REPORT OF THE ACTING SUPERINTENDENT OF THE YOSEMITE NATIONAL PARK.

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## REPORT

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# ACTING SUPERINTENDENTS OF THE YOSEMITE NATIONAL PARK.

## **REPORT OF ACTING SUPERINTENDENT J. W. ZEVELY.**

## DEPARTMENT OF THE INTERIOR, Washington, January 6, 1899.

SIR: In compliance with your instructions, I have the honor to submit the following report of the performance of my duties as acting superintendent of the Yosemite National Park during the summer of 1898, and to make certain recommendations touching the same.

Under directions contained in your letter of May 26, 1898, I proceeded to the Yosemite Park in California to investigate the condition of affairs in that park. Under the instructions contained in said letter, I occasioned suitable notices to be published in the following newspapers: The Merced County Sun, of Merced; the Weekly Evening Expositor, of Fresno; the Weekly Republican, of Fresno, and the Mariposa Gazette, of Mariposa, warning all persons against trespassing on the parks. I also occasioned numerous notices to be posted in prominent places at the various entrances to the park, warning all persons against trespassing.

In obedience to your telegram of June 17, 1898, I assumed the duties of acting superintendent of the Yosemite Park, and immediately appointed, by authority of said telegram, 11 men as forest agents for the purpose of expelling trespassers from the park. Special Agents Cullom, Buick, Pryor, and Langenberg, of the General Land Office, under your direction, reported to me for duty. Messrs. Cullom and Buick were each placed in charge of a squad of men in the Yosemite Park, and Pryor and Langenberg were dispatched to Sequoia and General Grant parks.

I kept Messrs. Cullom and Buick constantly in the field expelling trespassers, extinguishing fires, and capturing firearms until September 1. During the time they were in the field, from June 25 until September 1, we expelled from the park 189,550 head of sheep, 350 head of horses, 1,000 head of cattle, and captured 27 firearms. On September 1 the civilian rangers, under Agents Cullom and Buick, were succeeded by Capt. Joseph E. Caine, with the First Utah Volunteer Cavalry, and from then until September 24, when I was succeeded by Captain Caine as acting superintendent, 24,500 head of sheep were driven from the park and 3 additional firearms were captured, making a total of 214,050 sheep expelled from the Yosemite Park and 30 firearms captured.

In addition to the expulsion of trespassing herds the forces in the field had numerous forest fires to contend with, some of them being of such extensive character that we were almost powerless to make any headway against them. The drought had been of long duration, and

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hence the forest with the accumulation of débris on the floor of the mountains and the valleys was extremely dry and the fires spread with great rapidity. In one or two instances serious damage was done to the growing forests by these fires.

Under the existing law, no penalty attaches to the offense of trespassing upon this park other than that which the superintendent may inflict in the way of dispersing herds, capturing pack trains, camp equipage, and stock, and occasioning the owners and herders to leave the park. This fact is generally known in California and Nevada, and in connection with the severe drought which obtained in that region during the past year, made them bold to enter and remain upon the park.

## RECOMMENDATIONS.

I beg leave to make the following recommendations:

1. That you urge upon Congress the necessity of the enactment of a law attaching a penalty for trespassing upon the national parks, and that some officer connected with the government of the park be given the same powers as are now vested in the United States commissioners, so that trials may be had as speedily as possible after the apprehension of the trespassers.

2. That you urge upon Congress the necessity of extinguishing the titles which now subsist in individuals to lands within the park limits. As long as there is private ownership of lands within the limits of the park it will be with the utmost difficulty that the stock can be kept off the park and the game and fish within its limits protected.

3. That a permanent barracks be established at Camp Wood, near Wawona, of sufficient capacity to accommodate an officer, a surgeon, and 20 men, for the purpose of protecting the park during the winter months when the troops have been withdrawn. A detail of the size here indicated should be kept there all the winter. There are many times during the winter when the park is very accessible to hunters and trappers, the consequence being that much of the game and fish within the park is destroyed.

