

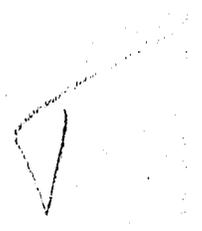
Yosemite files

SUPERINTENDENT'S MONTHLY REPORT

June, 1931

YOSEMITE NATIONAL PARK

CALIFORNIA



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
YOSEMITE NATIONAL PARK  
CALIFORNIA

OFFICE OF THE SUPERINTENDENT

July 4, 1931

The Director  
National Park Service  
Washington, D. C.

Dear Mr. Director:

I am submitting herewith report on activities in Yosemite National Park for the month of June, 1931:

000 - GENERAL

010

June was an exceptionally cool and clear month with only two rainstorms, one on the sixth and another on the sixteenth to interrupt the spell of sunny weather. Camping conditions were ideal and travel for the month exceeded last June by 5.7%. There were no serious accidents, arrests and the heavy rain, amounting to .85 of an inch, on June 16, helped materially in relieving a rather serious fire situation due to the early spring and summer. All mountain roads were open all of June and water in the falls and streams gradually dropped all month. Weather conditions, park operations and road and trail openings were all about one and one-half months ahead of any normal year.

020 - General weather conditions

June was featured by clear and cool weather with daytime temperatures averaging about 6 degrees colder than last year. The average maximum temperature was 79° while the average minimum was 44°. Toward the end of the month temperatures reached a high of 91° while last June the thermometer reached a high of 96°.

A heavy rain on June 16 lessened the fire hazard and left .85 inch over all of the park. Precipitation for the season is now 20.44 inches as compared with 26.87 inches for last year and 51.4 inches normal for the last seven years. Water conditions are now 76% of last year; 65% of average for the last seven years. Water in the Yosemite Falls is dropping rapidly and indications are that it will dry up completely by July 15, one month earlier than last year.

100 - Administrative

110 - Status of Work

An unusual amount of warehousing activity has occurred during June. Over \$36,000 worth of supplies were issued, this exceeding that of any other period in the history of the park. Personnel on June 30 exceeded the number on any one day previously in the history of the park. All work, however, is moving along splendidly.

120 - Park inspections by:

121 - Superintendent

The Superintendent made regular inspection trips of all going operations. On June 17 he, with other Park officials, Highway Engineer Tolen and Engineer Alderton, of the Bureau of Public Roads, looked over possible road location between Tioga Pass and through Tuolumne Meadows. Since then the Superintendent and Mr. Woaky have been investigating a new location for the Tioga Road running close to the Tuolumne Canyon.

122 - Special Field Representatives

Sanitary Engineer Hommon and Assistant Mr. Hopkins arrived June 10. Most of their time was spent in connection with the new sewer plant construction. Mr. Hommon left on June 11 and Mr. Hopkins June 14.

Mr. Beyer, of Wallace and Tiernan Company, supervised the installation of the chlorine machine at the new sewer plant on June 26 and 27.

John Williams, foreman of the State Division of Highways, was assigned as consulting foreman with the Park Service on the oiling of the Wawona Road, which is under the supervision of the Bureau of Public Roads.

123 - National Park Service Officers

June 1, Staff Photographer George Grant, was in the park especially to make photographs of Mariposa Grove for the museum there.

June 21, Assistant Director Dr. Harold C. Bryant arrived in the Park to act as director of the Yosemite School of Field Natural History in its seventh session. He will be in the Park until July 8.

125 - Other Governmental officers

Mr. S. A. Ash, district engineer of the U. S. Bureau of Mines, was in for a few days inspecting the tunnel June 9.

Mr. C. L. Marlatt, chief, Bureau of Entomology, Washington, D. C. and Mr. D. B. Mackie, Senior Entomologist, Department of Agriculture, Sacramento, were in the Park for one day during the middle of the month.

127 - Other Agencies

Messrs. McAfee and Callahan, city engineers, were in the Park June 18 to check trail work at Hetch Hetchy.

130 - Finance and Accounts

The following is a statement of the status of the various appropriations handled by the Park:

<u>Appropriation</u>	<u>Allotment</u>	<u>Expended &amp; Obligated</u>	<u>Balance</u>
40/1434 Yosemite National Park 1930-1931	\$ 556,677.70	*\$556,572.48	* \$105.22
4X436 Roads & Trails National Park Service	2,064,405.14	*1,473,228.97	*591,176.17
40/1406 Forest Protection and Fire Prevention	12,000.00	*11,912.50	*87.50
41/2434 Yosemite National Park 1931-1932	536,100.00	*78,333.30	*457,761.70

\* Estimated figures

140 - Labor Situation

Ten to fifty men applied for work daily, however, most of the men employed during the month were those living in Mariposa County who had families to support. Our laboring class as a whole are much better men than ever before employed.

150 - Equipment and Supplies

The following equipment was received during the month: Miscellaneous camp equipment; hotel chinaware; 1 Ford truck; 1 Crawford electric range; 1 lawn mower; 1 ventilating fan; 2 Pontiac autos and other items too numerous to mention.

170 - Plans, Maps, and Surveys

Much field work was accomplished during the month. At Mariposa Grove a change in the water line location was surveyed through the Upper Grove, weirs were established on Big Tree Creek and branch, a traverse line was established from the road near the Grizzly Giant to the camp and preliminary surveys started for an auxiliary water system and a report and reconnaissance

survey of the Raynor Creek watershed made. Tracings have been made of the septic tank at the Grove.

Transitman Fox was sent to Tuolumne Meadows where he has been running levels, establishing grade lines, tying in the water line to traverse points on the Tuolumne Meadows map, laying out the Landscape Architect's development scheme and investigating possibilities for a sewer outfall line.

In the Valley field work consisted of staking out of Indian Village development, small jobs in connection with construction, the commencement of bridle path locations which will later be transferred to the Valley map, and the completion of The Ahwahnee parking area map. A plane table map of the Wawona Point area for future development was made.

The 200' scale maps of the Valley are being revised in respect to water and building construction; preparing mounted trail maps, making 400' water line maps to be submitted with the Superintendent's report on Valley fire control, and various computations and blueprinting has occupied the time of the drafting office.

A beginning was made in the following out of Office Order #221 in the Superintendent's employment of Rangers Ernst and Griffith, two men who are well fitted for the work. They have traveled the first week to the county seats of Mariposa, Madera and Sonora securing patented land information. Since then they have cruised the Sierra Club's land in Tuolumne Meadows, have commenced cruising the many small lots in the Foresta tract and have made preliminary investigations of other patented land areas within the Park attempting to find section corners and boundary lines. It is expected that the assembling of the data which they collect will require the help of nearly the entire engineering office.

The purchase of a map filing cabinet for the Engineer's Office is facilitating the finding of various prints and maps and is well worth the amount spent.

## 200 - Maintenance, Improvements and New Construction

### 210 - Maintenance

Water System - Consumption of water has greatly increased, the demand at times reaching the rate of 1,600,000 gallons daily. During the last few days of the month a falling off of pressure has been noted, indicating the restrictions on lawn sprinkling will have to be started this year earlier than last. Chlorination at the settling tank commenced June 2.

Sewer System - There have been the customary small repairs and maintenance. Mr. Hauck has been able to get along with one operator at the old sewer disposal plant. The repair of manholes last season has caused a noticeable decrease in the amount of sewage for the month of June as compared with last year, the

reduction being approximately 40%. This has enabled the operators to keep the old disposal plant and beds in excellent condition. Chlorination at the Imhoff tanks was started during Mr. Hommon's visit but some difficulty has been encountered in feeding the right amount without an apparatus.

Buildings - Maintenance has been rigidly controlled by the Superintendent. The principal carpentry repairs have been to the old Taylor house and to the cabin and barn at Bridal Veil Creek.

Trails - Favorable progress was made on trail repairs outside of Yosemite Valley according to reports of rangers in charge of each section. A total of 117.9 miles have been gone over by the crews. The rim trails suffered a great deal of damage on account of storms. Especially on the Nevada Falls Trail between Happy Isles and Vernal Falls bridge where the trail is very steep, considerable labor was required to repair the damage. Fourteen miles of rim trails were repaired. In addition to trail repairs, 5280 feet of Nevada Falls-Merced Lake Trail was oiled starting from Nevada Falls west.

Roads - On the Valley floor pavement edges were patched; ditching of 6654 feet, (lineal) was accomplished during the month. The El Portal Road was kept free from falling rocks and small slides and pavement edges were mended where needed. Heavy traffic on the Wawona Road necessitated our going over the area between the foot of the grade and Grouse Creek on an average of every ten days. The hot weather softened the oil in places and heavy trucking caused high ridges to form, which required constant attention. Small rock slides on the Big Oak Flat Road between the floor of the Valley and Gentry checking station required our constant attention. The City of San Francisco is doing some maintenance work on the section of the Hetch Hetchy Road between Mather and the Dam. The Tioga Road is in fair condition with the exception of a few spots due to several heavy rains during June. Several places breaking out in soft, sandy soil on the Glacier Point road have been repaired.

