## REPORT

OF THE

## ACTING SUPERINTENDENT OF THE SEQUOIA NATIONAL PARK.

CAMP AT MINERAL KING, CALIFORNIA, August 31, 1891.

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

SIR: I have the honor to submit the following report:

On May 14 my troop (K, Fourth Cavalry) left the Presidio of San Francisco by rail for Exeter station, en route to the Sequoia National On the 16th it encamped at a place on the Mineral King road, known as the "Summit," about 7 miles from the park, where it was obliged to remain till June 7, on account of the bad state of the road This road runs through township 17 south, range 30 east, to the Mineral King mining district, in township 17 south, range 31 east, where it terminates abruptly at the foot of a high range of mountains, over which no road could be constructed without excessive cost and that would be impassable on account of snow for about 9 months in the year. This road lies on the south side of the main Kaweah River as far as a point about 1 mile east of the summit, where it crosses the East Fork by a bridge. It then runs along the north side of the cañon of the East Fork at some distance above the river until it reaches the Mineral King district, when it approaches the river. The distance from the bridge to Mineral King is about 24 miles and the ascent about 6,500 feet. In many places the road is very steep and rocky for long distances. It was badly washed by rains and melting snow, and in the last 6 miles was impassable on account of snow. The county had appropriated some money to put this road in repair and two men were working on it. I had soldiers help them, but several storms did so much damage that a great part of the work had to be done again. It was not till early in June that the road was practicable for wagons, and on the 8th I arrived at Mineral King. The upper part of the cañon was yet covered by several feet of snow, and it was not till June 29 that the command reached its present camp.

I was compelled to come here, as there was no place in the park, the road being cut along a steep hillside, where so many men and horses could camp. At the summit the grass was getting dry and the water supply gave out. The land was owned by private individuals and the weather during July and August is excessively hot, the thermometer usually rising higher than 100° every day. At Mineral King there is good grass, the nights are always cool and frequently frosty, and the

men are healthier and have more vigor for the hard work of mountain climbing. The altitude of the camp is about 8,300 feet.

The only other road leading into the park is the one built by the Kaweah Colony to the colony sawmill. To reach it I should have had to cross the Kaweah River just below the mouth of the North Fork, and then the latter stream. There are no bridges and the main river was not fordable till about July 15 and the North Fork until about July 1. The colonists have a small ferryboat at the crossing of the main stream, fastened by ropes and pulleys to a wire cable above the water, and run by the pressure of the current striking the boat obliquely. This boat is long enough for four horse teams, but it would have been useless to take advantage of it, as there was no ferry over the North Fork.

I was authorized by the commanding general, Department of California, to hire a guide for one month, and employed him on July 8. Owing to the time necessary to travel over such a rough country, the whole month was employed almost wholly in the park proper, though I was very anxious to learn by observation something of the adjacent country to the north, east and south. I was notable to go all over the park myself, owing to the action taken by the people working at Atwell's Mill. I have, however, drawn a small crude map, approximately correct, of so much of the country as I have seen, which will give an idea of the general direction of the principal mountain ranges, though not of their spurs, inequalities, and roughness.

The different branches of the Kaweah River, except the North Fork head on the western slope of a range of mountains 12,000 to 13,000 feet high, whose general direction is north and south. The top of this range is steep, bare, and rugged rock, broken and irregular, and passable in but very few places. It is a high wall that completely separates the country on one side from that on the other. Projecting from it in a westerly direction are the high ranges that separate the Marble, Middle, East, and South Forks from each other. Northeast of the park a ridge extends eastward from it to Mount Whitney, on the main divide of the Sierra Nevadas. To the south of this ridge are the headwaters of Kern River, to the north those of Kings River. Mount Whitney is said to be the highest in the United States, and the mountains about the headwaters of Kern, Kings, and Kaweah Rivers to be the highest and roughest in the whole Sierra Nevada range. The only tolerably level ground of any extent in the park is in the two southern townships, where there are probably 300 to 400 acres of it. This portion of the park is known as the Tuohey Meadows, and also as the Hockett Meadows, though particular portions have special names, as Zimmerman's Meadows, Warren's Horse Camp, etc., but all lying in the Tuohey or Hockett Meadows. These meadows are in a flat basin at the head of the South Fork, at an elevation of little more than 9,000 feet and almost completely surrounded by mountains. The snow lies here till late and the ground was very boggy until about July 10. It is partly timbered, the open spaces having small lakes, streams, and grassy bottoms. It has for years been a favorite grazing ground for sheep and cattle, and the streams have been stocked with trout. It is one of the most picturesque spots in the park, and a delightful camping place during the latter part of July and August. The only other spot of special interest that I have visited is the Giant Forest. This covers four or five sections in the southwest corner of township 15 south, range 30 east, and northwest corner of township 16 south, range 30 east. It is in its natural state except for