4. The roads which have been constructed for the purpose of accommodating the general public who wish to visit the National Park ought to be owned by the Government. Persons going there either for pleasure or health ought not to be required to pay for traversing roads which are upon the park itself. The roads which ought to belong to the Government are the Yosemite Stage and Turnpike Company's road from Wawona to the Yosemite Valley; the Big Oak Flat road, which enters the park about 3 miles west of Crockers and runs into the Yosemite Valley at the foot of El Capitan; the Coulterville road, which crosses the park line about 3 miles south of the Big Oak Flat road and runs to the lower end of the Yosemite Valley. Many of my predecessors have recommended the purchase of the Tioga road. I do not think this should be done, as the Tioga was not originally constructed even for a quasi public purpose, but merely to enable the owners of the Tioga mine to have an outlet from their mine to the market. This is not a toll road and never has been; it has been abandoned by the builders for more than twenty years; if they ever had any rights, they have lost them by abandonment. I think appropriations should be made for the repair of this road, but I think none ought to be made for its purchase, as I conceive it already belongs to the Government.

5. In the matter of the prevention of forest fires, from conversations had with old mountaineers, men who have lived in the Sierras since the fifties, who have been constant observers of the conditions there, and who are deeply interested in the preservation of the forests in the national parks, as well as the national reservations, I have concluded that the policy heretofore pursued by the Government, looking to the prevention of fires altogether, is erroneous. Since the Yosemite Park was established, great efforts have been made by each superintendent to prevent fires altogether, and when they have started, to prevent their spread. The consequence of this is that the floors of the mountains and the valleys have become covered by decaying pine needles and cones and the leaves of the deciduous trees to a depth of from 12 to 18 inches; in addition, many trees have fallen and are now decaying, and the whole mass is highly inflammable. The consequence is that when fires start under existing conditions it is next to impossible to control them at all, and the trees in the track of a fire are destroyed. Prior to the inauguration of the present policy, fires occurred almost every year in all parts of the forest-in fact, they were frequently set by the Indians, but there was so little accumulation on the ground that they were in a great measure harmless, and did not in any sense retard the growth of the forest.

I therefore think it would be well to consider whether or not the policy of the Government had not better be reversed and, instead of efforts to prevent fires, a systematic burning had not better be indulged. There is not to be found now in the whole forest any tree of great magnitude which has not upon it the marks of fire, yet the trees have in no wise been seriously affected by these burnings.

In conclusion, I beg leave to suggest that the Yosemite National Park ought to be placed upon the same footing as the Yellowstone National Park. While no official records are kept of the number of persons who annually visit the Yosemite National Park and the Yosemite Valley, yet I think the number of tourists and visitors is quite equal to the number visiting the Yellowstone. From the report of the superintendent of the Yellowstone Park for the present year, I see the total number was 6.534. The books of the Yosemite Stage and Turnpike Company show that for several years last past the number of tourists carried by it has averaged more than 2,500 annually. When we take into account that there have been in operation two other stage lines, and that many persons go in by private conveyances, and on horseback and on bicycles, it is reasonable to conclude that the total number of tourists is equal to the total number visiting the Yellowstone annually. The further fact that the troops that were designed for the protection of the Yosemite during the season just closed were withdrawn on account of the war with Spain, thus leaving the park wholly unprotected, makes more apparent the urgent necessity of providing for the permanent superintendency and patrol of this park.

I beg leave to submit herewith (Exhibit A) a letter from Dr. Marsden Manson, who has made a study of the flora of the Sierra for many years past; also a letter (Exhibit B) from Dr. Marsden Manson and W. L. Ashe, members of the department of highways in the State of California, making some suggestions relative to the roads and trails within the park.