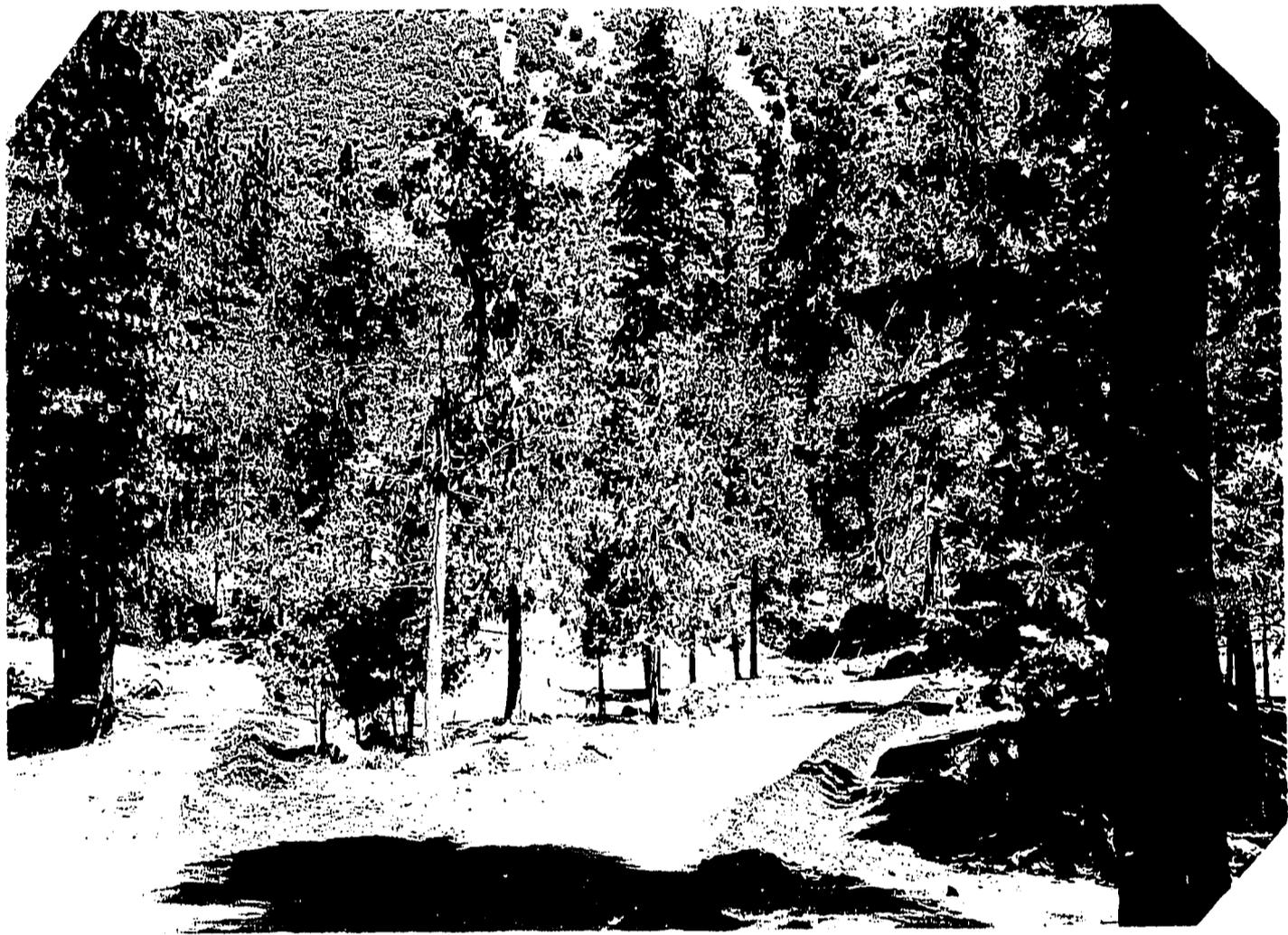
Signs - A sign painter has been employed the entire month working in conjunction with Ranger Eastman. Several burnt redwood signs were prepared for Mariposa Grove.

Mechanical Division - The quarry site cleanup was finished this month. The buildings at Inspiration Point were removed. The pipe line trestles were strengthened from the Dam to the high trestle and the rubbish cleared away.

Miscellaneous - Wood cut from bug-infested trees that were cut down by the insect-control work has been hauled to the woodyard.

#### 220 - Improvements

Buildings - The Superintendent approved a \$1200 painting program for outlying buildings. It is expected that all the staining will be accomplished before the visit of the Congressional party.



New camp ground road in camp No. 11 being oiled. This is a portion of the camp ground improvements.



Extension of foot path lighting using the same type of standards as was employed last year.

Water System Extensions - A new 250-gallon per minute pump has been installed at the auxiliary spring supply and carpenters are now at work erecting the house. One hundred feet of 6" wood stave pipe necessary to make connections from the spring line to the Fish Hatchery have been ordered. The spring flow can be forced into the Valley mains at a moment's notice. The extension to the new sewer plant was made mainly of 1250 feet of salvaged 2" air pipe. This pipe was thoroughly cleaned before installation. The line commences near Bridal Veil Falls on the Coerig and Dahlberg service to the Bridal Veil construction camp and extends north through one of the road culverts to the new plant.

Campground Development - Two hundred campground tables were finished this month except for the staining of twenty. Most of them have been installed in the various campgrounds. Mr. Sovulewski oiled the new loop and connecting roads in Camp #11. A log rail crew is at present engaged in peeling logs, attaining an average of sixteen a day.

Water, Sewer and Sanitation Systems, Tuolumne Meadows - Construction of the sixty-man camp has been completed. The principal item was the semi-permanent dining room, 16'x40', which will house about sixty-five men. It consists of boarded and battened sides, having screened windows which can be battened down and a canvas roof. Fifteen tent platforms, 12'x14', were erected; also one toilet and three shower bath houses, 8'x14', with water heating compartment. A 7'x8' meat house was erected, and provision has been made for cooling.

On the water system, Charles Nelson has excavated for and laid 1,000 feet of 4" pipe. The men are working about 1200 feet west of Dana Fork, encountering large granite boulders and ground water. The settling tank was staked out and remaining excavation completed. Materials for it have arrived. The hypochlorite solution feeding apparatus has been awarded.

Plans for the sewer system are as yet indeterminate. The installation of a 550-gallon tank and pump for gasoline service is a decided benefit to Tuolumne Meadows.

#### Relocating Indian Village

Water System - The water line has been completed, 2950 feet of 4" Universal pipe having been laid from Yosemite Lodge to the new site, three 2" fire hydrants installed and fittings left for future connections. One fire hydrant was installed on the line between comfort stations in the winter campground. Mr. Hauck left connections for two 4" fire hydrants near Army Row.

Sewer System - The major portion of the sewer lines (lengths of lines will be reported later) is in place. Manholes and service connections to buildings remain to be built.

Water System, Mariposa Grove - Pending negotiations to secure the McGilvray tract and obtain a clear right to the spring supply on Raynor Creek, all work was suspended May 28, the men being brought into the Valley. On June 14 work was resumed, and since that time 4700 feet of trail have been built along which the water line will be laid, and the crew is now within 1800 feet of the spring. One-quarter mile of trail, in addition to that along the water line, is required to enable the pipe to be hauled from Star Mill camp to its location along the line. Thirty men are employed. The pipe was awarded to the McWane Company and consists of 4" precast cast iron.

New Sewer System and Plant - This was completed at the end of June and was ready for operation. The principal construction during the month was the arrival and erection of the green house covering the sludge drying beds; the waterproofing of the tanks with Inertol; the pouring of the concrete floors in the engine room, boiler room and laboratory; the construction of the reinforced concrete septic tank; purchase and installation of the switchboard; placing of filter plates; the major portion of the pent house above the laboratory; the purchase and installation of the clarifier units and the chlorinator. An enormous amount of work has been accomplished by Mr. Burr and his organization of the men, layout of the work and the planning of installation has proceeded in a thorough and efficient manner.

Sewer System Extension, 1931 Appropriation - This was completed with the rewiring of Pump Plant #3 and the installation of a small agricultural pump in the same plant to replace that removed for sludge pumping at the new sewer plant. The transfer was made also for transformers for Pump Plant #4, installation of which took place last month.

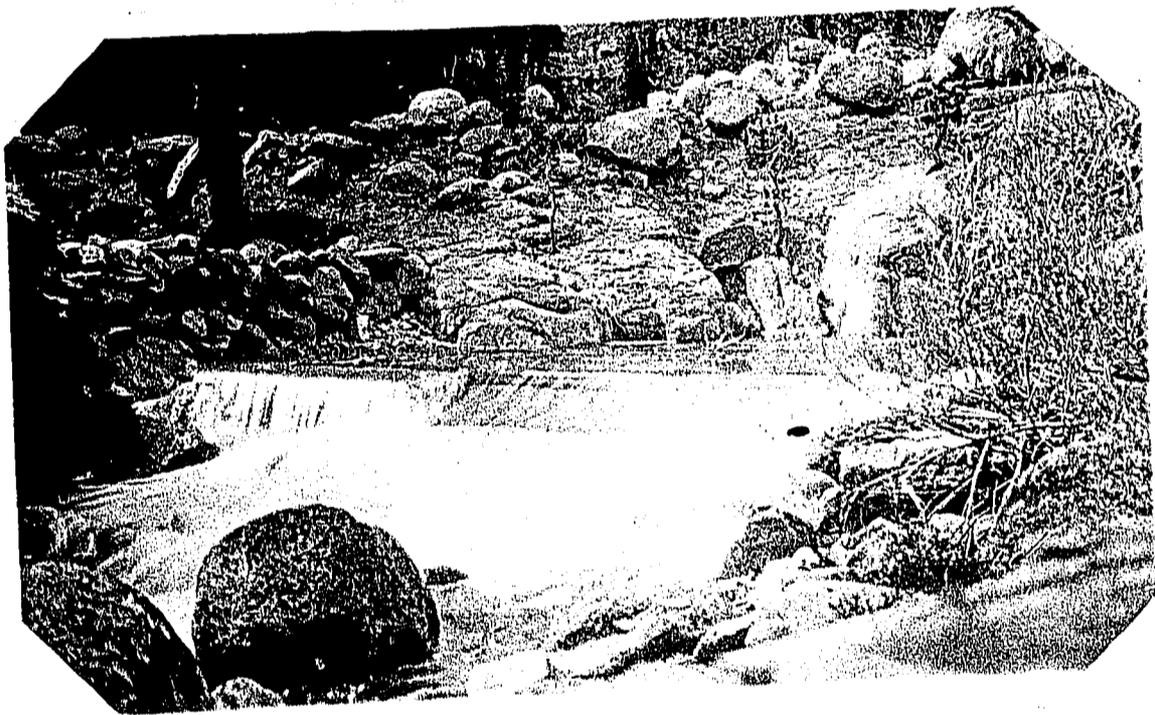
Road Traffic Signs and Marks - Painting of traffic marks on all Valley roads was completed. There have been very few alterations in signs, no new ones being installed.

Cascades Area Road Improvement - This is completed. Storms washed out a portion of the new fill and in addition to repair work the lune was rerolled and graded.

Ahwahnee Parking Area - Reported completed on May 16. During June a new Rayflector exit sign was placed. The Company is engaged in landscaping the pool and completing slate footpath surrounding it. The Company has also installed electric lighting poles in the west parking area.

Quarry Site Cleanup - Very little work has been done this month. Landscaping, which will consist of transplanting shrubs and trees, will be done next fall.