a number of cabins that have been built, and some ground fenced for cattle.

One tree, measured by Lieutenant Nolan, was 341 feet in diameter and about 370 feet high. In other groves the sequoia trees are a very small proportion of the whole number, being scattered here and there among spruce, fir, and pine trees. In the Giant Forest, while the sequoias are still greatly in the majority, they grow more thickly and to a greater size than anywhere else in the park and, travelers say, than anywhere else in the State. Lieutenant Nolan, who has visited the General Grant Park, says there is no tree there that compares with some that grow in the Giant Forest. The tree known as General Grant has had the earth washed away near its roots, and 3 or 4 feet from the ground it doubtless measures more than any in the Giant Forest, but the main trunk is smaller. The conditions now existing in the Giant Forest seem to have been very favorable for its growth and preserva-The ground is uneven, and the growth of pines and other trees on the heights and around the big trees have kept the winds from breaking off their tops, have protected their trunks from the action of the weather, and kept the ground moist and of an equable temperature.

The safety of the big trees doubtless depends to a certain extent on the preservation of these others. The Government, at whatever cost, should never allow any private individual or corporation to have control of any portion of this forest, nor allow any timber to be cut in it. As it stands now, and as it ought to remain, it is probably the most remarkable forest of its kind in the world. The more one sees of it the

grander it seems. To despoil it would be a desecration.

There are also big trees in other portions of the park, notably on the mountain slopes both north and south of the East Fork, in township 17 south, range 30 east, and south of the South Fork, in township 18 south, range 30 east, and a few elsewhere. Some of those north of the East Fork are on the Atwell estate, through which the Mineral King road passes, but finer trees are found farther west, in a more inaccessible locality. In no other grove, however, do they obtain the size of those in the Giant Forest, nor grow so thickly. A number have been cut down in the vicinity of Atwell's Mill, and the value of the property consequently lessened.

The mountain range south of the two southern townships is lower than the next one to the north (the one between the South and East Forks), and the country beyond is generally lower than that in the park. I was unable to get into those townships during the month of June, owing to high water on the trail up the South Fork and snow on the mountains south of the East Fork. I was surprised in the latter part of June by the appearance of two herds of sheep in the valley of the East Fork that had come over the snow on the mountains between the South and East Forks. They had worked up from the south and found too much snow in the southern townships to remain there, and had come onto the East Fork. I mentioned my action concerning them in my last letter, as also in the matter of two herds of cattle that came up the wagon road about July 1.

The country northwest of the Giant Forest is quite low, comparatively speaking, and consequently free from snow early in the season. The high water in the main Kaweah River and North Fork kept any party of troops out of that country till after the middle of July, as the only practicable route to reach it is by the Colony road. There is no known trail across the Middle Fork above the mouth of the Marble Fork, nor up the mountains, if a crossing existed. The only other way

would have been to have gone nearly to Visalia and then taken the road to Camp Badger, but I had not enough pack mules to spare to carry sufficient forage for such a detachment. I expected to find sheep and cattle grazing in that part of the park, but Lieutenant Nolan reports not more than a dozen cattle near the Colony sawmill and in the Giant Forest, and that only one herd of sheep had passed through the northern part of the park, and that it had gone through hurriedly. In the Hockett Meadows a few cattle, the property of Mr. Blossom, who lives on the South Fork, near Three Rivers, are constantly giving trouble, straying back as fast as they are driven out. With the above exceptions there has been no trouble from cattle or sheep in the Sequoia Park. On the other hand, General Grant Park, from its isolated position and being surrounded on all sides by loose cattle, is particularly liable to be overrun with them. The owners have been notified to keep their cattle out, but I imagine it is having very little effect.

