNIFORM CHANGES?

By
Dale S. King

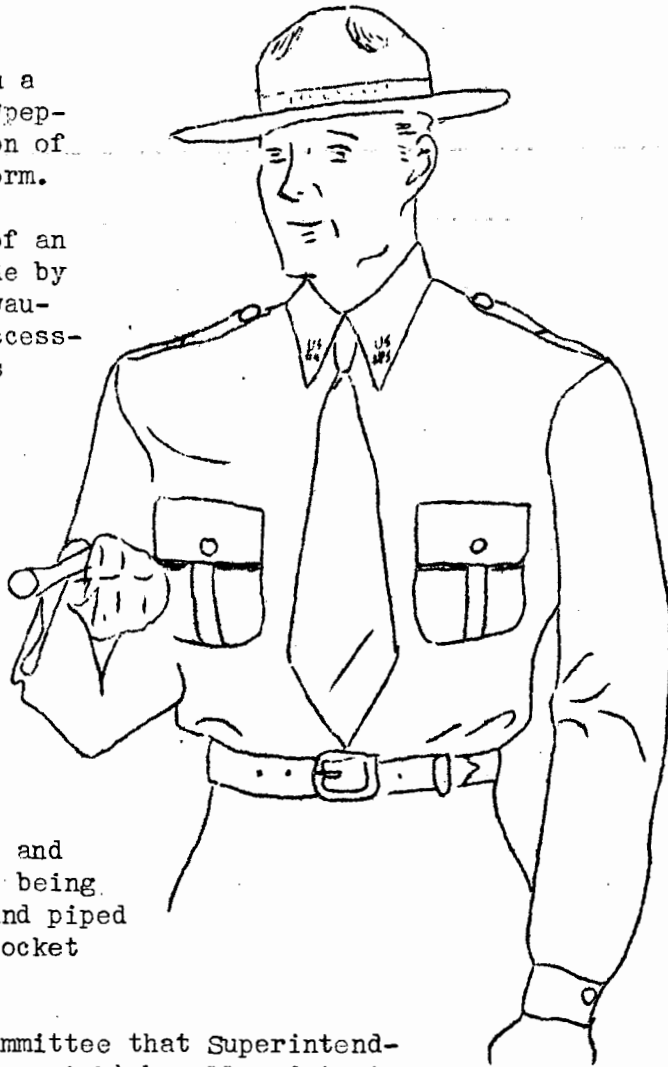
For some time there has been a movement afoot toward the "pepping up" and standardization of the National Park Service uniform.

First step was selection of an odorless brown dye (No. 99, made by the Fiebling Chemical Co., Milwaukee) which has proven quite successful in rendering various shades of brown to a uniform Cordovan color. A quantity of this dye has been ordered, and Southwestern Custodians and Rangers are not only invited but urged to secure it from us. Detailed prices will be published later.

At the recent Superintendents' Conference at Washington, a Committee went further into the problem, suggested beige (a sort of a cross between tan and gray) breeches, and possibility of the present coat being equipped with shoulder straps and piped with red along the straps and pocket flaps.

It was suggested by the Committee that Superintendents (and Custodians too, if they wish) be allowed to try out the new uniform for a year before requiring the other grades to purchase it. Thus, minor changes can be adjusted before the uniforms are generally adopted.

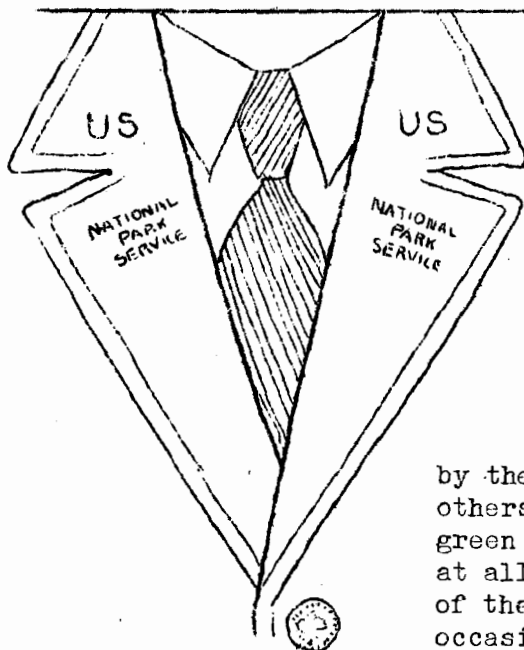
Drawings and samples by Fecheimer of the proposed outfit together with comments by Superintendent Thomson of Yosemite have reached this



Office, and we are sending them on to you herewith in abridged form. Our comments are appended, and we would like to have you men in the field send in your suggestions and criticisms.

COAT

Yosemite is flatly in favor of the present coat. About 60 men studied the drawings and without exception were opposed to the red or any other type of piping---they think it is the uniform not of a Service but of a servant, and there are further practical objections that the piping will fray and soil readily.



(Southwestern Headquarters Staffmen feel the same way, except we think the addition of a shoulder strap would add to the uniform's peppy appearance.)

BREECHES

Yosemite favors the Elastic Beige breeches---they harmonize excellently and contribute notably to the "pepping up" of the uniform, as desired by the Director and the majority of the others. The other two colors, a dark green and an olive drab, were not liked at all. Yosemite recommended that slacks of the Beige be authorized for suitable occasions, as heretofore.

(Southwestern Staffmen concur.)

HAT

Yosemite in favor of a slightly wider hat band than the present one.

(Southwestern Staffmen concur.)