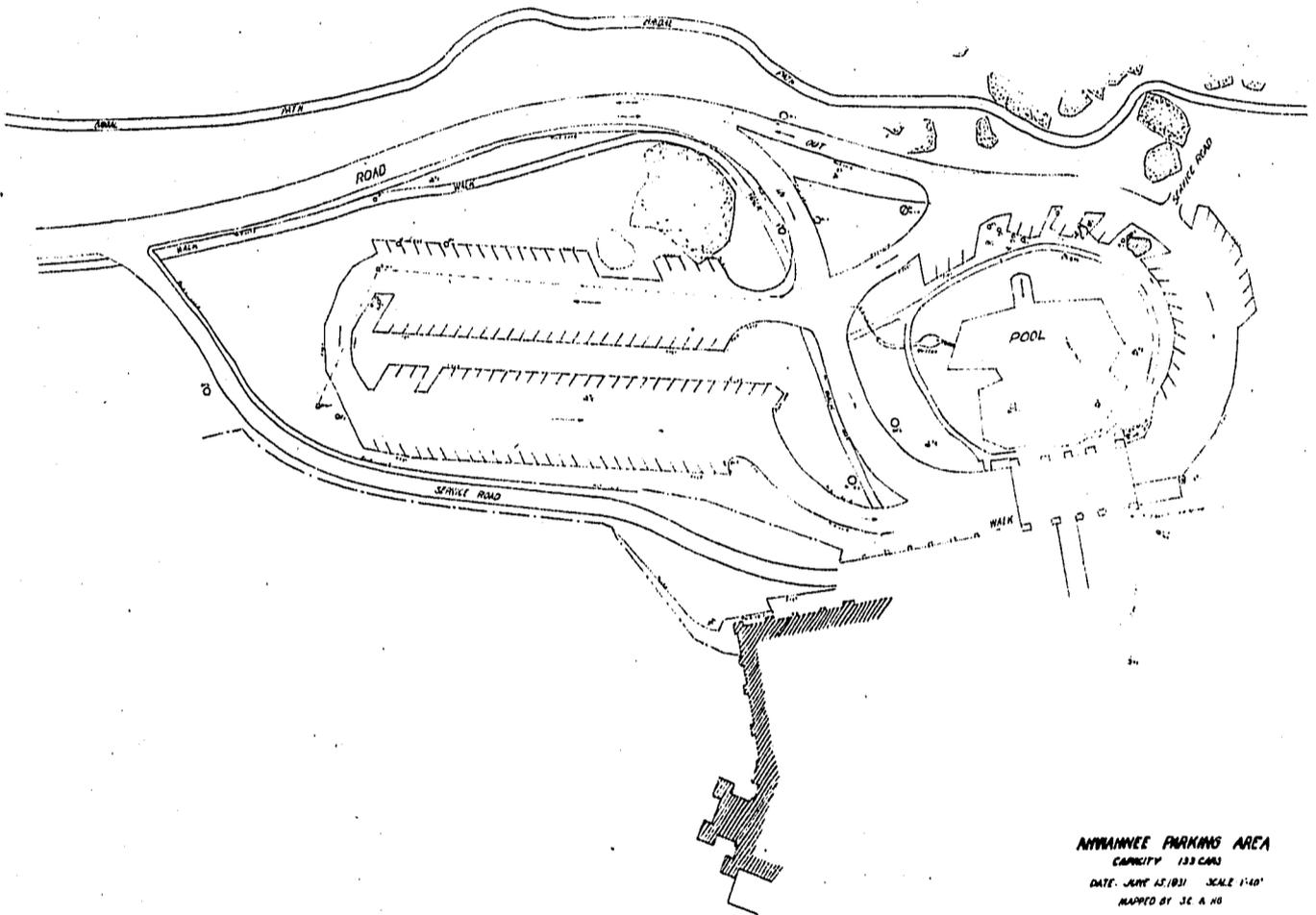
Floor of Valley Road Shoulders - But very little work was done during June, only two days' ditch construction work being accomplished.



Rubble masonry diversion dam at intake of Tuolumne Meadows water supply. This was completed last year and the water was turned into the government utility mains during June.



Entrance to the Ohwahine parking area. The exit road on the left was relocated and narrowed for one-way traffic.



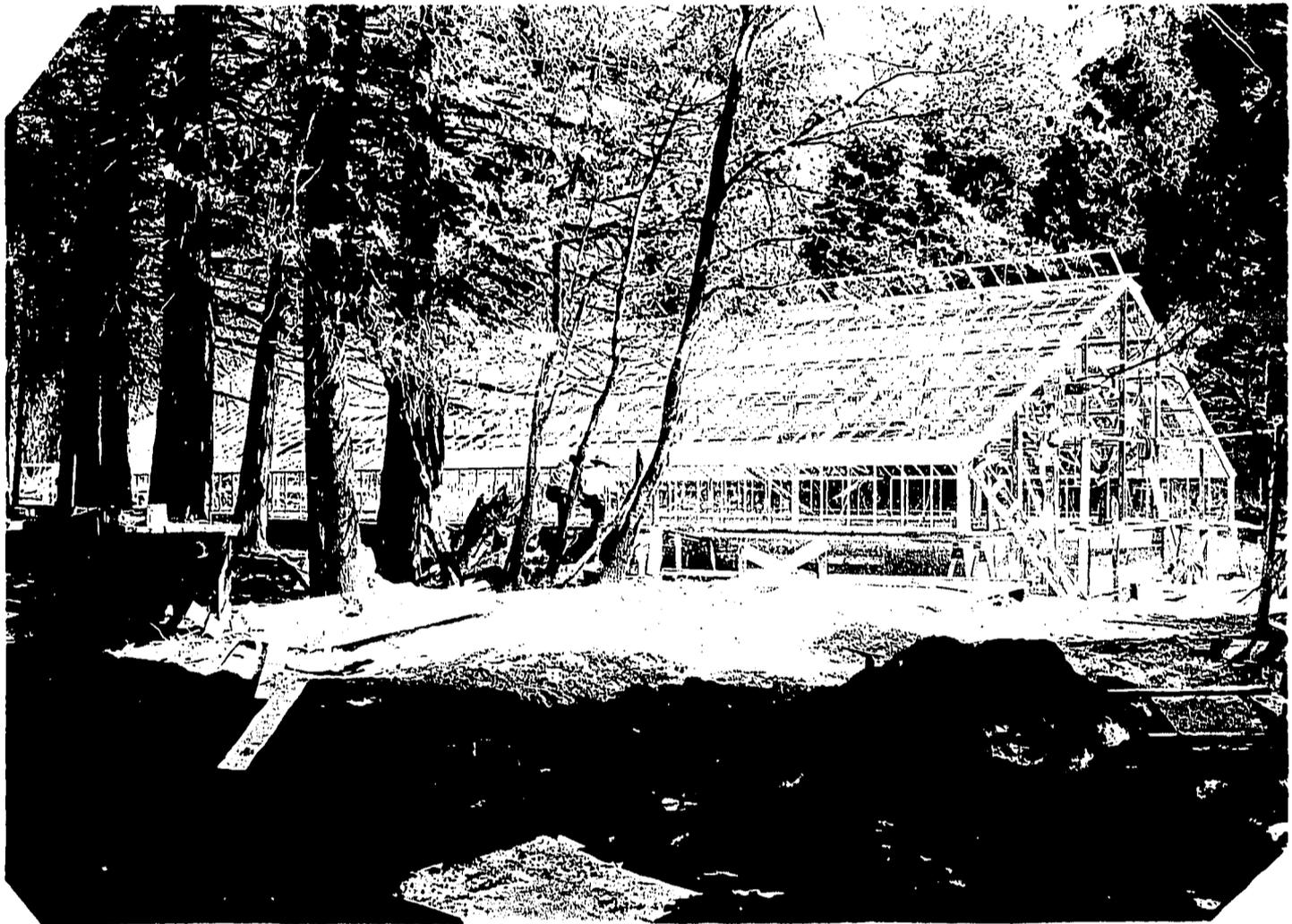
**ANWANNEE PARKING AREA**  
CAPACITY 133 CARS  
DATE: JUNE 15, 1931 SCALE 1"=40'  
DRAWN BY J. E. H. H.



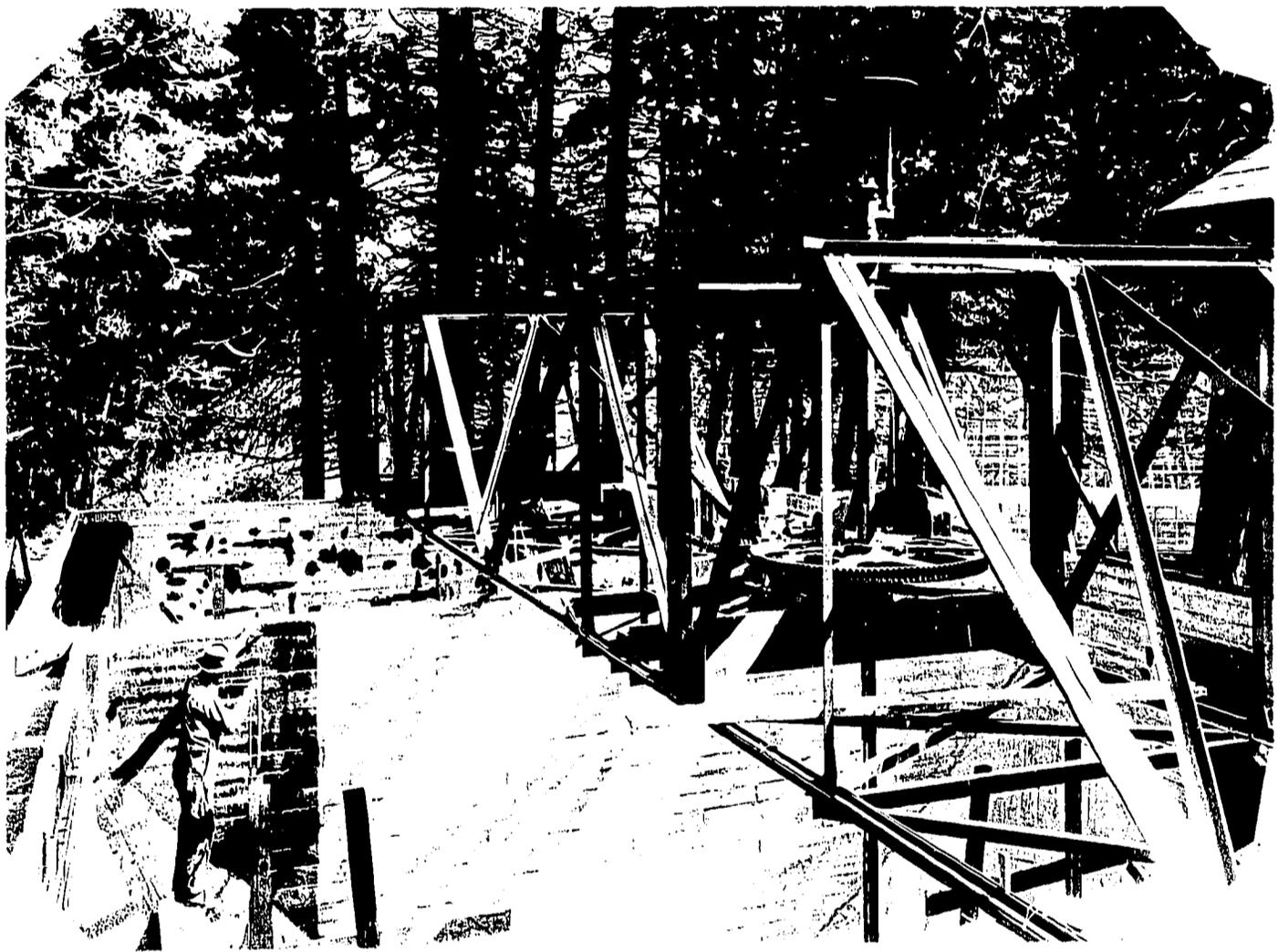
Southwest corner of Ahwahnee parking area. Log rail buffers are placed around all of the west area, and 3" x 4" division marks were set flush with the oiled ground surface and painted.