At the Colony sawmill a detachment is stationed to protect the Giant Forest and patrol the northern portion of the park and General Grant Park. By the nearest route the sawmill is 50 miles distant from here.

At the foot of Big Red Hill, 6 miles above Three Rivers and 26 miles from here, is another detachment. At this camp a trail crosses the river that leads to the Giant Forest, and the detachment watches that trail and the road to see that no cattle are driven into the park. also patrols the road in the park. In the Hockett Meadow is another detachment, about 18 miles from here, guarding that portion. Men are now at work trying to make a shorter route to this camp, on the mountainside south of the East Fork, and then from that camp to Big Red On the headwaters of the Middle Fork several hundred cattle and probably 5,000 sheep are grazing. They are just north of the camp at Mineral King and patrols watch them to see that they do not encroach on the eastern side of the park. Eastward, in the Kern River valley, there are sheep by thousands that formerly grazed in the park. The camp at Mineral King is necessary to guard the eastern line of the park, for as soon as cold weather sets in the sheep-herders will drive the sheep back through it, as has been their custom, unless prevented. There will then also be danger from fires, as the herders, often through carelessness, let the dry brush and grass catch fire before they leave. This year it is thought they will do so out of spite.

The Mineral King district is also a favorite resort for people to stay in camp, and a base for hunting and fishing parties during the sum-For about 6 weeks over 300 people have been camped mer months. within a mile of my command. In township 17 south, range 30 east, James W. Griffis and a few persons, formerly members of the Kaweah colony, are living in section 7, Mrs. Maria W. Eylie in section 8, and Mr. Jacob H. Tronger in section 20. They are all farming, and I am informed by Mr. Andrew Cauldwell, special agent General Land Office, that they are living on their own homesteads. The colony people live on land now owned, or formerly owned, by William Riddell. The Atwell estate, in the same township, has been rented by Mr. Irwin Bernard, a member of the Kaweah colony, who is cutting timber on it, and employs members of the colony only. With these exceptions, no land to which any one has a claim or title is occupied. A man is hauling posts cut some years ago from land just west of the Atwell estate, that I am informed was bought by him from John E. Miller, who got it for eash from the Government. I get my information concerning land claimed or owned by any one from Mr. Andrew Cauldwell, who, I understand, has furnished the same information to the Department.

At the mouth of Marble Fork a single man by the name of Wolverton is living, and has cultivated a small piece of ground. Another, by the name of Bonneview, is similarly on the Middle Fork, just within the western line of the park. Lieutenant Nolan passed by the land they occupy, and mentions them in his report. Mr. Cauldwell knows of their occupancy, and says they have no claim whatever to the land.

Since commencing this paper I have received instructions from the Interior Department to make a report concerning patented lands, this having been brought about by objections to and inquiries concerning the conduct of the troops toward the people employed in cutting timber at Atwell's Mill. The foregoing is all the information I have concerning other patented lands. As the action of the Department and the troops concerning the Atwell Mill property may cause discussion hereafter, I shall make it the subject of a special report.

The valuable game in the park consists of deer, bear, mountain grouse, and California quail. Besides there are varieties of other animals, such as chipmunks, gray squirrels, ground squirrels, groundhogs, panthers, wildcats, coyotes, etc. In the rocky valleys, at low altitudes, are

quantities of rattlesnakes.

The streams in the Hockett Meadews have been stocked with trout, and these fish are also found in the Marble Fork near its mouth, and a few miles below it in the Middle Fork. The streams are too swift and the falls too high for fish to ascend them any distance into the park. North and west of the Giant Forest the Marble Fork is a beautiful stream, in which I think trout would thrive. The headwaters of the East Fork, at Mineral King, have been stocked, and the trout propagate rapidly, but this is not in the park, and the waters are fished so much that the number is kept down.