SHIRT

Yosemite feels the white shirt is ideal for dress, but not good for duty wear. They all like the tan Aerocrat shirt sent out by Fecheimer (see sketch on opposite page). The use of this shirt, with shoulder straps, gives a natty uniformed appearance when worn without a coat. As Yosemite temperatures run all summer from 90 to 105 or 106 degrees, and as many

other Park and Monument units suffer similar or even higher temperatures, the coat-less man is a very important consideration.

(Southwestern Staffmen concur.)

BOOTS

Yosemite and Southwestern men are very pleased with the brown boot dye mentioned earlier in this article.

NECKTIE

Yosemite strongly favors the black necktie, principally because it insures a uniform appearance instead of so many shades of green as have always been in use, and will give better service because green ties have not been cleanable. Removal of spots, even with cleaning fluid, leaves a ring or discoloration. Black ties will be not only more uniform and neat, but also more economical.

(Men at Coolidge agree.)

CAP

Yosemite nor the Coolidge Office voted on the cap, believing that since it is not used in the west, eastern men should have full choice of what they want. However, the new drawing seems to be an improvement.

INSIGNIA

Yosemite: "We still lack a significant insignia. If we had one that meant something, it could replace the USNPS. Without such a symbol, we apparently have to continue the "USNPS", but some of our people think we should substitute a device as per the accompanying drawing. (See sketch on preceding page.)

"The coat and shirt should be provided with holes for the insertion of the insignia to insure that the devices are located uniformly and correctly.

"I think the gold and silver stars denoting length of service should be made about 50 percent larger."

(Coolidge men differ slightly. Most agree that since service stars mean nothing except to Service men, why make them larger? Two of the force consider the U.S. on the accompanying drawing unnecessary. The Boss feels that the "National Park Service" should be slightly smaller. But all agree that

the idea is sound.)

DISTINGUISHING FEATURE

Yosemite: "Here there is general strong feeling that the temporary contact groups should be instantly distinguishable from the permanent contact groups. The simplest way will be to add a green patch just above the upper left pocket of the blouse bearing the caption "Temp. Ranger" or "Temp. Naturalist"; the permanent men to wear merely "Ranger", "Naturalist", "Supt.", etc.---these to be used only by groups that normally contact the public extensively."

(We do not see any particular reason for this, unless it is in the minds of Park men that a slight mistake by a temporary man would be excused more readily by visitors. However, on the other hand, some persons might resent or question the authority of temporary men so designated. All in all, Coolidge men are not in favor.)

Yosemite: "We think also that there should be a brassard worn on the left sleeve just below the shoulder, showing the name of the unit in which the wearer serves ("Yosemite", "Casa Grande", "Great Smokies", etc.). This will not only distinguish the assignment of the wearer, but will also add a bit of color, the need for which has been so much discussed. We favor having this in the form of a sewed-on woolen patch of the same color as the hat, with the word embroidered in gold or black; these to be worn only by the permanent employees....This device also automatically distinguishes between the field men in the Parks and the men of the staff and the cooperating groups."

(We are heartily in favor of the brassard idea. However, in our particular case; we would rather have the Southwestern Monuments men designated by a single emblem denoting the group. In other words; the Monuments setup is rather that of a big Park with 25 sub-divisions. Designating a man "Casa Grande" or "Sunset Crater" would be comparable to a label "Pasture Wash Ranger Station" at the Grand Canyon.)

Yosemite: "....very much pleased with the proposed new general layout. As we are removed such distances, we can't settle the small details quickly, and it is recommended that the Committee adopt the two-tone uniform with the present coat, the Beige Elastique breeches, the tan shirt for duty wear and the white shirt for dress, the black necktie, and the new dye for the boots, and that Superintendents secure such outfits under existing instructions, and that we use the year during which they will be under study and fire to work out the smaller details."

(Southwestern Staffmen concur, with such exceptions as are above noted. Let's have comments from the Field Stations.)

MUSEUM STUDIES AT CASA GRANDE

By
Louis R.
Caywood

This brief study is being made in an attempt to obtain desirable and necessary additions to the present museum and will be justified at each step.

Importance of the Casa Grande ruins cannot be too highly stressed. The Casa Grande itself is the only clay walled ruin of its type in the world which is now standing. A number of well preserved Pueblo ruins of the masonry types can be visited in the Southwest, but the only preserved Hohokam site in existence is within the bounds of the Casa Grande National Monument. So why should there not be the finest Hohokam museum displays to accompany this fine ruin? Why should not the best presentation of the lives of these Hohokam people be found at the Casa Grande National Monument Museum?