Pent house over lavatory room at new sewage disposal plant.



Exterior view of sludge drying bed covers at new sewage plant.



Door clarifying machinery in place and ready for operation.  
Man at left may be seen applying water-proofing compound to  
side walls of clarifying tank.



Interior of sludge drying bed green house while glaziers were at work on steel structure.

Roads - Generally, all roads are in fair condition.

Work on the Big Oak Flat Road betterment is progressing favorably. Some time was spent on clearing and finishing portion of the unfinished part of last fall which required surfacing in places. Besides surfacing, 177 loads of brush and debris were hauled away and burned where it was safe. Five-tenths of a mile of road was completed and surfaced, and six-tenths of a mile graded, ready for surfacing. In connection with the improvement, 3680 cubic yards of material were moved. By means of scrapers and graders, 2000 yards were moved and 1680 yards hauled by trucks, of which about 200 yards was surfacing material.

The road has been widened from a ten and twelve foot road to eighteen and twenty feet. Fills were made where needed and grade improved by cutting out some of the steepest parts.

### 230 - New Construction

The Glacier Point Cabins are 70% complete. Much of the lumber was cut to size before hauling to Glacier Point and most of the work was subcontracted, other than carpentry work. The buildings are entirely framed, sheathed and roofed with the roughing in of the electric and plumbing work accomplished.

Mariposa Grove Naturalist Cabin - This was completed with the waxing and polishing of the hardwood floor, the placing of a log platform at the rear entrance and the installation of a gas lighting system.

Garage for Hospital - Construction has proceeded very slowly due to the demands upon Stonemason John Luini for other work, particularly at the new sewer plant. The stone work and the framing are completed. The placing of the roofing paper on the front elevation and roof and the hanging of the doors remain to be done. There is a crew of two men grading up the approach road.

Comfort Station, Mariposa Grove - Material has been ordered. Gravel and sand are being hauled from the South Fork of the Merced River to the site. Construction will probably commence the first week in July.

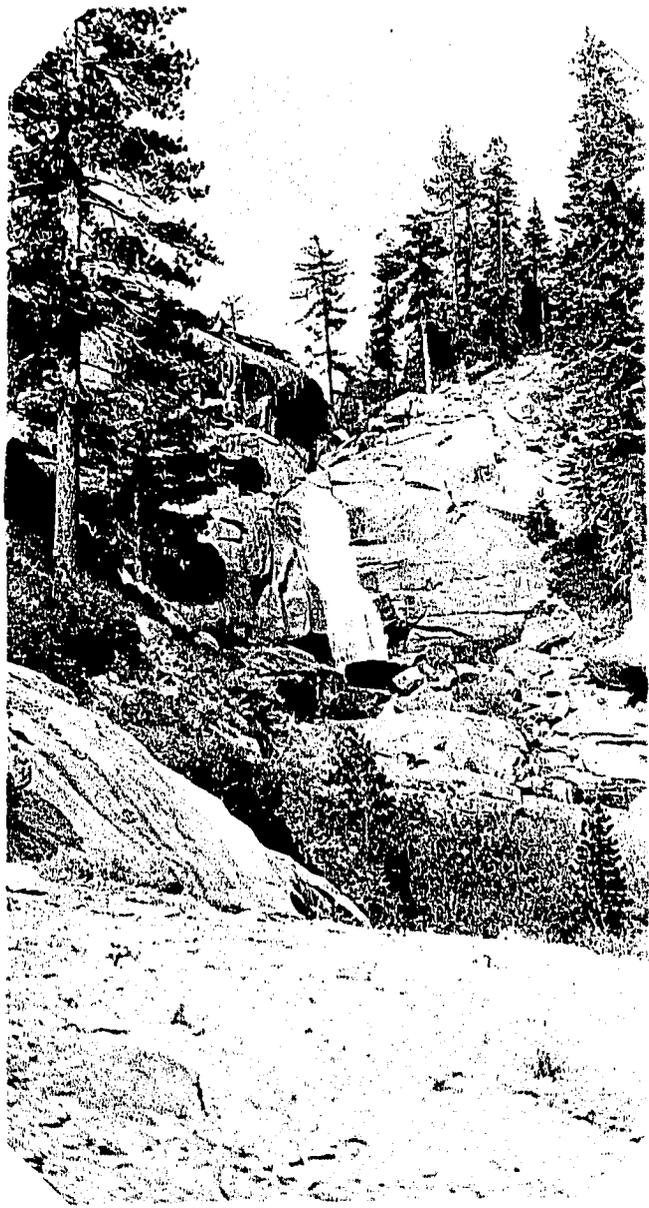
Quarters for Indians - The sites have been staked out and approved. Orders for materials have been prepared. Grading has commenced and concrete piers have been poured for three of the cabins.

Telephone System Extensions - A one and one-quarter mile spur was built to Mariposa Grove construction camp.

Electric System Extensions - The W. B. Lewis Hospital and Camp #11 electric signs have been serviced and wired. A sign reading "Program" was made for placement below the already completed Camp #15 sign. Glacier Point path lighting previously reported has been installed.



Chilnualna Trail--lower portion showing marked resemblance to bridle paths on the floor of the valley. The trail for nearly the entire distance is wide enough for two riders abreast.



Upper Chinalvalna Falls. This picture was taken from the point on which the new trail is constructed. View of the lower falls is obtained further down the trail. Also an extensive panorama may be seen from Mount Raymond to Sentinel Peak.

Bridle Paths - The loop bridle path extending from Army Row along the north bank of the Merced River to near the new bridge location and up the south bank has proceeded to within a short distance of the Glacier Point Trail. Some excellent views are obtained, particularly along the south side. The ford crossing at present is temporary, awaiting the new bridge construction.

Nevada Falls to Merced Lake Trail - Fourteen thousand lineal feet of trail was completed through Little Yosemite to a width of 6 feet, most of which was through small timber and on level ground. Wherever possible the old trail was retained and reconditioned to prevent cutting timber.

Three small bridges were constructed: 1, 21 feet long 7 feet wide; 1, 20 feet long 7 feet wide; 1, 14 feet long 7 feet wide. Each bridge is supported by three stringers of 20" diameter. All flooring was hand made and cut on the ground.

Twenty-six hundred feet of trail was built in the upper end of Little Yosemite with an average of one foot retaining wall. Partially completed trail and retaining walls -- 500 feet. On the upper part of the Nevada Falls - Merced Lake Trail 300 feet of new trail was constructed and 4422 feet of old trail was reconstructed. Out of 4422 feet of improved trail, 844 feet was through loose rock, 250 feet through solid rock, and 3028 feet dirt excavation. Wall construction consisted of 450 feet, average height 24 inches.

Chilnashna Trail - Construction practically finished. The trail is very picturesque resembling Valley bridle paths, especially in the lower portion, and is excellently located, very many switchbacks along the old trail being eliminated and the grades cut down. Views are obtained of the panorama towards Mariposa Grove and Four Mile.

Mountain Trails - Crews are established with base camps at Chinquapin, Hetch Hetchy, Crane Flat and Tuolumne Meadows. The one at Chinquapin is reconstructing the old Wawona Trail. The other crews are occupied mainly in clearing and improving.

#### 260 - Landscape Work

During the month 6,707 trees and shrubs at various points on the Valley were watered. The Landscape Architect was consulted in connection with all construction.

#### 300 - Activities of other agencies in the park

##### 310 - Public Service Contractors

Messrs. Best, Boyesen and Foley have operated their studios daily thru-out the month.

The High Sierra Camps, under the operation of the Yosemite Park and Curry Company, opened on the following dates:

Merced Lake High Sierra Camp	Dinner, June 10
Tuolumne Meadows Lodge and Tuolumne Meadows High Sierra Camp	" June 13
Tenaya Lake High Sierra Camp	" June 17
Booth Lake High Sierra Camp	" June 18
Glen Aulin High Sierra Camp	" June 19

They have already proved very popular to a large number of hikers.

320 - Cooperating Governmental agencies

The status of the new construction work on the Wawona Road, under the supervision of the U. S. Bureau of Public Roads is as follows:

Wawona Road, Grading - Mariposa Grove - Wawona - 7.8 miles

The George Pollock Construction Company, contractors for this section, have fifty-five men working. They are using two shovels and six trucks. They are slightly behind schedule now, but are picking up rapidly and should finish ahead of time.

<u>Percent cons. to date</u>	<u>Const. this Mo.</u>	<u>Const. last Mo.</u>
69%	18%	21%

Merced River Bridge (South Fork, near Camp Hoyle)

The George Pollock Construction Company, contractors on this job, have twenty-one men working. The excavation (structure) is complete under both abutments and one pier with masons putting rock in for pier. A compressor and a truck are used to secure rock from the quarry. A hand derrick is used for placing the rock.

<u>Percent cons. to date</u>	<u>Const. this Mo.</u>	<u>Const. last Mo.</u>
6%	0	6%

Wawona Road Cleanup and Oiling (Mariposa Grove - Turtleback Dome)

Forty men are employed on this project as day labor under Bureau of Public Roads direction. Total length of job is 25 miles. The cleanup is completed from Chinquapin to Grouse Creek, and oiling completed from Elevenmile to Grouse Creek and Mariposa Grove to Fourmile.

The crew is now working on repairs to surface between Hoyle and Eleven-mile and on cleanup between Elevenmile and Chinquapin summit.

<u>Percent to date</u>	<u>Percent last month</u>	<u>Percent this Mo.</u>
40%	16%	24%

Turtleback Dome - Valley Floor Section - Length 3.69 miles

A. C. Goerig, contractor for this section is using two shovels, eight trucks, two compressors, two battery locomotives and small tools. With 200 men working, one and one-half miles has been rough graded and one-half mile has been opened up. Approximately 1300 cubic yards of cement rubble wall is in place and all concrete box culverts are completed. The tunnel is in 1575 feet out of a total length of 4230 feet. The contractor's grading operations are all on the section west of the tunnel.

<u>Percent to date</u>	<u>Percent last month</u>	<u>Percent this Mo.</u>
31%	22%	9%

400 - Flora, fauna and natural phenomena

410 - Ranger, naturalist and guide service

The Ranger Department functioned smoothly all month with sixteen permanent men and forty-seven temporary rangers on duty at the end of June. Temporary rangers were placed on the force earlier this year due to the early opening of all the outpost stations. By July 1 all temporary positions will have been filled, with a total of forty-nine temporary men in the summer ranger organization.