Very respectfully,

J. W. ZEVELY, Special Inspector, Acting Superintendent of the Yosemite National Park.

The Honorable,

The SECRETARY OF THE INTERIOE. INT 98—MIS—67

## EXHIBIT A.

#### SENTINEL HOTEL, Yosemite, Cal., June 17, 1898.

SIR: In studying the west slope of the Sierra Nevada for the past twenty years I have been impressed with the fact that there are many species of the flora of that region which are being destroyed by various agencies, but particularly by sheep and forest fires. There are also several species (notably the big trees) which are disappearing from natural causes.

To preserve these I recommend-

(1) That the Yosemite Reservation be designated and set apart as an area devoted to the preservation of the distinctive flora of the Sierra, and that the policy of the Department be to encourage Government, State, and private aid to this object.

(2) That the introduction of foreign species be forbidden, and that those already introduced be systematically destroyed. (3) That the Sierra Club, the College of Agriculture of the University of Cali-

fornia, or the Smithsonian Institution, be charged with the duty of carrying out this work under the direction of the honorable the Secretary of the Interior.

Very respectfully,

MARSDEN MANSON.

J. W. ZEVELY, Esq., Special Inspector, Interior Department.

## EXHIBIT B.

#### SENTINEL HOTEL, Yosemite, Cal., June 17, 1898.

SIR: As the work with which we are charged has certain general relations with your duties, we submit for your consideration the following: First. It is desirable for the Government to acquire those portions of existing toll roads entering the Yosemite Valley which lie within the lines of the reservation, the basis of these values being (a) the cost of constructing the same at present; (b) the values of the roads and franchises as given by the assessors' books of the counties in which said roads are situated.

Second. The conditions of such acquisition being that all tolls should be reduced during the remainder of the franchises in proportion to the lengths of toll roads left beyond the limits of the reservation, and that such remaining portions be made free roads at the expiration of existing franchises.

The Tioga road traverses the reservation and approaches desirable passages through the Sierras to the easterly counties of California and to the State of Nevada.

A bill for the extension of this road passed the last California legislature, but failed to become a law by reason of certain defects in the title. It is probable that this will be remedied on the future and that the State of California will construct the extension casterly to the road system of Mono County. This road has been abandoned entirely for several years, and it is doubtful whether the State laws regarding the acquisition of the right of way and franchise have been fully complied with. We therefore are of the opinion that this road should be taken possession of by the Government and maintained as a line of travel and police control. It is also respectfully urged that existing and possible lines of road be examined and surveyed, and that upon the basis of such surveys and examinations a road be jointly constructed and maintained by the Government and State along the best grades and alignments which the nature of the country will afford.

In the matter of the passage and pasturage of stock in the reservation, we believe-(1) That such passage should be restricted to cattle, horses, mules, and asses; that sheep and goats should be absolutely prohibited.

(2) That a light toll should be charged upon such stock in transit.(3) That a pasturage charge should be made.

(4) That the number should be restricted so as not to overstock the ranges and meadows.

(5) That the charges thus collected should be used for the maintenance of the roads of the reservation.

Very respectfully,

MARSDEN MANSON. W. L. ASHE,

Members Department of Highways, State of California.

J. W. ZEVELY,

Special Inspector, Department of the Interior.

## REPORT OF ACTING SUPERINTENDENT CAPT. JOSEPH E. CAINE.

1898

## YOSEMITE NATIONAL PARK, OFFICE OF SUPERINTENDENT, Camp near Wawona, Cal., January, 1899.

SIR: In accordance with your instructions, I have the honor to report upon the condition of affairs in the Yosemite National Park during the season of 1898.

With the First Troop Utah United States Volunteer Cavalry I left the Presidio of San Francisco on August 13, having been assigned by the War Department for duty in the national parks of California. Arriving at Madera on the 23d of August, the command was divided, First Lieut. Benner X. Smith and 32 enlisted men going to the Sequoia and General Grant parks, and I, with Second Lieut. Gordon N. Kimball and 61 enlisted men, proceeding to the Yosemite Park, making a permanent camp near Wawona on the main stage road.