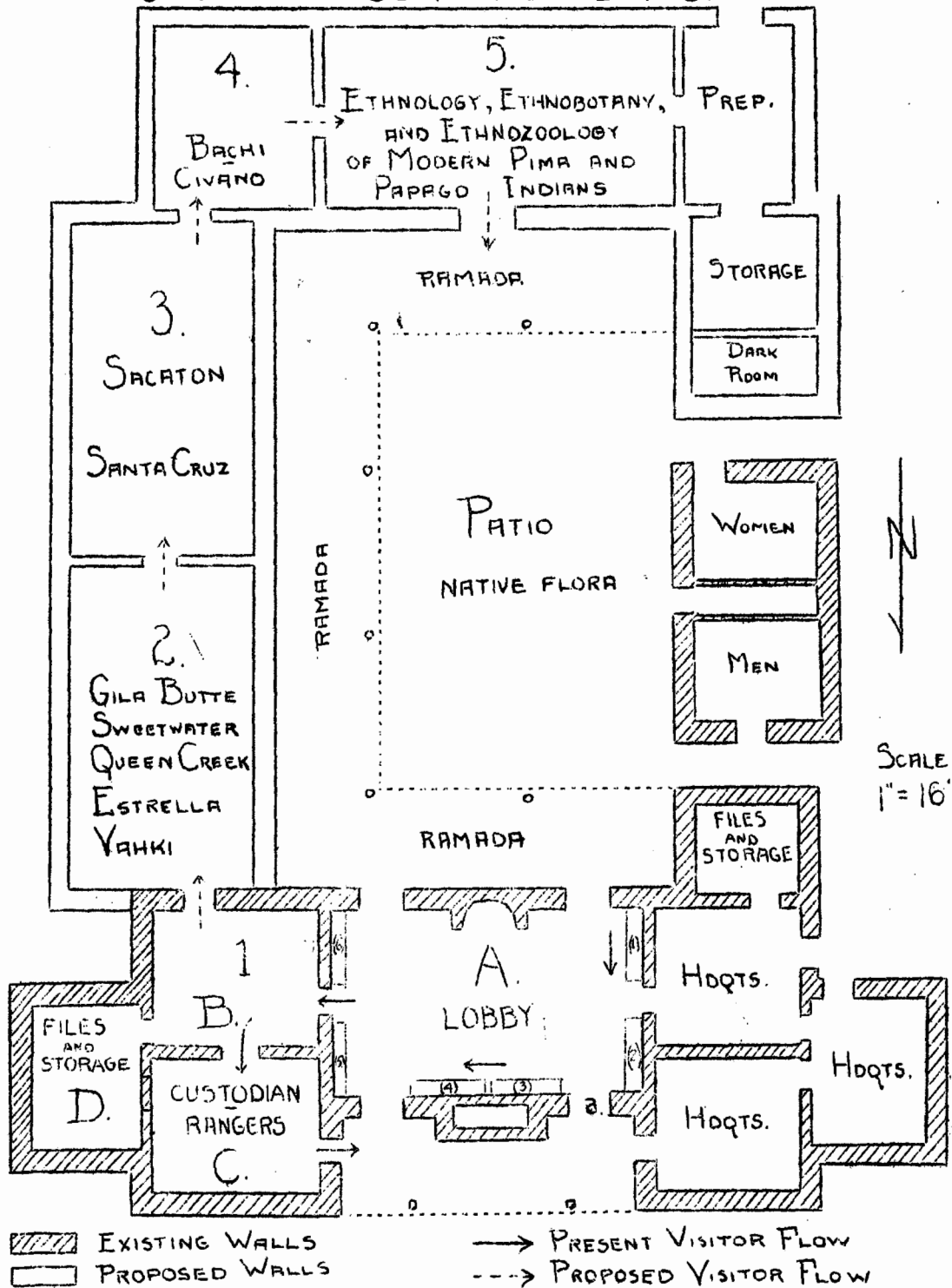
Knowing that a much longer and more complete archaeological story of the Gila and Salt River areas can soon be told, it is only right that plans be made for the proper telling of this story. Archaeological work being carried on by the Gila Pueblo of Globe at Snaketown on the Gila River Indian Reservation is bringing to light more evidence daily. There is work being done near Phoenix at Pueblo Grande which will also bring new evidence for this story. Work already done by Mr. Carl A. Moosberg of Sacaton added considerable in the way of artifacts and burial customs, but the greatest additions and refinements to our story have come from the researches of the Gila Pueblo.

EXISTING FACILITIES

The present museum layout is shown on the plan on the next page as the shaded portion. The large room (A) is where our present story is told. In room (B) are several cases showing small artifacts, i.e., shell, stone, clay, textiles, a case of representative pottery of the Southwest, and several charts. Room (C) consists mainly of modern Pima, Papago, and Apache handicraft with two charts. Room (D) was made ready for a preparation room and storage room until space was needed for the Engineering Department. It is now used as an office, drafting room, and map file room.

The story of the Hohokam now told to the visitors centers in room (A). Entering the room through door (a) they are conducted to a case marked (1) where the story begins with the earliest period that we have

PROPOSED MUSEUM AND PREPARATION ROOMS
CASA GRANDE NATIONAL MONUMENT



previously known, the Colonial or Santa Cruz Phase. The flow started here continues around the room as marked by the arrows where the successive stories of Sedentary (or Sacaton Phase) and Classic (or Civano Phase) are told. The points brought out show the pottery development, architecture or house type development, burial customs, agriculture, and religion so far as is known.

Room (B) now contains three glass top cases, two wall cases and four wall charts. The various displays in the cases are jewelry of stone and shell, clay objects, stone objects, and a case of representative pottery types of the Southwest. One wall chart of sherds shows pottery types of the Southwestern culture areas and periods classified in chronological order. This display was given to us by the Gila Pueblo at Globe. Another chart shows dated ruins of the Southwest according to data known several years ago. Due to rapid changes going on in Dendrochronology this chart should be replaced as soon as possible by a revised chart. And a fourth chart shows the food areas of North America.

Room (C) is the present ethnology room showing modern Indian pottery, basketry, implements of warfare, etc. A map showing the Indian reservations of the Southwest is helpful to many visitors in orienting themselves. There is also in this room a large map chart or pottery percentage chart of the state of Arizona showing the percentage of types of pottery found in each quadrangle. A few pickled snakes and insects, a stuffed Gila Monster, a stuffed Western Horned Owl and some specimens of petrified wood make up the rest of the displays in this room.

On Sundays, holidays, and other busy days the flow through these three rooms becomes so congested that many people do not see all of the displays.

PROPOSED ADDITIONAL ROOMS FOR EXHIBITS AND FOR PREPARATION PURPOSES

The following outline of plans with justifications for additional display rooms should be considered in planning. Mr. Frank Pinkley, Superintendent of Southwestern Monuments, and the local educational staff concur with these preliminary plans.