Permanent trained rangers have been placed in charge of each district with several temporary men under their supervision. On June 29 a new entrance station was established at the park line on the Big Oak Flat Road and cars will be checked in at this station rather than at Gentry as before. This station is near the new park boundary and is located on the newly acquired land purchased by the Rockefeller fund.

During June, 117.7 miles of trail were put in good condition making a total of 246 miles worked on this season up to June 25. The cost of this work varies from \$12.00 to \$58.00 per mile according to the district and the type of work done.

Over the Decoration Day holiday, the ranger force satisfactorily handled the record crowd of 3,522 cars and 11,986 people who entered the park in one day. Regular patrols of all the high country, the operation of fifteen outpost stations, fish planting, bear control, camp entertainments, camp inspection, traffic and information work all were carried on by the Ranger Department with very little trouble. June has been rather unusual in the absence of the usual fires, accidents, arrests and disturbances.

In assisting the public to more thoroughly enjoy the flora and fauna of the Park, the Park Naturalist and the Museum Preparator has been assisted by eleven temporary ranger-naturalists throughout the month. A total of sixty-two lectures were given each week during the month as follows:

- 7 at Bear Platforms 9:30p.m. daily
- 28 in the Geology Room at the Museum, 10:00, 11:30, 2:30 and 3:45 daily
- 14 at the live Indian exhibit
- 6 at Camp #15 at 8:30p.m.
- 2 at Yosemite Lodge
- 2 at Ahwahnee Hotel
- 2 at Camp Curry
- 1 Nature Lore Campfire at Museum

Thirty-nine guided trips are being conducted each week, as follows:

- 6 Auto Caravan, 2:00p.m. daily except Sunday
- 6 Walks from Camp Curry, 8:30a.m. daily except Sunday
- 6 Walks from Yosemite Lodge, 9:00a.m. daily except Sunday
- 6 Junior Nature School trips, 9:00a.m. daily except Sunday
- 6 All-Day Hikes to the Rim, 7:30a.m. daily except Sunday
- 1 Bird Walk each Wednesday 8:00a.m. from Sentinel Hotel
- 2 Legend Caravans, Wednesday and Friday, 3:00p.m.
- 6 High Sierra Camp Hikes

A ranger-naturalist will be assigned to Tuolumne Meadows during the first week of July for the balance of the season there.

#### 420 - Museum Service

The Museum and Reading Room has been kept open daily from 8:00 until 6:00 this month.

#### 430 - Zoo

Two coyote pups were purchased from George Myers, of Big Meadows, June 27, and were placed in the Zoo for the public to enjoy. The Junior Nature School, especially, derived great delight from observing these animals.

#### 470 - Animals

Most of the deer have left the valley and are now seen in great numbers in the High Country. Jay Bruce, the State Mountain Lion Hunter, killed a large male lion west of Chinquapin, outside of the Park, on June 8. It weighed 150 pounds and is believed to be the lion making so many kills of deer in that vicinity. Two elk were born in the elk paddock in the valley.

Bears are not troublesome this year. Only five were trapped and moved to the feeding grounds. Last year at this time we had moved thirty-nine.

Form A

SUMMARY OF EDUCATIONAL ACTIVITIES

Yosemite National Park  
Station or Park

For <sup>week-</sup> month ending June 30, 1931  
~~season~~

Place	Field Trips		Lectures		Museum	Publications Distributed		Total Persons Served	Park Visitors During Period
	No.	Attend.	No.	Att.	Att.	No.	Sales		
Lodge	7	139	10	4400				4539	
Ahwahnee			9	840				840	
Museum			108	6760	60,000	1119	\$376.35	66760	
Curry	26	895	8	7160				8055	
Camp #15			23	13700				13700	
Junior Nat. School	7	178						178	
Rim Trips	19	742						742	
Auto Caravan	26	1651						1651	
Bear Pits			29	20708	(average) (5 bears nightly)			20708	
Special	14	524	5	990				1514	
<u>OUTPOSTS</u>									
Glacier Pt.	5	74	26	1199				1273	
Mar. Grove	47	1605	42	1389	1,800			4794	
Yos. Sch. of Fld. Natl. His.	6	120						120	
									93,974
Totals	157	5928	260	57146	61,800	1119	\$376.35	124874	93,974

General Memoranda

June, 1930 figures:

252      8341      582      48317      20,420      1607      \$483.90      77078      88,852

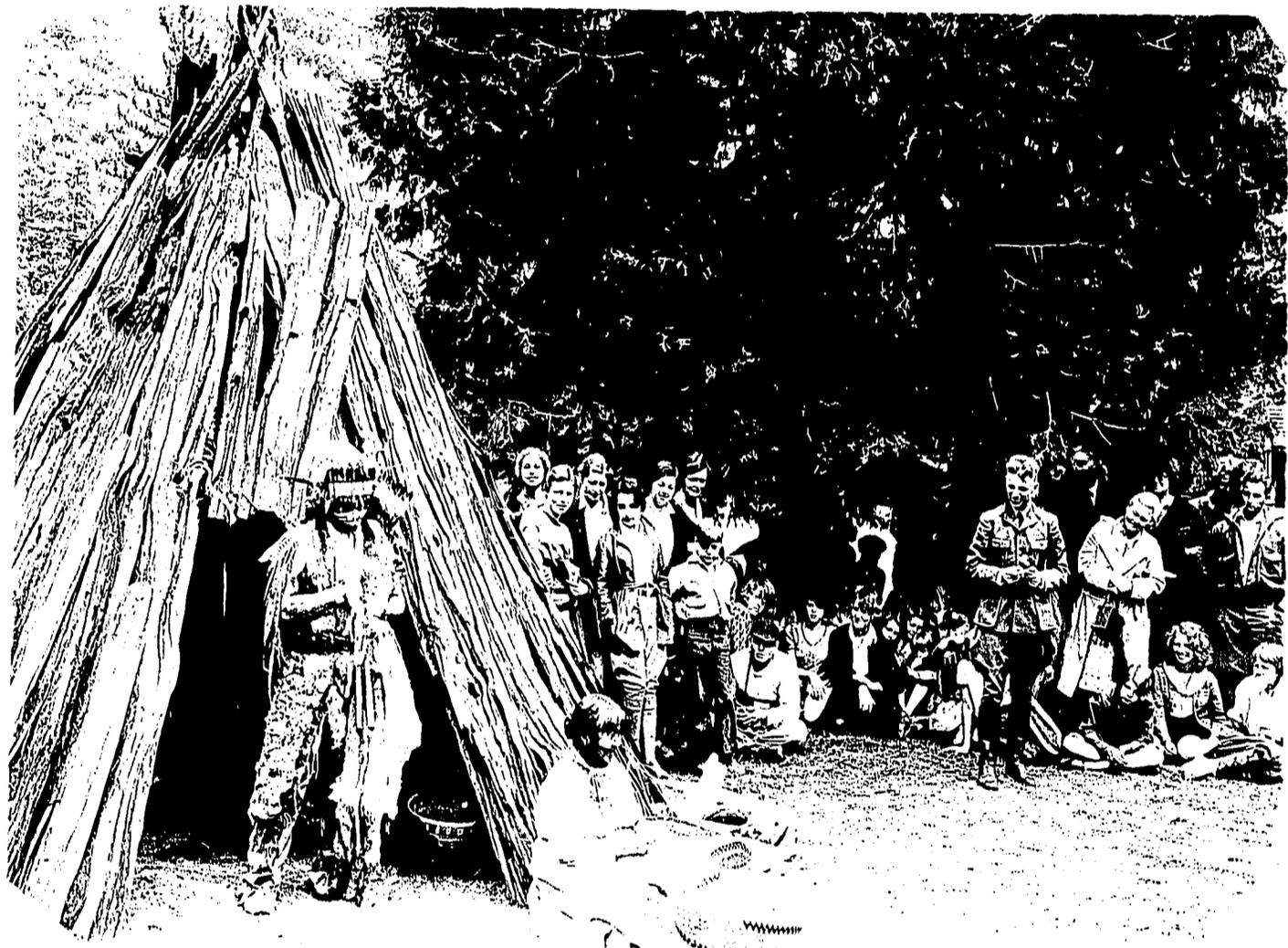
Submitted:

June 30, 1931

Signed:

*Edmund*

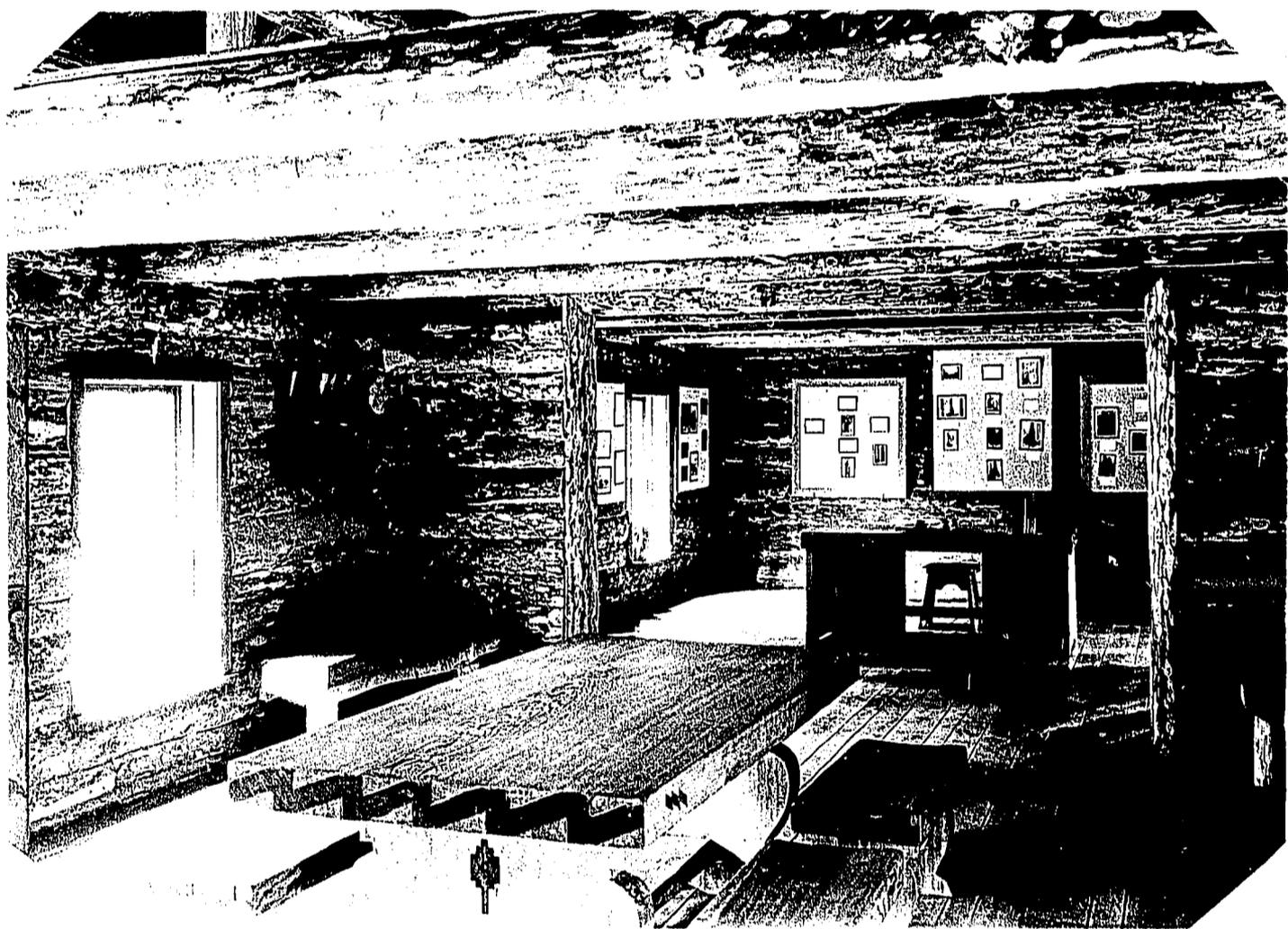
Park Naturalist  
(Title)