Owing to the high altitude of most of the land in the park and deep snows in winter deer can live in only a few places in it in that season, and are forced into the foothills to the west. In the summer they go eastward and many through it. The same applies to grouse and quail. Although there is a State law against killing deer for 2 years, this is not a complete protection. I have heard of deer being killed in this vicinity this summer, and numbers will probably be killed in the foothills this winter. After the law referred to expires the deer belonging to the park will have very little protection. A few deer have usually been found in the winter just within the park in the valleys of the Middle, East, and South Forks. Some years ago one of their principal ranges was about the headwaters of the Middle Fork, not in the park. The cattlemen and sheep herders have now made them very scarce Any one interested in game can not help wishing they could be better protected. For this purpose, if for no other, I should recommend that townships 15, 16, and 17 south, range 31 east, be added to the park. The mountain range in which the East and Middle Forks head would then inclose the park on that side and form a barrier that would to a great extent protect it, and materially lighten the labor of the guardians of the park on the east side. It would also to a great extent stop the travel through the park of landowners and cattlemen with cattle to their land now lying along the eastern boundary and avoid many occasions for dispute. It would also lessen the danger of destruction of many valuable trees from fire.

At Redwood Meadows, near the head of the Middle Fork, is a small grove of big trees. As long as land is owned by individuals in the townships I have mentioned they will insist, on account of the difficulty in reaching it in other ways, on using the Mineral King road and trails

through the park. I understand from Mr. Cauldwell that very little land is owned in these townships. In the Mineral King district, in township 17 south, range 31 east, are a number of mines, none of which have ever paid for working them, and are not worked now except a few to a very limited extent, and principally only enough to keep the owners from

losing their claims.

For the further preservation of game, and to keep it from becoming a nuisance to the settlers in winter; it would be well to extend the park westward, so as to take in all the land east of the North and South Forks. A post at Three Rivers could then watch the principal avenues to all parts of the park from the west. As this would include much land now taken up I suppose this extension would not be favorably considered. By taking in the eastern halves of townships 17 and 18 south, range 29 east, but little private land would be included, and the object of an extension to a great extent attained.

The Mineral King district is a great resort in summer for people from the Lower Kaweah Valley about Visalia and Tulare. As in the case of the troops, it is about the only camping place accessible to wagons that they can find. During July and August the heat of the valley is intense, and made more unbearable by the moisture from irrigating ditches and green vegetation. A daily temperature of from 102° to 106°

or higher is the rule.

The bracing atmosphere of the mountains is of inestimable value to delicate women and children, and many men, some of them too poor to send their families to the seashore or elsewhere, have been in the habit of sending them to Mineral King. Should this district be annexed to the park, the privilege of letting them camp here as formerly, under proper restrictions, ought not, from a humane point of view, be denied them.

As there is no place in the park for troops to camp, either in summer or winter, some provision should be made to remedy this. If the Mineral King district be annexed, a summer camp will be provided, but troops must leave it by the 1st of October at the latest, when it is still too early to leave the park unguarded. There is then no place to go nearer than the foot of Big Red Hill, about 6 miles above Three

Rivers, and outside the park.

All the land along the main river from the bridge westward is owned by private parties, and it is only by courtesy that my command will have a place to camp when it leaves here, as it will have to do in a few weeks. If the park be enlarged, a winter station must be provided. It should be of sufficient extent to permit the troops to be properly trained, and should be a supply depot during the summer. The land should either be bought or leased. The most suitable place I have seen is along the main Kaweah, from one-half a mile to 1½ miles below Three Rivers. Next year the favor by which troops were permitted to camp on private land before the park could be entered, and again after summer was over, may not be granted.

As I have implied, an extension of the park eastward would stop considerable travel over the Mineral King road. I was under the impression that this was a county road, chartered by the State, and that I incurred considerable risk in preventing cattle from being driven over it. Mr. Cauldwell, however, informs me that it was built by the miners of the Mineral King district about a dozen years ago, on public land, to take in machinery and carry out ore. After the mining excitement subsided, it was made a toll road by the mining company that owned it, but failed to pay expenses. It was transferred once or twice and

finally bought by Tulare County for \$1,500 or \$2,000, and the county has no title to it.

Considerable work will always be necessary in the spring of the year to make this road passable. It is not probable the county will expend any money on it hereafter, and if soldiers must repair it, some way

should be provided for their compensation.