Location:

The proposed addition will consist of two wings enclosing a patio to the south of the present museum building.

Purpose:

To extend the archaeological story of the region to include a

postulated period when the first peoples were passing through the valley before they began to settle down as agriculturalists. Then bring it up through the various periods of development through the period of decline to the present time.

Such a story is more than justified at the present time because of the work being done 30 miles from the Monument by the Gila Pueblo. The finds of the various institutions and individuals should be combined into a story to pass on to the interested visitor and the student. It is no more than right that when such evidence is exhumed that it be passed on by methods which the National Park Service has developed.

Building:

The building would consist of four additional rooms for display purposes, a preparation room, a storage room, and a dark room for photographic purposes. A ramada would be built on three sides of the resulting patio.

PROPOSED MUSEUM LAYOUT

A. Lobby:

The proposed lobby is at present the main room of the museum where the archaeology of this region is told. In this room would be placed appropriate furniture for anyone wishing to rest, write, or study. Around the walls might be placed pictures of other Southwestern Monuments. On a central table would be a few books on the Southwest in general and albums containing pictures of points of interest in the Southwest. This lobby would be the gathering place between trips to the ruins and museum.

In the room marked (1) would be a story telling how man came onto the American continent. Also the fact should be brought out that he was nothing more than a hunter. Tell how he spread and moved from one place to the other. Show present language groups and how widely separated they are. In general, then, this would be an introductory room to show the average visitor that man has not always been a farmer, but that there was a hunting stage before the agricultural stage. It is not so much this fact as the point to make the visitor see this and make him remember it.

Going on to Room 2 there would be the evidence so far uncovered as to how the earliest agriculturalists lived---portrayed by pottery shards, house types, etc. These phases as tentatively outlined by Mr. H.S. Gladwin and Dr. Emil W. Haury of the Gila Pueblo

at Globe are as follows:

Vahki---the earliest period. Undecorated pottery and large houses.

Estrella
Queen Creek
Sweetwater
Gila Butte

In Room 2 one good diorama of a period of which there is the most evidence would be in order. A model of a trash mound cut showing the early houses beneath the debris would be good. A map of Snaketown showing trash mounds, houses, irrigation ditches, etc., would be extremely valuable. An a progression of house type models beginning in the earliest period and going through to the last period should be made.

Room 3 would show later periods which have been named by the Gila Pueblo as follows:

Santa Cruz
Sacaton

Appropriate maps of sites excavated with ground plans and models should be made for these periods.

Room 4 would contain the following periods or phases:

Civano
Bachi

Casa Grande is included in the phase called Civano. These more recent phases have a wealth of displayable material, but dioramas and models would be the best ways to present the evidence to the average visitor.

Between the time of the evacuation of the Casa Grande and the coming of the Spaniards there is a phase or two of which there is very little known at the present time. One phase has been called Bachi. Between now and the time that any displays will be made or any buildings obtained it is fairly probable that more will be known of this phase. Room 4 will be the room in which the story of Casa Grande and the story of what happened to the Hohokam after the abandonment of Casa Grande up to the coming of the Spanish will be told.

Room 5 will tell the story fo the modern Indians of this region including the relationship between the nomadic Apaches and the sedentary Pimas and Papagos. The ethnobotany and ethnozoology of these

Indians would also be treated.

From this room containing the modern material the visitor will be conducted through the patio where specimens of the native flora would be growing. On metal labels would be the names of the plants with their uses by the Indians of the region. Beneath the ramadas of the patio would be displayed some of the heavier artifacts, such as mortars and pestles, manos and metates, storage jars, etc. This would complete the conducted museum trip and the visitor would then to back into the lobby where he might further his study of the Southwest from material on reserve there.

The preparation room, storage room and dark room are absolute necessities to carry on the proper work of the Monument and the Southwestern Monuments. The room marked D has been the preparation room, but under the present congested conditions this room has been turned into a drafting and map room. The room marked C is our present ethnology room. It would be turned into an office for the custodian and the rangers. Room D would then be used as a files and storage room for the custodian with a door cut between C and D.

This completes a skeleton outline for a proposed addition to the present Casa Grande National Monument Museum. There are many gaps to be filled, suggestions to be made and plans for displays to be worked out, but for the present this will be a mark to aim at.

THE PRESERVATION OF C R RUINS IN THE SOUTHWEST

We now have with us Mr. Fredrick T. Martius who for the past year has conducted thesodobe conservation research at Stanford University.

After all materials submitted by manufacturers failed to meet the requirements, Martius continued to carry on this work as his time would permit. Finally he developed a formula which in laboratory tests fully met all of the rigid requirements for the preservation of not only ruins built of adobe but those built of sandstone or other materials as well.

Field tests so far have proven the merits of his compound which, for the present, has been designated as "x".

It is of interest that Martius should have become connected with work which is somewhat related to the accomplishments of one of his immediate ancestors, Carl Friedrich Philip von Martius, whose memoir appears in the Smithsonian Institution's Report for 1869 on pages 169 to 178 from which we may quote:

"The family of the celebrated botanist and ethnologist, to whose memory this sketch is dedicated, traces its origin back to Galeottus Martius, a famous physician and astrologer, born in 1427, at Narni, Umbria. About the year 1450 he occupied a professional chair at Padua, but, persecuted by the Inquisition on account of reformatory tendencies and compelled to leave Italy, he subsequently went to the court of the learned King Matthias Corvinus of Hungary, who appointed him his counsellor and librarian. The descendants of Galeottus mostly spread themselves over Germany, and many are known to have pursued learned professions, thus forming an ancestry worthy of their distinguished successor."