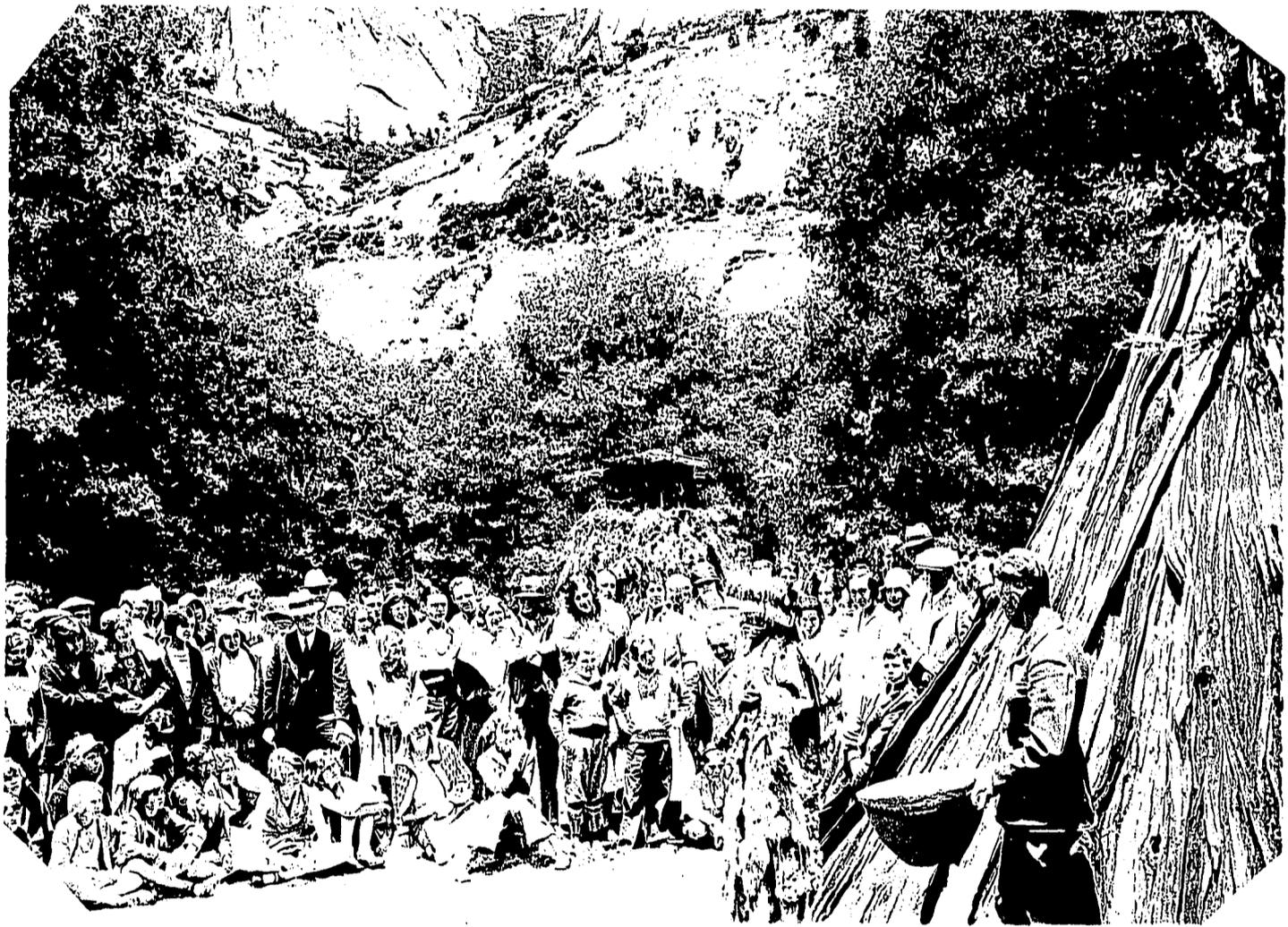
Le-me and Tra-bu-ce giving demonstration of Indian culture  
for the Museum audience.  
This is a popular feature of our daily program



Mariposa Grove Cabin Museum. The structure was completed this month; only a few interior items including Flamo gas illumination was needed in June



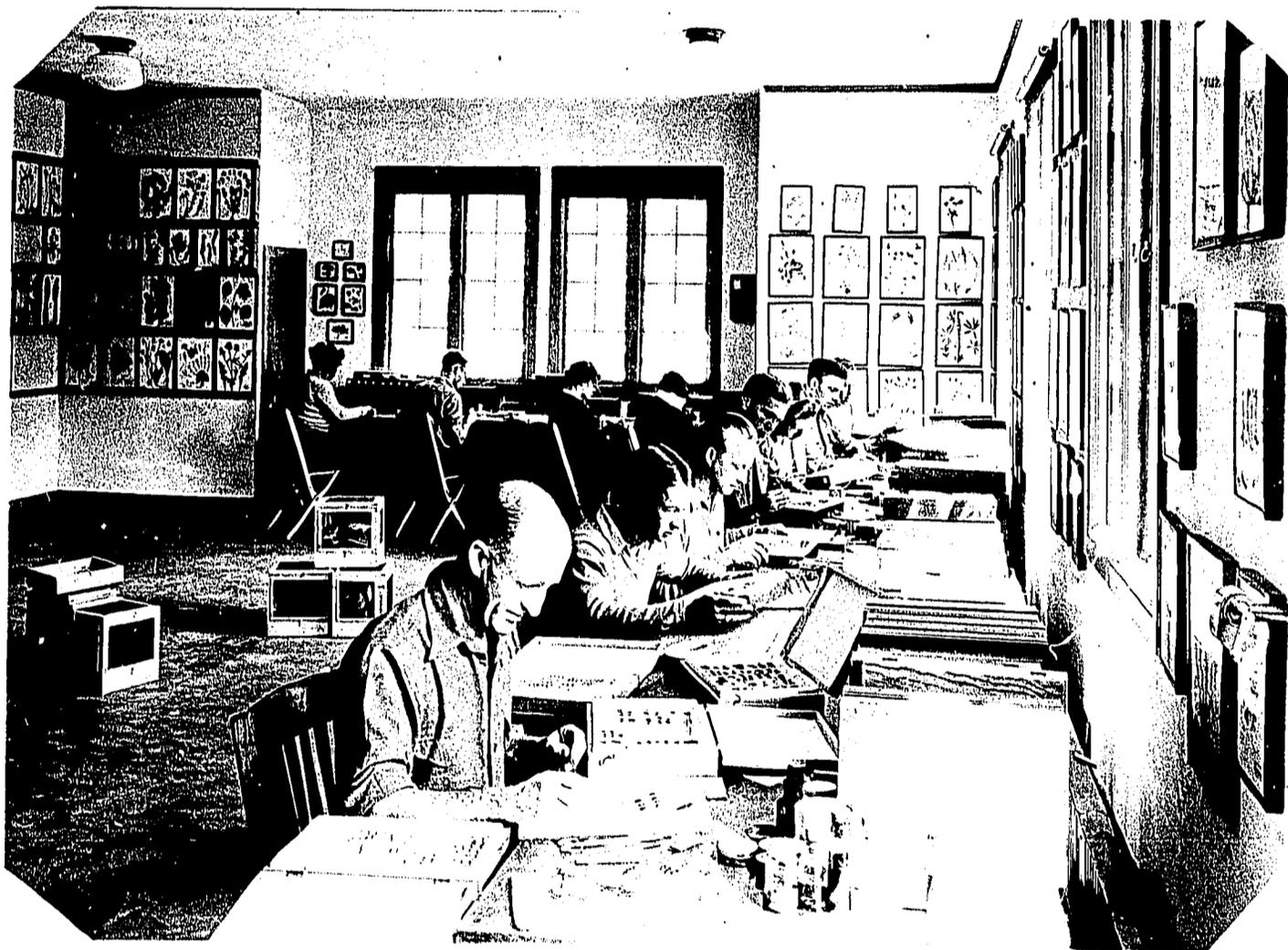
Interior view of Mariposa Cabin Museum looking north, showing the especially designed redwood furniture and naturalist exhibits.



Lo-mo (Chris Brown) giving demonstration of Indian signs and Indian dances back of our museum. This is a twice daily feature museum program.



Professor W. O. Raseig conducting field class of students from University of California. These students receive university credit for seven weeks' course spent in Yosemite. Our museum profited by very considerable additions to our research collection of insects.



Professor Essig (in foreground) with class of entomology students from the University of California at Berkeley. This class used our Museum for laboratory work during a seven-weeks' course.

#### 480 - Birds

A pair of Black Phoebe nesting at our Diversion Dam.  
A family of Canyon Wrens successfully raised in Indian Caves.  
A pair of Western Flycatchers nesting in Tenaya Canyon below Mirror Lake.  
A nest of a Townsend Solitaire found on the new trail to Nevada Falls.  
A pair of Lazuli Buntings nesting in ferns of elk paddock.  
A pair of Water Ouzels successfully bringing off a brood of four young at Valley View. These birds have been under observation from April 10, when the nest was discovered in the early processes of building, to June 16, when the parents were seen feeding one young on the rocks near the nest site.

#### 490 - Miscellaneous

District rangers planted 388,000 trout fry in the lakes and streams during June, making a total of 492,000 placed in Yosemite's waters this season from the State Hatchery in the Valley. Due to the speed and facility with which these fish were handled there was very little loss. Waters planted in June were: Bishop Creek, Skelton Lake, Helen Lake, Tenaya Lake, Middle Fork and South Fork of Tuolumne, Alder Creek, Crescent Lake, Johnson Lake and a small lake on Mammoth Ridge.