I reported in person to Mr. J. W. Zevely, acting superintendent, for instructions, and the operations of the troop were directed to carrying out his suggestions. The work up to the time of Mr. Zevely's departure consisted in great part in fighting forest fires, which, on account of the very dry season and the late arrival of the troops, were very numerous.

On September 25 I was appointed acting superintendent of the park, and continued the work begun with Mr. Zevely.

The late arrival of my command had left the park practically unguarded during the spring and early summer, the small force of forest rangers employed having been entirely inadequate to the demands. There is sufficient work for a whole troop of cavalry in the park at all times, and in many emergencies a squadron could be used to advantage. The drought in California this year forced many sheep and cattle men to seek grazing lands in the national parks who would not under ordinary circumstances be guilty of trespassing. One old man, of more than ordinary intelligence, who was captured in an almost inaccessible part of the park, said he had herded his own sheep for twenty years and had never before crossed the park boundary. I asked him if he did not know he was liable to be ejected and to lose his sheep. He replied that he did, but that the only alternative was to allow his sheep to die of starvation in the valley below. I have no doubt that many of the trespassers were in the same desperate circumstances as was this old man, but while these facts excite sympathy, they do not repair the damage done to the reservation. The very fact that the temptation to infringe upon the park is becoming greater every year through the exhaustion of other ranges makes it imperative that some new system for preserving the reserve be adopted at once.

Under the present regulations a herder may be expelled from the park at a point remote from his flock and his sheep may be scattered; but, though this results in great inconvenience to the herder, the actual loss sustained is not sufficient to restrain others from trying the experiment. The expense of supplying rations and forage for cavalry in the

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parks is very heavy, and the work upon these mountain trails is most trying upon the horses, many of which are subjects for condemnation after the summer's work is over. If the Government is going to continue the heavy expense of maintaining a cavalry patrol on this reserve, there should certainly be sufficient penalty attached to trespassing to make sure that a herder once captured would never return to the park, and to serve as a warning to others.

It is a well-known fact that sheep will exist where other animals would starve. It is therefore a common thing to find them in places that are almost inaccessible. To add to the difficulty of finding them this year, I found that the herders had established a system of spying. A squad could not leave the home camp without the word being carried to remote parts of the park faster than the troopers could travel. Ten or more herders would join in employing watchers, who were placed on the main trails to give the alarm upon the approach of the soldiers. By signal fires and other means the herders were warned to get out of the way. Lieutenant Kimball, who made an extensive tour of the eastern part of the park, noticed these signal fires every night, and also found warning notices nailed to the trees along the trails. Notwithstanding these precautions, many of the herders were captured, there being as many as fourteen at the home camp at one time.

I am averse to believing that many of these herders would be guilty of deliberately setting fire to the forests for their own advantage, but I must confess that appearances are against them. During the early part of September there were three or four large fires in the district west of the Yosemite Valley. Twenty troopers were kept constantly at work for a period of two weeks, and all of these fires were gotten under control. But no sooner had the last one been put out than another started less than a mile away. This one was extinguished, when a third one started in a place most favorable to the wind. In a short time the flames were in the tops of the fir trees, and with a heavy wind were soon beyond all control. Being satisfied that this fire had been started by a herder, I divided the fire squad into several small detachments and started them to scour that side of the park for herders, leaving the fire to burn itself out. At the same time I sent out other squads from the home camp, covering nearly the entire park simultaneously with a patrol that was moving in all directions. The result of this raid was the capture of some twenty-four herders, the scattering of thousands of sheep, and the ending of the forest fires. There was not another conflagration in the park during the entire season.