Carl Friedrich Philip von Martius on his travels and expeditions in South America, particularly in Brazil, wrote numerous works in the Latin and German languages, many of which were translated and published in the English language. Among the remarkable number of one hundred sixty titles a few may be mentioned which may be of interest to our personnel:

Contributions to the ethnography and philology of America, especially Brazil.

On Bushmann's work - The traces of the Aztec language in Northern Mexico.

The past and future of the American race.

Names and plants in the Tupi language.

The physical condition, diseases, physicians, and remedies of the aborigines of Brazil.

On the preparation of the arrow-poison Urari among the Juri Indians on the Rio Yupura, in North Brazil.

The creation of the Negro: a Brazilian legend.

Natural History of Palms (Historia Naturalis Palmarum). A monograph unique in its kind which caused the famous Naturalist Alexander von Humboldt to exclaim: "As long as palms are known and mentioned, the name of Martius will not be forgotten."

May we hope that our Martius in his work for the conservation of our ruins may win distinction as a "Chip off the Old Block".

RUINS STABILIZATION IS MOST NECESSARY NOW WHILE WE STILL HAVE RUINS TO STABILIZE. TWENTY OR THIRTY YEARS AGO WOULD HAVE BEEN THE TIME TO HAVE DONE IT. AND TWENTY YEARS FROM NOW WILL BE TOO LATE. RUINS MAY WELL BE LIKENED TO ANY DEPRECIATING ASSETS. THEY ARE THE ASSETS OF THE AMERICAN PEOPLE.

EDUCATIONAL ACTIVITIES:

Mr. Robert H. Rose was called to Berkeley for the period of February 12 to March 23 for the preparation of museum studies and supervision of the making of Museum displays for Southwestern Monuments. Following is part of his report on Museum planning:

The most important task completed during the month was a general report on Museum and Educational development in Southwestern Monuments with special reference to Museum needs. This general survey for the 25 Southwestern Monuments was made according to the following outline:

Name of Monument

- A. Location and accessibility
- B. Annual travel (1934)
 - 1. Distribution by seasons or by months
 - 2. Character; local or out of state; length of stay
- C. Educational features possessed by particular monument.
- D. Plans for protection and interpretation of ruins or other educational features.
- E. Structure proposed for particular monument
 - 1. The Museum unit
 - a. Rooms and subject material of each
 - b. Sequence of rooms and visitor circulation
 - c. Suggested dimensions of each room
 - 2. The Administration unit
 - a. Offices, files, etc.
- F. Trails to ruins, Nature Trails, Etc.
- G. Exhibits in place (Trail sides, etc.)
- H. Comments

This outline followed through in detail for each monument, gives a picture of the situation as a whole. It seems the knowledge of location and accessibility, annual travel, general educational features of the monument, etc., will assist us in knowing our problems better.

The next step (on which some progress has been made already), is the preparation of a report on the actual museum buildings themselves. This outline will take up in greater detail the building, architectural suggestions of general nature, location, functions and other problems.

Exhibit outlines for Bandelier, Casa Grande and other proposed museums have also been given attention. This is to form a part of the general educational development report referred to above.

Case layouts for five Aztec cases were worked out; labels printed; label copy made; the exhibits put up on a test exhibit background, etc. The cases for the new Aztec Museum were ordered. The matter of deciding on just how to apportion the allotment for cases and for exhibit preparation was the occasion of a good deal of planning.

Other details considered and worked on were as follows: Twelve lantern slides were colored. Relief map projects for Bandelier and de Chelly were drawn up and work is to proceed. The bird traps, the Moosberg cremation model, etc. were a part of the work given attention.

Here is a good story on Jimmie Brewer as told by his wife.

Dear Boss:

There may be some doubt as to just who this joke is on, but it is a good story. It might be called the "Tale of the Mysterious Pot-hunter" or "Why Custodians Age Before Their Time". The first episode occurred well over a month ago. We were on our way to town; as we rounded the bend and came in sight of Citadel we plainly saw a figure on top of the ruin; there was no car in sight; we suspected that the figure was no open and above board visitor, but a pot-hunter we were having the good luck to catch red-handed. The short distance to the ruin was covered in a hurry and Jim ran to the top of Citadel hill; he was gone quite a while and returned with only a very puzzled expression. Whoever it was had vanished without a trace; there was no signs of digging and he had evidently had time to take his tools with him! I drove back to the bend -- no, we hadn't mistaken a post or stones for a figure -- it was gone now; Jim reconnoitered the hill, looked for a horse, a car, peeked under stones -- no luck. The hasty departure made it all seem more mysterious and suspicious. When we failed to find any trace of the culprit we easily imagined he had a car, that it was parked below the mesa, and somehow a pot-hunter had escaped from under our very noses. We felt just a bit foolish -- I mentioned a slight misgiving as to Jim's qualities as an apprehender of pot-hunters. We decided not to mention the incident as it seemed best to ignore it in the hope that the person would unsuspectingly return when drastic measures could be taken. So for weeks we made a point of driving quietly (as the truck permits) by Citadel when we were in that vicin-

ity. Finally one day Jim's ruse seemed to be working -- coming around the bend we again saw the figure on top of the Citadel. With grim determination Jim started on the chase -- when the figure suddenly came to life, stretched great wings, and soared away. Yes, it was an eagle. I think on the whole, that Jim felt relieved -- it is probably better to be fooled by an innocent eagle than by a designing pot-hunter -- at any rate, the ruins had not suffered.

----Sally.