#### Flora

Late spring rains and hard showers at scattered intervals during the month did much to bring out the beauty of the wildflowers. The paved roads, paths and oiled horse trails present a very great improvement over the old days for now the roadsides, trees and shrubs look fresh and clean.

Twining Brodiaea is found blooming in the parkway near the Museum. This plant was the first one noticed in bloom on the floor of the Valley in years.

Sentinel Meadow has been more beautiful than in several years. Fleebane daisies, Brown-eyed Susans, Sneezeweed, Shooting Stars, Larkspur, Golden Brodiaea, Zygadene and other flowering plants have made a charming show there this spring. Stivers lupine has been grand this season on the alluvial fan. The little Alpine lily is coming back shyly appearing in some of the great Heracleum hedges near Stoneman Meadow.

Azaleas are still the most showy flowers in the very shady portions of the Valley but especially in meadows above the rim.

#### 500 - Use of Park Facilities by the Public

Camping in the free public campgrounds is more popular than ever. The outdoor campfire programs were held every night except Sundays in Camp #15; average nightly attendance was 800 people. Favorable comments are made by the campers in providing for them not only clean and comfortable campgrounds

but entertainment as well. People seem to be demanding the cheaper accommodations and housekeeping tents or cabins in the Valley do not begin to satisfy the demand. The Housekeeping Department had every tent and piece of equipment rented out and their housecount ran over 1,016 people on several days, while on the same days the Lodge and the Ahwahnee were taking care of only one-half of their capacity.

520 - Conditions which favorably or unfavorably affect travel

As reported in May, the unusually early spring and perfect touring weather throughout the State has resulted in the large influx of people to our Park.

530 - Visitors

June 26 - Dr. Charles J. Chamberlain, Professor Emeritus, Botany, University of Chicago, was an interested visitor to the Park and at the Museum.

June 26 - Dr. W. F. Loehwing, Professor of Plant Physiology, University of Iowa, Iowa City.

June 29 - Miss Alice Keith, program director, School of the Air, 485 Madison Avenue, New York City, Columbia Broadcast.

June 1 - Congressman Taylor and family in for two days.

June 8 - Mr. Arthur C. Pillsbury, former photographer of Yosemite.

" " - Lions' Club Convention in Yosemite for three days.

" " - Mr. Ash, of the U. S. Bureau of Mines; inspecting tunnel.

" 21 - Admiral J. V. Chase of Pacific Fleet; taken to Big Trees and around the Valley in the official car.

June 23 - Mr. and Mrs. Sims Ely, and daughter, taken to Glacier Point in the official car.

June 23 - Commander Graham, U. S. Navy, retired, of Berkeley, California was taken on a Valley tour in the open car.

June 27 - Mr. Farley, of the California Fish and Game Commission.

540 - Public Camps

A census taken May 30 showed 4,700 people in the Government camps and during June the grounds were comfortably filled all month. Camp 11 was reserved for the Lions' Club Convention on June 7, 8 and 9, then it was closed for road oiling operations for a few days and was used by the public after June 18. Camps #7, #14, #15 and #16 are all well patronized.

## 600 - Protection

### 610 - Protection, Police

Seven cases were taken before the Commissioner. Liquor was involved in four of these; \$170.00 were assessed in fines; two cases were dismissed and two are still pending; three arrests made for outside authorities; two cases were handled administratively.

### 620 - Fire protection

Only two very small fires are reported for June:

June 12 - A small pine needle fire, less than one-quarter acre was put out by quick action by the local fire crew and trail men. No damage was suffered any timber. Location, along road near Cathedral Rocks; and the fire was caused by careless smoker.

June 12 - A tent in Camp #7 belonging to a camper, Mr. Ringer, burned when a gasoline stove exploded. Spread of the flames was prevented by neighbors and the camp rangers.

Total reportable fires for season to date, 5; two caused by lightning, two by careless smokers; one by brush burning.

Assistant Chief Ranger Wegner is devoting all his time to fire plans and fire suppression work. Rangers Wegner and Eastman, with Mr. Woods, of the Yosemite Park and Curry Company, made a complete inspection of all dormitories, buildings, camps, hydrants and extinguishers in the Valley during June and a detailed report with recommendations was submitted. Hose and fire protection equipment was installed at the Cascades residence unit.

### 630 - Accidents

Ten auto accidents occurred during the month. No one was seriously hurt in any of them.

Friday, June 26, Wm. Grant, age 17, of 436 Olive Street, Long Beach, California, while climbing around on the rocks at the foot of Bridal Veil Falls, slipped and fell, fracturing his right ankle. He was taken to the hospital for treatment.

There were eight minor accidents reported in which treatment was received at the hospital, but none of them were serious.

On June 23, two parties, Miss Jeannette Zeitlin, Camp Curry guest, of 3965 South Wilton Place, Los Angeles, California and Mr. Deane M. Abrams, Camp Curry musician, while riding horseback, were thrown from their horses

and both received bruises and bumps. The frightened horses ran into a group of boys knocking down two of them. Aralan Georgson, age 15, of Merced, California, received a bumped head and cut on the left upper arm and J. H. Davidan of Fresno, California, was bruised on the right lower leg.

#### 650 - Signs

New burnt redwood signs were placed in the vicinity of the naturalist cabin at Mariposa Grove. Progress in placing elevation signs has been very slow due to the use of the aneroid barometer for other purposes and difficulty in obtaining a saddle horse. At the end of the month the remaining signs for outlying roads have arrived and it is expected that the majority of these will be placed during July.

#### 660 - Sanitation

For the first time in the history of the Park, a Ford is available for pickup on mountain roads and campgrounds. A man and the car were employed June 25. The sanitation crew is up to full force.

The milk and water samples have been satisfactory. As previously mentioned, chlorination of Valley water supply commenced July 2.

An intensive replacement of outlying toilets where needed is being undertaken by Mr. Murphy. He is also concentrating on outlying campgrounds, supplying camp tables and painted garbage cans.

#### 900 - Miscellaneous

Yosemite School of Field Natural History - The regular seven weeks' course of the school started June 22 with Dr. Bryant in charge. A daily schedule of field trips and lectures under the direction of our naturalist staff and visiting scientists is being conducted.

Maggie Howard, the Piute Indian squaw, age approximately 70, is proving to be a real educational addition to the program daily in back of the Museum. Chris Brown and his brother come to the Museum each day and in native costumes (or as nearly as we can duplicate them) give an exhibition of Yosemite Indian songs and dances. These programs are given much favorable comment.

The Junior Nature School, under leadership of Ranger-Naturalist Thaxter, of Portland, Oregon, was started June 22 with a good enrollment of local and camping children. Mr. Thaxter is assisted in the daily program of talks and field trips by a committee of mothers from the local Parent-Teachers' Association.

Mrs. Ruth Casaday, on leave from the Oakland Free Library, joined our staff June 8 under Civil Service appointment as temporary Librarian for the summer. We are planning to make a good beginning on the work this summer.

Dr. Hartley G. Dewey, operating the W. B. Lewis Hospital, handled a total of 495 cases during the month. There were 1,020 office calls and 30 house calls; there were 3 major and 57 minor operations performed. There were four deaths: Virginia Chamberlin, Donald Guy Johnson, Moses Heller, and Frances Virginia Conlon. There was one birth during the month: Clarence Jobe, Jr.

Church Services:

Seventh Day Adventist - Bible School Saturday at 9:45a.m. in the Church Bowl; preaching service at 11:00a.m.

Roman Catholic - Mass at 6:00, 9:00 and 11:00a.m. in the Old Village Pavilion.

Lutheran, Missouri Synod - Worship at 11:00a.m. in the Old Village Chapel.

Protestant - Bible School at 9:45a.m. in the Church Bowl; Worship at 11:00a.m. and 7:45p.m. in the Church Bowl.

Young People's Meeting, Camp Curry Pavilion Sunday evenings at 9:15; special invitation to all visitors.

Christian Science - Service at 2:00p.m. Sunday in the Church Bowl.

In case of inclement weather, all out-door services will be held in the Old Village Chapel.

As this report is being closed, we may add that we are handling a fine Fourth of July crowd, a happy pleasuring-seeking group -- another holiday peak day of over 10,000 visitors for the Fourth and incoming cars running over 3,000 in the one day.

Very respectfully,

Superintendent

10-157  
(July, 1929)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

TRAVEL REPORT

.....YOSEMITE..... National Park for the month of June 1931.....

	This Month	This Travel Year To Date	This Month Last Year	Last Travel Year To Date	Increase for Travel Year	
					<del>Oct. 1, 1930 to date.</del> Number	Percent
<u>PRIVATE TRANSPORTATION:</u>						
Cars first entry, . . . . .	15060	41669	16133	44196	-2527	-5.7%
Cars reentry, . . . . .	15997	38677	10935	25403	13274	52.2%
Motorcycles, . . . . .	20	98	24	84	14	16.6%
Total motor vehicles, . . . . .	<u>31077</u>	<u>80444</u>	<u>27092</u>	<u>69683</u>	<u>10761</u>	<u>15.4%</u>
Persons entering via motor vehicles, . . . . .	90343	233766	82492	213380	20386	9.5%
Persons entering via other private transportation, . . . . .	261	616	344	443	173	39.0%
Total persons entering via private transportation, . . . . .	<u>90604</u>	<u>234382</u>	<u>82836</u>	<u>213823</u>	<u>20559</u>	<u>9.6%</u>
<u>OTHER TRANSPORTATION:</u>						
Persons entering via stages, . . . . .	2710	7089	4577	8860	-1771	-19.9%
Persons entering via trains, . . . . .	660	1593	1439	4784	-3191	-66.7%
Persons entering otherwise, . . . . .						
Total other transportation, . . . . .	<u>3370</u>	<u>8682</u>	<u>6016</u>	<u>13644</u>	<u>-4962</u>	<u>-36.3%</u>
GRAND TOTAL ALL VISITORS, . . . . .	<u>93,974</u>	<u>243,064</u>	<u>88,852</u>	<u>227,467</u>	<u>15,597</u>	<u>6.85%</u>

NOTE: <u>Increase</u> for month of June-- 5,122 people or 5.7%	This Year	Last Year	Increase	
			Number	Percent

Automobiles in public camps during month, . . . . .  
Campers in public camps during month, . . . . .

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

STATUS OF AUTHORIZED PROJECTS

.....Yosemite..... National Park for the Month of .....June, 1931.....