But the sheep herders, who are openly trespassers upon the park, are by no means the most difficult class to deal with. There is a large class who own or lease small tracts of patented land within the park boundaries and are necessarily allowed to bring cattle and sheep on to these lands. It is a rare thing that one of these owners or lessees keeps his stock within the limits of his own possessions. If he hears the soldiers are coming, he gathers in his stock; but it is impossible to watch these men constantly, and when the troopers are not present their sheep and cattle are allowed to roam at random over the entire park. We found much of this stock, and, had there been any penalty attached to this sort of trespass, could have convicted nearly every occupant of patented land within the park; but while the stock was on public land the owner would remain upon his private land and could not be ejected from the park. By scattering these stray cattle and driving them to remote points, the owners were duly harassed, and no doubt suffered some heavy losses; but this sort of punishment is indirect, and is neither so fair to the cattle owner nor so satisfactory to the commanding officer as would be a system of uniform penalties imposed by law.

Under the present system the large owner who employs a number of herders does not suffer in proportion to the man with a small herd. In the latter case the entire herd is often captured and driven off the park at remote points, resulting, in many cases, in a very heavy loss.

I am satisfied that my troop succeeded in running practically all unauthorized sheep, cattle, and horses off the park; but, as we started late, this was not accomplished until the grazing season was almost over, and until most of the feed had been destroyed.

The fact that nearly all the meadows had been eaten off before we arrived in the park made our operations exceedingly difficult. The districts where the sheep were found were many miles distant from camp, and accessible only by steep and rough mountain trails, so that supplying grain for the horses used in these districts was a difficult problem, and the transporting of long forage by pack train was an impossibility. I am informed that in ordinary years there is sufficient grazing to supply the troop horses, so that detachments on the trail can move rapidly over the country, carrying little or no grain, as the circumstances permit.

The toll roads in the park are in excellent condition, being the best mountain roads I have ever seen. But, as has been suggested by former superintendents, these roads should be owned by the Government and be free to the public. Until such time, however, as an appropriation can be obtained sufficient to keep these roads in their present excellent condition, and until a system of control is adopted to insure the preservation of these great highways, I would recommend that they be left in the hands of the present owners. The great Tioga road, which was built some years ago by private capital, and was formerly run as a toll road, has been practically abandoned by the owners and has fallen into disrepair. This road leads from Crockers (Sequoia postoffice) across the park to the eastern boundary, a distance of about 50 miles. The eastern half of this road is in such bad condition as to be hardly a good trail. Upon my arrival in the park I was informed that the repair of a few bridges would make this road passable for wagons, and I had intended to undertake these repairs, but an inspection of the ground proved that the road could not be put in good condition without a large expenditure of money and labor. The estimate of a former superintendent that \$10,000 would be required to repair this great highway is low enough; \$15,000 is probably nearer the cost. Unless immediate steps are taken to secure the control of this road to the Government and to place it in repair, it will soon become a thing of the past, and the vast amount of labor expended upon it will be a total loss.

I consider this Tioga road the most important highway in the park. With it all the points of interest in the eastern end of the park are accessible to campers and tourists. Without the road these wonders of nature will remain shut out from the world, and a vast tract in the most attractive section of the park will be left an easy prey for the sheep men and hunters who come in from the East. The road is an absolute necessity to the proper patrolling of the park. Were it passable for wagons, a permanent outpost could be established and maintained at Soda Springs, and all of that important section could be patrolled

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from that point. As it is, the difficulty of supplying rations and forage renders it impracticable to do more than send an occasional squad hurriedly over the trails.

Another rich tract of grazing country that abounds in natural wonders. such as the Devils Post Pile, the Minarets, Soda Springs, etc., in the southeast corner of the reserve, is reached by the Chilnualna trail. via Chilnualna Creek, Crescent Lake, Lake Johnson, Buck Camp, etc. While this trail is in good repair, the altitudes reached are so great as to make the trip difficult at all times. I found that there is a much more easy route by a trail that leaves the stage road at Fish Camp and joins the Chilnualna trail at Jackson Meadows. While this route is no doubt a little longer than the other, the grades are so easy as to make the travel much more rapid than by the other route. This southeast corner, which includes all the creeks and lakes that form the source of the San Joaquin River, is a very important district and should be protected. This year the grass in this district was all eaten off before we arrived in the park, and as there was absolutely no grazing left, it was impossible to subsist our horses and pack animals there for any length of time. The preservation of this watershed is all important, not only to the park, but to the people of the San Joaquin Valley, who depend upon it for their water supply.