NATURE NOTES AT CASA GRANDE NATIONAL MONUMENT

FLORA:

Everything growing on the desert is green and many of the shrubs, trees and cacti are in bloom. The mesquite is budding out and will soon be blooming. The creosote bushes (*Covillea mexicana*) have been blooming since the 10th of March. All of the cacti are beginning to bud. The ocotillo has leafed out and will be blooming in a few days.

FAUNA:

Every animal and bird is mating. There are young rabbits, some a month old already. The ground squirrels look as though there will soon be large litters. The quail are thinking of nesting. In the ruins the Western Horned Owls have finally hatched their young on top of one of the walls. A Say phoebe has a nest in a post hole in one of the rooms and a number of Rough Winged Swallows are thinking of nesting in post holes also. They probably saw the Phoebe in her post hole and got the idea from her.

Mr. A. E. Borell, Wildlife Technician, spent a morning looking over the Monument. He stated that it certainly was a wildlife sanctuary. He straightened me out on a lot of birds that I wasn't sure of.

We have a bird banding station here and so far have been fairly successful in trapping and banding a number of birds. Ten Government Sparrow traps were sent us by the Berkeley office. Of these we will use about three or four here and send the rest out into the field; so any custodians or rangers who could use one or more send in your order. So far we have been able to catch 27 English Sparrows, 5 Cactus Wrens and 30 White-Crowned Sparrows. The 5 Cactus Wrens and 30 White-Crowned Sparrows were banded with Biological Survey bands. A very limited number of these bands are on hand but a few can be sent out after it is known what kinds of birds can be caught in the type of trap that we have.

The best joke so far is on a lady who seeing a bird in a trap let him out and told us that she saw the little fellow in that terrible mess of wire and finally found a way to let him out.

T.R.G.

HOW THE MONUMENTS GET THEIR MONEY

Custodians recently received copies of the preliminary estimates for the fiscal year 1937. Since perhaps some of the newer men are not familiar with the procedure which finally results in the allotment of specific sums to the respective monuments and since some even of the older men regard the process as darkly mysterious, it is timely to explain something about how the monuments get their money.

While a number of special programs have been submitted in connection with the various emergency appropriations, each involving a somewhat special procedure, the regular fiscal year appropriations are based on a standardized procedure prescribed by regulation. As an introduction to the subject, the following section is quoted from the Appropriations Estimate Manual:

Section 101. The Budget and Accounting Act 1921 (42 Stat. 20), requires the President to submit to Congress on the first day of each regular session, the Budget, setting forth in detail among other things: (a) Estimates of the expenditures and appropriations necessary in his judgment for the support of the Government for the ensuing fiscal year; (b) estimates of the receipts of the Government during the ensuing fiscal year; (c) the expenditures and receipts of the Government during the last completed fiscal year; (d) estimates of the expenditures and receipts of the Government during the fiscal year in progress.

Congress usually takes up the appropriation bills for running the government departments, the so-called "supply" bills early in the session each year. The supply bills now being considered in Congress are to provide funds for the fiscal year which begins July 1, 1935. As soon as the amounts carried in the bill for the Department of the Interior are known, the Director of the National Park Service calls upon the superintendent for preliminary estimates covering the cost of operating the Monuments for the fiscal year following that provided for in the current legislation. Thus, this office was recently asked to prepare preliminary estimates for the fiscal year 1937, which begins July 1, 1936. It will be seen that needs must be anticipated nearly a year and a half before the beginning of the fiscal year for which funds are sought. This fact in itself explains why desirable improvements must often be delayed exasperatingly after every one concerned is agreed that they are desirable. It makes clear the necessity for careful advance planning, and it handicaps the hair-trigger sort of man who receives his ideas as inspirations in his sleep and must put them into execution before breakfast.

In the preliminary estimates the superintendent simply tells the Director in a letter how much money it will take to run the monuments for the fiscal year under consideration. Each monument is treated separately and the "increases" are explained carefully. The Bureau of the Budget, the press, the taxpayers, all resent increases. There is something about the word that carries a flavor of extravagance and a suggestion of wasteful expenditures. When officials of the National Park Service (or any other service) are called before the Bureau of the Budget or the House Ways and Means Committee, it is said they are called to "defend" the estimates. Thus it will be seen that increases in the preliminary

estimates must be fully "justified" if they are to gain the approval of the Director, who in turn must defend them before the Budget Officers and the Congressional committees.

The superintendent, from his knowledge of his monuments, recommends that provisions be made for needed personnel, equipment, operating expenses. He knows just how badly off some of the monuments are, and explains - often year after year - how urgent this and that situation is.

The preliminary estimates are reviewed by the Director, who, with the requirements of other park units in mind, notifies the superintendent of the amounts approved for submission in the final estimates. The amounts again are approved for each monument individually. They are then carefully broken down in this office, by cost accounts. There are thirty-four cost accounts prescribed for Administration, Protection, and Maintenance; for example, 101 Administration, 104 Ranger Service, 208 Electric System, 226 Quarters Operations. Not all of them apply to each unit, but those that do are the items of which the estimate for a given monument is made up. The Bureau of the Budget, however, makes its comparisons on what is called an "Object of Expenditure" basis; hence, each one of these cost accounts must be broken down to show just what "Objects of Expenditure" are contemplated under it. The common objects of expenditure, with their symbols, are as follows:

- 01 Personal Services
- 02 Supplies and Materials
- 03 Subsistence and support of persons
- 04 Subsistence and care of animals
- 05 Communication service
- 06 Travel expense
- 07 Transportation of Things
- 08 Printing and photographing
- 09 Advertising and publication of notices
- 10 Furnishing heat, light, power, water, and electricity
- 11 Rents
- 12 Repairs and alterations
- 13 Special and miscellaneous current expenses
- 30 Equipment

