

**Report on**  
**Wallowa Forest Reserve**  
**Oregon**

By

M.L. Erickson, Assistant Forest Inspector

October, 1906

Address Chelan until Nov. 15; thereafter 2802 Lawrence Ave., Tacoma

Chelan, Wn., October 31, 1906

Mr. M.L. Erickson,  
Asst. Forest Inspector,  
Prairie City, Oregon

My dear Erickson:

On my return here last night I found your letter of October 12, also your Wallowa report, which did not reach me before I left Tacoma so had to await my arrival out of the woods. I am sending it to the Forester today, together with a copy of this letter.

The report is very much better than the first one and it is too bad you had to leave the territory before making as complete an examination as you desired. Under the circumstances, however, especially as O'Brien is doing so well, I think you were right not to return until after finishing with Ireland. There are still a few points which it would be better to cover more fully, but I presume you have the information at hand and can do so if called upon by the Forester. I should also like to point them out so you can look out for them next time.

Under "Timber" you recommend no definite stumpage prices for the future. Tacitly the report would seem to approve those already set by O'Brien, but even there is a discrepancy between 50 cents in a sale and \$1 in the Bankhead unintentional trespass.

Under "Grazing" a reduction of stock on the Bear Creek range is advised, but no figures are given. The Laam and Black sheep trespasses are not shown up to be serious enough, it seems to me, to warrant penalty so severe as total exclusion hereafter. It does not appear that the owners were really responsible, and unless this were so, personally I should not advise such strong measures without knowing more than you have written. The same is true regarding the Whittier trespass. I believe Mr. Potter will want a stronger case before denying them next year.

Under "Privileges" I should hereafter mention all, big or little, and their standing, whether closed or pending. I have found here that the office and the supervisor are at variance sometimes over little points like dates, etc., and these may be straightened up by an inspector's report giving the standing in the supervisor's files.

Under "Protection" you advise a telephone line from Joseph to Cornucopia, but give no idea of the expense involved, which would be one of the first considerations by the office.

I do not care to approve the suggestion for a ranger meeting on December 15 until the plan has been put up to all the supervisors involved. Some may have reasons why the date would not suit. Personally, if I were to go, I should prefer Spring, for I find lots of things in the Use Book I don't understand and want a little time to get wise.

Very sincerely yours,

(Signed) E.F. ALLEN  
Forest Inspector.

Portland, Oregon, October 3, 1906.

The Forester,  
Forest Service,  
Washington, D.C.

Sir:

Herewith is submitted report on the Wallowa Forest Reserve. It was the original plan to examine and make a single report on both the Wallowa and Chesnimnus reserves, since they are both under the same administration, but call to attend the Portland meeting did not allow me sufficient time to complete the examination of both reserves.

But twelve days were taken to inspect the Wallowa reserve. This was too short a time to examine it carefully, but I do not consider it necessary to go back and make a more complete inspection, since the reserve is in very good shape and the administration of it has been very effectively carried out.

I failed to meet Assistant Forest Ranger Marshall Giffin when I rode through his district, hence I can not report on him. I had arranged to meet Giffin at the mouth of the North Fork of the Minam River, but he was engaged in examining grazing allotments and had not called for his mail for several days. He never received my message in time and I failed to connect with him. I could not wait for Mr. Giffin nor hunt for him for I was compelled to hurry on, but I plan to take up his district and report on him when I make the examination of the Chesnimnus Reserve later in the fall. This reserve is in a comparatively low country and can be travelled over as late as December 15. Hence I purpose to postpone this examination until I have completed the Blue Mountains Western Division which must be inspected soon before the snow becomes too deep.

Very respectfully,

(Signed) M.L. ERICKSON

Assistant Forest Insp.

## WALLOWA FOREST RESERVE Erickson, October 3, 1906.

### TIMBER SALES.

#### GENERAL FOREST CONDITIONS

The topography of the Wallowa Forest Reserve is exceedingly peculiar in that toward the center of the reserve several streams head and flow in all directions and here the mountains rise up very high and with almost precipitous slopes. In general the reserve is cut up by deep canyons and high ridges which make a large part of the area barren. The main Wallowa Mountains traverse the reserve in a northeasterly and southwesterly direction dividing it into two nearly equal areas. This divide is very prominent and is often marked by sharp razor-like ridges, the slopes of which are bare and produce no timber whatever. Numerous landslides prevail. The loose granite formation disintegrating and sliding off the steep sides makes numerous small lakes.

The main bodies of timber stand in the lower portion of the reserve at the bottoms of the canyons and along the more gradual slopes. The soil is often shallow, loose and in many places stony, hence only the Alpine type of timber grows in the higher altitude. This zone extends much farther down than the altitude would warrant because of the rocky soil formation.