The building of bridges recommended by my predecessor is no doubt an important matter; but as all my stay in the park was at low water time and in a very dry season when all the streams were fordable, I can not speak from actual experience of the necessity of these bridges.

While many of the trails are out of repair, I found that the only ones that had become really impassable are those in the northwestern part of the park leading into the Hetch-Hetchy and Till Till valleys and the country beyond. A squad of my men under Sergeant Richards succeeded after great difficulty in reaching the floor of the two valleys above mentioned, but were unable to go beyond, and, as a result, a large tract was left at the mercy of the sheep and cattle men. The land in the Hetch-Hetchy, which is owned by private parties, was this year under lease to a large cattle owner. It was only after doing a great amount of work upon the trail that he was able to withdraw his stock for the winter. These valleys are the home of hundreds of bears, and with proper protection will remain for many years a great national game preserve. Hay and grain are always obtainable in the vicinity of Crockers and the Hog Ranch, and the operation of troops in this part of the park can therefore be conducted successfully from these With the repair of these trails all this vast tract could be kept points. under constant patrol. While it is true that sheep are less troublesome here than in the eastern part, there are many herds of cattle and horses roaming at will; and the prevalence of game, together with the ease of access over the western boundary, makes it a paradise for hunters. Fully three fourths of the firearms captured in the park were taken in this district, where the roads from the west enter the park.

Again, a large proportion of the land in this district is owned by individuals, leaving all this tract subject to constant trespass by the herds of these owners.

The southwest quarter of the park is easily accessible to patrols, and while we found some sheep and cattle there, it did not take long to clear this tract. There were several large forest fires in this district early in the season, but while the floor of the forest was burned in these places, I think no great damage was done to the large timber.

As many of the old trails have fallen into disuse and new trails have

been blazed, I assigned to Lieutenant Kimball the work of correcting the map. Before he had gotten fairly started on this work, however, he was ordered to take command of the detachment in Sequoia Park, and the corrections therefore were never made.

I attach to my report the map published with the report of Capt. Alexander Rodgers, acting superintendent in 1897, which is sufficiently up to date to be of great value. The fact that the patented lands are printed in this map in colors makes it an invaluable aid to the acting superintendent and to the troops operating in the park. I recommend that this map be republished with my report.

I was unable during my limited stay to pay any attention to the subject of fish culture in the park. I found, however, that the lakes and streams are well stocked, though the Merced River bears evidences of having been fished too much. Fishing in this stream should be restricted for a term of years.

That portion of the park recently ceded to the State of California, and embracing the Yosemite Valley, is in an excellent state of preservation. The roads and trails are in perfect condition, and the artificial improvements that are constantly being made detract nothing from the natural beauties. The condition of this tract reflects the greatest credit upon the commission in charge.

In conclusion, I beg to urge the imperative necessity of a system of penalties for trespass by hunters, herders, and all others who violate the rules governing the park. I can not recommend too strongly that these penalties be made severe enough to act as a deterrent upon others.

I also suggest that action be taken at once to secure to the Government the title to all the land within the park. If the outlay required to purchase this land is considered too great, the six townships on the west side of the park, which contain at least three-fourths of the patented land, should be taken out of the park and returned to the public domain. This could be done without great loss to the park—a few sections being retained out of this tract to cover the Merced Big Trees, on the east side of township 2 south, of range 19 east. (See map.) The patented land in the remaining part of the park could then be purchased without a great outlay.

Sufficient money expended each year to keep the trails and roads in repair would save a vast outlay of means at some future time, and would assist materially in furthering the work of the troops assigned to the duty of protecting this park.

Respectfully submitted.

JOSEPH E. CAINE, Captain, Utah United States Volunteer Cavalry, Acting Superintendent Yosemite National Park.

The SECRETARY OF THE INTERIOR, Washington, D. C.