This information by monuments is then consolidated on prescribed forms, for the Southwestern Monuments as a group, both by cost accounts and "Objects of Expenditure," so that in its final form the estimate shows, for example, how much is asked for the Southwestern Monuments as a whole for Account 101 Administration, just what it will be spent for; i. e., 01 Personal Services, 02 Supplies and Materials, etc., and how much each monument is to receive for 101 Administration. The increases, which will be given critical examination all along the line, are very explicitly explained, showing just what increase is asked for each monument under each cost account. The regular fiscal year appropriation for the Southwestern Monuments for 1935 includes 92 cost accounts. There will be over a hundred for 1936. It will be seen, therefore, that the compilation of these figures is a sizable task even after the amounts have been decided upon.

When the final estimates have been prepared and all of the various forms completed, they are again submitted to the Director, who again reviews them and consolidates them with the estimates submitted by other Park Service units for presentation to the Bureau of the Budget. In the Bureau of the Budget, certain officers specialize on the estimates of certain departments and thus gain a remarkable familiarity with the conditions presented in the estimates. Officers of the National Park Service are called before the Bureau to give testimony "defending" the expenditures which they have recommended. The Budget officer must be convinced that the increases shown are really necessary, and, even should he be convinced, Budget limitations may still prevent him from incorporating the increases in the Budget submitted to Congress. It is here that provisions which seem vital to the custodian, close to his own reservation, vital to the superintendent, who knows the need, are lopped off. On the Budget officer devolves the fight to stop the mounting cost of government. The "increases" shown on the estimates submitted by all government agencies, are this "mounting cost," hence it is natural that the increases should suffer the most at the hands of the Budget. The custodian, who thus finds very real needs unprovided for, may feel that he and his monument have been the victims of malice, favoritism, neglect, or whatnot, when in fact the result came about in a wholly impersonal, detached way.

By the time the Budget officer gets through with the estimates, drastic cuts may have been made in the amounts recommended by the superintendent and defended by the Service. The amounts finally allowed by the Bureau are consolidated with estimates submitted by the other government agencies into a bound book entitled "The Budget of the United States Government." The Budget for the fiscal year ending June 30, 1936, now before Congress, is a book of nearly 900 pages 9x11½ inches, crammed with figures in very small type. Estimates for the National Park Service become a part of the Interior Department supply bill. These supply bills are first introduced in the House of Representatives, where they are referred to the House Ways and Means Committee. The Committee holds hearings of its own, to which again Service officials may be called to defend their estimates. The bill finally emerges from committee, is passed by the house, follows a similar course in the Senate, and finally receives the President's signature by which it becomes a law.

The superintendent is notified of the amounts finally approved for each monument and is asked to suggest an "Outline of Work," showing by cost accounts how he thinks the money ought to be spent. This is necessary because the figures submitted in the final estimates have by now been so changed that the original outline can no longer be used. If this revised outline is approved by the Director, he issues an "Allotment Advice" and an approved "Outline of Work" from which the first allotment ledger pages are set up and the Monuments are ready for another fiscal year.

-- H. M. M.

Mr. Robert Rose returned to Coolidge from Berkeley only to hear of the death of his father in Indiana. Mr. Rose left immediately by plane to attend funeral services.

Superintendent Pinkley and Park Naturalist Dale King left on the 22th for White Sands to meet Assistant Director Tolson and Chief Architect Vint in order to accompany them over the Southwestern Monuments.

SIPAPU CAVERN
G. H. Gordon, Assistant Eng.

March 29th and 30th Associate Engineer Attwell and the writer arrived at Wupatki National Monument at 10:30 A.M. for the purpose of exploring certain openings in the fault line that extends in a northerly and southerly direction through the western half of the Citadel group. In the party were several members of the staff of the Museum of Northern Arizona and the acting custodian of Wupatki National Monument.

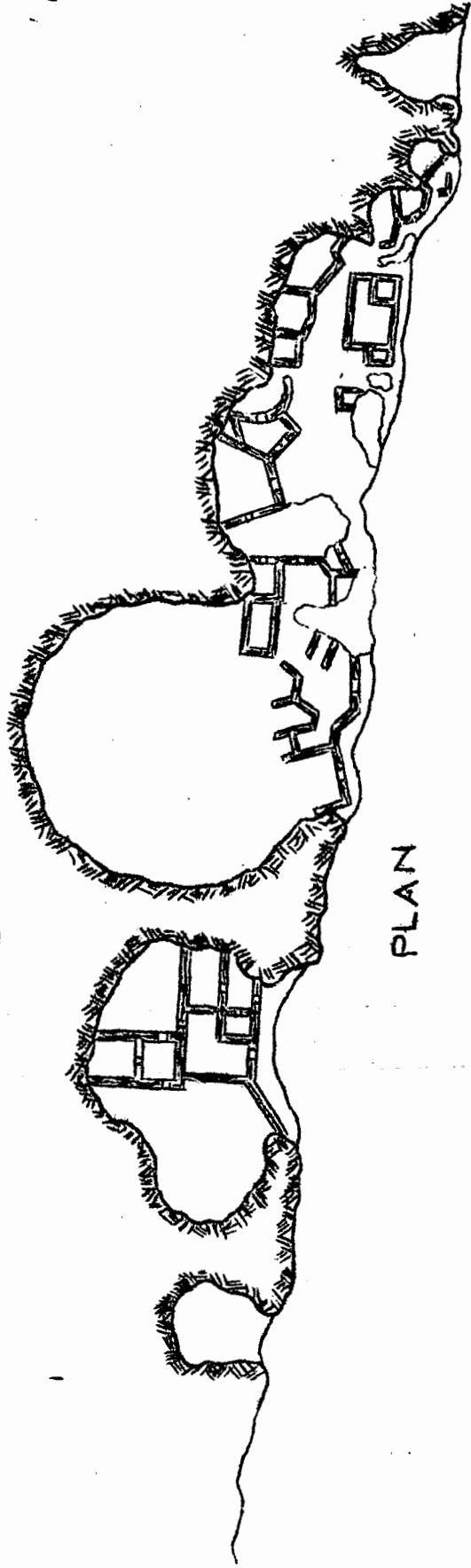
So far as the writer knows these caverns do not have a name. As one opening suggests the mythical sipapu of the Pueblo Indians, it was christened Sipapu Cavern. The other being near Loma Ki Ruin was named Loma Ki Cavern.