There has been talk of the propriety of further extending the park to the eastward to the main divide of the Sierra Nevada range; also some distance farther to the south and northward, to take in King River Cañon and Tehepitee Valley, or even to the Yosemite. I have had no time to explore the country to the south, about the heads of the Tule River nor the Kern River or King River valleys. I wished to go to Mount Whitney, at the head of Kern River, but the round trip would take 10 days, and I was informed the country had been so overrun by sheep that I could find no free pasturage for horses and pack animals. The same lack of feed would prevent a trip to Kings River and to any distance down the Tule. Many tourists now go to Mount Whitney, and after the Giant Forest is more generally known it will be about the only other attraction in this section, except the Kings River Canon and Tehepitee, which I understand furnish scenery equal, if not superior, to that of the Yosemite. But aside from objects of interest, the prosperity of the population living in the valley between the Sierra Nevadas and Coast Range depend upon the preservation of the timber and brushwood in the mountains, as is well known. I have stated in a former report that brushwood covers the lower slopes and foothills to an altitude of about 5,500 feet, where the timber commences and extends to between 10,000 and 11,000 feet wherever there is enough soil to support the trees. The brush and timber both assist in holding back the snow and preventing disastrous snow slides, and also by their shade in keeping the snow from melting too fast in the spring, thus preventing dangerous floods and keeping up a steady water supply till late in the season.

Sheep destroy much of this brush, and the herders often set fire to it in the fall to destroy it, as the ground will furnish a good crop of grass next season. The best way to secure the safety of the brush and timber is for the Government to take charge of the country and guard it, whether it be called a park or not. Of course as the State is specially interested in this matter it would be proper for the State to attend to it, but as so many local interests would be involved the State might defer proper action too long to be of much use. Most of the land now belongs to the Government, and the difficulty of protecting it would probably grow less and less every year, until local dissatisfaction would disappear, when it could well be turned over to the State.

Knowing how much the welfare of a large population depends on this matter, I am in sympathy with any plan that will preserve the mountainous country in its natural state. Some game animals, now very rare and in danger of becoming extinct, might also be preserved. Formerly elk were abundant, but have been killed off. Horns of mountain sheep are sometimes found, but the last traces of live ones were seen about two years ago near Mount Whitney. There is nothing related to show that they have been killed, but the supposition entertained by many is that they have left the country on account of having been frightened by the proximity of sheep herders and having had

their feed destroyed by bands of domestic sheep.

I renew my former recommendation that a competent surveyor be employed to mark the limits of the park. Only to-day I was asked

whether a certain mine were in the park. I could not answer the question, nor do I know who can. I also renew the recommendation that penalties be provided for violations of the regulations prescribed by the Secretary. As it becomes more widely known that I have no power to make arrests, and that owners of cattle can not be made to keep them out of the park, the difficulties of enforcing the regulations will be increased.

Men of the detachment of troops in the two southern townships have been in the saddle every day looking for and driving out cattle. This duty is accompanied with great physical exertion and fatigue, as the men must walk and lead their horses up and down all steep declivities and over rough places, at an altitude where the air is very light, and when the same cattle are driven out over and over again, with no effective result, the men get disheartened and look on their labor as drudgery.

During the last 2 months my troop, as an organization under my command, has marched about 277 miles, mostly in that portion of the park south of the Middle Fork of the Kaweah and east of the park.

A patrol under Sergeant Tully marched about 75 miles; one under Sergeant Adams, 75 miles; one under Corporal Donner, rounding up and driving off sheep, 130 miles; a patrol under Corporal Fureman, rounding up and driving off cattle, 156 miles; a patrol to Giant Forest and General Grant Park, by Lieutenant Nolan, 207 miles; by different details of the detachment in Hockett Meadows, 970 miles.

I inclose herewith, with a map, Lieutenant Nolan's report of his trip to the Giant Forest and General Grant Park. Also a map and two reports of Sergt. Patrick Dougherty, in charge of the detachment in Hockett Meadows.

I also inclose a memorandum showing the strength of the command. Very respectfully, your obedient servant,

J. H. Dorst,

Captain Fourth Cavalry,

Acting Superintendent Sequoia National Park,