Description of Projects	Percent Constructed To Date	Percent Constructed This Month	Percent Constructed Last Month	Probable Date Completion
411 Ranger Station (Contract)	70	70	0	July 15, 1931
416 Naturalist Cabin, Mariposa Gr.	100	3	8	--
423 Garage for Hospital	70	20	46	July 31, 1931
427 Comfort Station, Mariposa Gr.	2	2	0	September, 1931
429) 434) Quarters for Indians	1	1	0	September, 1931
453 Telephone System Extensions	100	15	12	--
455 " " Ext. & Imp.	7	6	1	June, 1932
481 Water System Extensions	40	10	20	August, 1931
483 Campground Development	34	9	15	August, 1931
484 Water, Sewer & Sanit. - Tuo.Mead.	25	23	2	September, 1931
485 Landscaping, Floor of Valley	100	10	10	--
486 " Old Sewer Farm	5	0	5	August, 1931
487 Relocating Indian Village	51	48	3	September, 1931
488 Merced River Revetment	15	0	7	September, 1931
489 Water System, Mariposa Grove	15	9	2	August, 1931
492 Extension Electric System	4	3	1	April, 1932
495 New Sewer System and Plant	100	7	3	--
496 Sewer System Extension	100	4	4	--
501-30 Road Traffic Signs & Marks	94	8	2	July, 1931
501-31 Cascade Area Road Impr.	100	1	1	--
501-32 Ahwahnee Parking Area	100	1	29	--
501-34 Quarry Site Cleanup	75	7	68	September, 1931
501-36 Floor of Valley Road Shoulders	18	2	8	September, 1931
503-2 Tioga & Big Oak Flat Betterment	30	23	7	September, 1931
<del>503-3 Road Oiling &amp; Betterment</del>				
505-1 Bridle Paths	99	3	2	July, 1931
506-13 Nevada Falls to Merced Lake Trail			26	August, 1931
506-14 Chilnualna Trail			35	July, 1931
506-16 Trail Telephones	60	0	0	October, 1931
506-18 Mountain Trails	16	10	6	September, 1931

(Figures for May on 506-18 incorrect)

10-159  
(May, 1931)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

STATUS OF PERSONNEL

**Yosemite**

National Park for the Month of **June, 1931**

	This Month		This Month Last Year	
	Appointed	Non-Appointed	Appointed	Non-Appointed
Number of employees beginning of month	115	313	105	197
Number of additions.....	34	157	27	162
Total.....	149	450	132	359
Number of separations.....	5	53	2	54
Number of employees close of month.....	144	397	130	305
Number of promotions during month.....	0	0	0	0
Aggregate amount of annual leave taken	55½ days	0	20½ days	0
Aggregate amount of sick leave taken....	15½ days	0	25 days	0
Aggregate amount of leave without pay..	34 days	0	7 days	0

10-215

24316

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
National Park Service  
Washington

REPORT OF NON-APPOINTED PERSONNEL

(TEMPORARY)  
YOSEMITE NATIONAL PARK

Changes outside the District of Columbia for the month of June, 19 31

	Total at beginning of month	Additions	Separations	Net Gain or loss (a)	Total at end- ing of month
<b>Civil Service</b>	<b>125</b>	<b>54</b>	<b>5</b>	<b>69</b>	<b>144</b>
<b>Per Diem</b>	<b>315</b>	<b>137</b>	<b>53</b>	<b>84</b>	<b>397</b>
<b>Total</b>	<b>440</b>	<b>171</b>	<b>58</b>	<b>153</b>	<b>541</b>

(a) If loss, indicate by minus sign.

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

REPORT OF PARK REVENUES

Yosemite National Park for the Month of June, 1931

	This Year	Last Year
Park revenue on hand beginning of month, . . . . .	\$1,977.33	
Received, . . . . .	72,733.94	
Total, . . . . .	\$74,711.27	
Remitted, . . . . .	74,478.42	
On hand close of month, . . . . .	232.85	
<hr/>		
Park revenues received this year to date, . . . . .	261,720.23	
Park revenues received last year to date, . . . . .	285,587.77	
<del>increase</del> , Decrease . . . . .	23,867.54	
Per cent of <del>increase</del> , decrease . . . . .	8.357	

10-161

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

Yosemite National Park

REPORT OF SALES OF PUBLICATIONS

June 1931

	Number	Value
<u>GOVERNMENT PUBLICATIONS:</u>		
On hand beginning of month, .....	5,049	676.85
Received during month, .....	1,500	135.00
Total, .....	6,549	811.85
Sold during month, .....	1,452	271.50
On hand at close of month, .....	5,097	540.35
<u>NON-GOVERNMENT PUBLICATIONS:</u>		
On hand beginning of month, .....		
Received during month, .....		
Total, .....		
Sold during month, .....		
On hand at close of month, .....		
Cash on hand beginning of month, .....		463.20
Sales during month, .....		271.50
Total, .....		734.70
Remitted during month, .....		0
Balance, .....		734.70

## DEPARTMENT OF THE INTERIOR

## NATIONAL PARK SERVICE

## REPORT OF TELEPHONE AND TELEGRAPH BUSINESS

Yosemite National Park for the Month of June, 1931

	This Month	This Month Last Year	Increase	Percent Increase
<b>LOCAL BUSINESS</b>				
Miles of circuit maintained . . . . .	342	340	2	0
No. of telephones connected . . . . .	478	468	10	2
No. of measured service calls . . . . .	1395	1810	-415	-12
No. of other local calls . . . . .	72048	70442	1604	2
Total No. of local calls . . . . .	83519	72252	16267	22
Peak load in calls per day . . . . .	2894	3101	-207	-7
<hr/>				
Receipts from measured service calls . . . . .	84.35	119.55	-35.20	-29
Receipts from coin boxes . . . . .	153.12	46.05	107.07	232
Receipts from telephone rental . . . . .	0	726.10	-726.10	-100
<b>TOTAL RECEIPTS</b>	<del>237.47</del>	<del>891.70</del>	<del>-654.24</del>	<del>-73</del>
<hr/>				
<b>LONG DISTANCE BUSINESS</b>				
No. Outbound calls . . . . .	1914	1787	127	7
No. Inbound calls . . . . .	1380	1573	-193	-15
<b>TOTAL LONG DISTANCE CALLS</b>	<b>3294</b>	<b>3360</b>	<b>-66</b>	<b>-3</b>
Peak load in calls per day . . . . .	148	187	-39	-15
Receipts from Long Distance business . . . . .	949.79	940.80	8.99	1
<hr/>				
<b>TELEGRAPH BUSINESS</b>				
Messages via Western Union . . . . .				
Messages via P.T.&T.Co. . . . .	143	100	43	43
<b>TOTAL MESSAGES</b>				
<hr/>				
Receipts from telegraph business . . . . .				
No. of money transfer messages . . . . .				
No. of money transfer receipts . . . . .				
<b>TOTAL RECEIPTS TELEPHONE &amp; TELEGRAPH DEPT-</b>	<del>\$1187.28</del>	0	0	0

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

\*ELECTRICITY GENERATED, SOLD, USED, ETC.

Yosemite

National Park for the Month of

June, 1931

	This Month	This Travel Year To Date	This Month Last Year	Last Travel Year To Date	Increase for Travel Year	
					Number	Percent
Current generated, . . . . .	1393040	9583060	777340	7895740	1687320	21
Sold to park operators, . . . .	543170	2950244	420495	2629576	320668	12
Sold to others, . . . . .	627900	3682741	102660	2338869	1343872	58
Furnished to other Governmental agencies, . . . . .	2492	129804	9171	155559	25755	-15
Used by National Park Service, lost in transit, etc., . . . .	219488	2820271	245074	2771736	48535	2
Total current generated, . . .	<u>1393040</u>	<u>9583060</u>	<u>777340</u>	<u>7895740</u>	<u>1687320</u>	<u>21</u>

Amount receivable from the sale of electricity, in Valley, 1931 . . . \$ 9,717.47  
1930 . . . . . 7,162.34

\* Indicated by K. W. H.

Sold to S.J.L. & P. Co. 705,432 k.w.h. \$ 1,292.90

U. S. Department of Agriculture, Weather Bureau

MONTHLY SUMMARY.

TEMPERATURE.

COOPERATIVE OBSERVERS' METEOROLOGICAL RECORD:

Month of June, 1921; Station, YOSEMITE S.; County, MARIPOSA  
 State, Calif.; Latitude, 37; Longitude, 119; Time used on this form, 12:00  
 Hour of Observation, 12:00

DATE.	TEMPERATURE.				TIME OF BEGINNING OF ENDING.	TIME OF ENDING.	PRECIPITATION.				CHARACTER OF DAY TO SUNRISE TO SUNSET.	† MISCELLANEOUS PHENOMENA.	
	MAX. MOM.	MIN. MOM.	RANGE.	* SEE MAX.			AMOUNT.	SNOWFALL IN INCHES.	DEPTH OF SNOW ON GROUND AT TIME OF OBSERVATION.	DIRECTION.			
1	82	47	35										
2	78	45	33										
3	77	43	34										
4	77	39	38			.07							
5	68	45	23			.08							
6	75	42	33										
7	72	43	30			.01							
8	64	40	24										
9	76	39	37										
10	80	41	39										
11	84	43	41										
12	83	48	35										
13	84	46	38										
14	82	46	36			.1							
15	80	55	25			.75							
16	74	40	34										
17	76	37	39										
18	76	39	37										
19	72	44	32										
20	76	43	33										
21	79	40	39										
22	84	42	42										
23	87	45	42										
24	89	45	44										
25	91	48	43										
26	90	50	40										
27	87	50	37										
28	83	41	42										
29	83	43	40										
30	81	43	38										
MEAN	80	43	37										

\* Reading of maximum thermometer immediately after setting.  
 † Including rain, hail, sleet, and melted snow.  
 ‡ Thunderstorms, halos, auroras, etc.

(IN TRIPPLICATE)

See cover for instructions

8-213  
 OBSERVERS' RECORD ONLY

Post-Office Address, Yosemite National Park, Calif.

W. S. Gagnon Cooperating Observer Chief Ranger  
 Yosemite National Park, Calif.

Mean maximum, 80  
 Mean minimum, 43  
 Mean, 61.4  
 Maximum, 91; date, 26  
 Minimum, 37; date, 17  
 Greatest daily range, 54  
 PRECIPITATION.  
 Total, 1.01 inches.  
 Greatest in 24 hours, .75; date, 15  
 SNOW.  
 Total snowfall, 0 inches; on ground 15th, 0 inches;  
 at end of month, 0 inches.  
 NUMBER OF DAYS—  
 With .01 inch or more precipitation, 5  
 Clear, \_\_\_\_\_; partly cloudy, \_\_\_\_\_; cloudy, \_\_\_\_\_  
 DATES OF—  
 Killing frost, \_\_\_\_\_  
 Thunderstorms, \_\_\_\_\_  
 Hail { Light, \_\_\_\_\_  
       Moderate, \_\_\_\_\_  
       Heavy, \_\_\_\_\_  
 Sleet, \_\_\_\_\_  
 Auroras, \_\_\_\_\_  
 REMARKS:  
PRECIPITATION TOTALS 20.43 26.87  
1921 1930