Sipapu Cavern was entered and explored by the writer to a depth of 240 feet. This depth was as great as could be explored with the equipment that was available. Further exploration of this cavern was deferred until the following day when better equipment would be obtained.

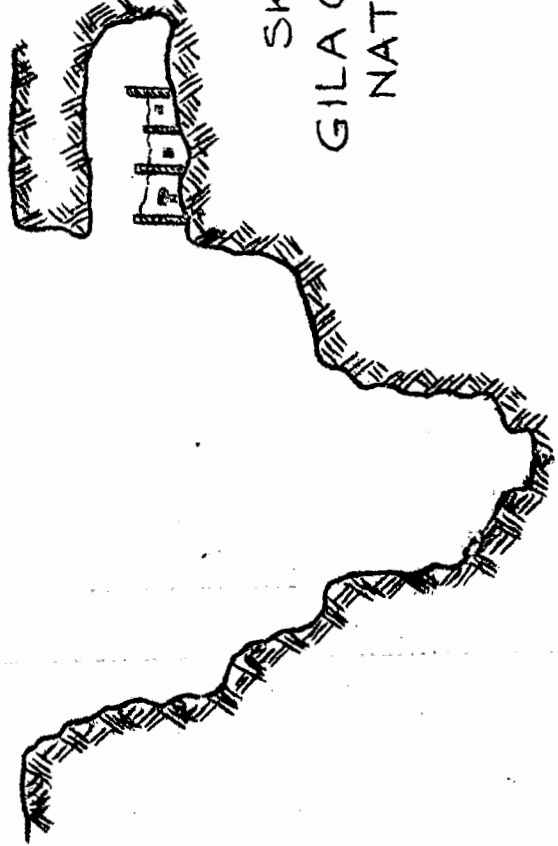
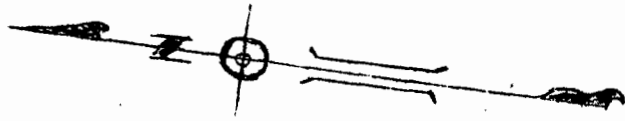
Loma Ki Cavern was explored by Associate Engineer Attwell to a depth of 128 feet. At this depth the bottom was reached. In the cavern a peculiar shaped head of antelope with horns attached was found.

on March 30th the writer made another attempt to reach the bottom of Sipapu Cavern, but was frustrated at a depth of 290 feet by the nature of the rock. Great quantities of loose material were encountered and it was deemed unsafe to attempt a greater depth at this time.

In the near future another attempt will be made to get to the bottom. Also a complete report will be submitted together with drawings of the cavern.



PLAN



SECTION

SKETCH PLAN
GILA CLIFF DWELLINGS
NATIONAL MONUMENT
MARCH, 1935
G. H. GORDON

A VISIT TO THE GILA CLIFF RUINS

By G. H. Gordon, Assistant Engineer

Saturday morning, March 16th, at 6:50, I left Silver City, New Mexico, for Gila Cliff Ruins National Monument. From Silver City the road goes through Bayard, Santa Rita and up the Mimbres Valley to within two miles of San Lorenzo where the road turns left to the north into the Gila National Forest, then on to the Goforth Ranch on Sapillo Creek. This is approximately 53 miles.

The car was left at the Goforth Ranch and horses had to be used across the divide between Sapillo Creek and the Gila River. The trail then led along the floor of the Gila. A number of river crossings have to be made before one finally gets to the little box canyon in which the Ruins are located. They are about two hundred yards up the box canyon on the west of the West Fork of the Gila River and are on the north side of the canyon about 150 feet above the floor of the canyon. This gave a southern exposure to the ruins.

Originally, a series of seven caves contained dwellings, but at this time only four of them have the remains of buildings in them (see accompanying sketch). The other three caves have had all walls removed some time in the past. There are, however, enough of the walls and blackened ceilings to warrant the statement that these caves had also been occupied.

At the present time there are the remains of some thirty five (35) or more rooms on what would have been the ground floor. Most of the buildings have been two story. This is indicated by the vigas. At some time past these buildings have been subjected to fire and consequently all vigas have been burned or partially burned to the wall line.

Floors of the rooms are covered by several feet of fill in places. This covering undoubtedly contains a great deal of material. From the surface of this material a small collection of fragmentary artifacts was picked up.

The walls show good workmanship. The lines are quite straight for this type of construction and corners are sharp. The openings are quite uniform and one excellent example of "T" shaped doorway was found. The walls are quite uniform as to thickness.

While I was there I saw evidence that some digging has been done. In my opinion it cannot be said that the site had been potted. Within the last month the site has been visited by five amateur diggers from a nearby CCC camp.