The forest on the south side of the divide is mainly lodgepole pine and tamarack. Yellow pine occurs scatteringly in the lower portions of the reserve, notably, along the boundary, but forms a very small part of the forest of the south slopes. The characteristic type is lodgepole and tamarack mixture, lodgepole in pure stands on the south and east slopes, while tamarack in mixture with lodgepole in on the north slopes. The forest composition in the Wallowa Reserve differs materially from that of the Blue Mountains east. The areas which would ordinarily be occupied by red fir and yellow pine are covered almost exclusively with lodgepole pine either pure or in mixture with tamarack. When the merging of tamarack and yellow pine occurs, the base of slopes bear the yellow pine and red fir and the upper edge of the slope or mountain side is nearly a pure stand of lodgepole pine. The peculiar condition existing on this reserve showing how tamarack encroaches upon the meadows and along the bottoms of ravines and seems to form a transition type between the red fir and yellow pine type, and lodgepole higher up on the ridge. It seems to me that eventually tamarack will give way to any of these species, simply for the apparent reason that tamarack seeds germinate best in open moist situations where plenty of light can be secured. Red fir grows commonly on ridges and exposed situations but is not of sufficient abundance to form a considerable part of the commercial forest. The fact that extensive forest fires have denuded the slopes on the south side of the Wallowa Forest Reserve accounts largely for the large areas now covered with lodgepole pine timber. Some good stands of lodgepole pine exist in the reserve, principally on the watersheds of the Imnaha River. A species of *Dendroctonus* working underneath the inner bark is doing immense damage to lodgepole pine. This will be treated more fully under "Production".

## INDIVIDUAL TIMBER SALES

### **QUEEN OF THE WEST MINE COMPANY 5-5-06**

This is the first timber sale on the Willowa Forest Reserve. The mining company desired timber for the purpose of bridge construction and repairing road already constructed. They made application for 12,000 feet of white fir and 15,000 feet of red fir. The value placed on this timber was a flat rate of 50 cents per M for both species. Contract calls for cutting diameter limited to 10 inches and to 5 inches in the tops. The area comprised eighty acres and shows a total of 638,700 feet but the timber was desired of selected trees which were marked by Assistant Forest Ranger Black, who has handled the sale. The sale was consummated, the brush was piled satisfactorily and the sale was closed May 23, 1906. In every way the sale was handled very satisfactorily, particularly the effort to dispose of white fir for mining purposes and the ability to secure a stumpage of 50 cents per M for it. Since timber in the vicinity of the Cornucopia mines, where this sale was located, is mostly white fir and tamarack, and in fact the only available species which can be used by the miners, it will be an important species in the development of the mines in this vicinity in the future. The effort to create a market for white fir is one which should be commended. Mr. O'Brien is aware of the situation and hardly needs any prompting to dispose of white fir whenever he possibly can. The miners report that white fir can be used in their mines only when they have a "dry" mine for the reason that slight moisture causes this material to rot readily. The tamarack in this district is very small, the large material being cut out years ago. I have no definite recommendations in regard to this sale.

### **QUEEN OF THE WEST MINE COMPANY 6-4-06**

Perhaps prompted by the success of the first sale the company decided to secure more timber for their mines, yet the only available material in the vicinity was white fir. This timber was to be cut for stulls and mine props and a value of 25 cents per C lineal feet was placed upon it. The contract in this sale is the same as in the previous one. The application calls for 8,000 linear feet white fir which amounts to \$20.00. This sale was also handled by Assistant Forest Ranger Black and was entirely as satisfactory as the previous one. The mining company was somewhat reluctant at first to pile the brush but upon insistence by Black they succeeded finally in doing a very good job. On this area an old cutting had taken place and there was much dead and down material on the ground, hence the company believed it would be of no use as a protection against fire to pile the brush which they left from their cutting. This stumpage price as compared with 50 cents per M feet is somewhat higher but I believe it is establishing a precedent in the right direction and no more white fir should be sold for less than 25 cents per hundred lineal feet when used for mining purposes unless the inaccessibility almost prohibits this stumpage price. In comparison with red fir it is about one-half the sale value. I have no recommendations for any changes in the policy pursued by Mr. O'Brien in conducting sales of this nature.

These two sales are the only ones which have occurred on the Wallowa Forest Reserve. A sale of 20 million feet to Frank Pierce of Homestead, Oregon, will no doubt be put through as Mr. Pierce in conversation with myself stated that he was very anxious to secure this timber to further the development of his mining properties in the Iron Dyke mining district. I have referred the matter to Forest Inspector C.S. Chapman, in charge of timber sales for this district. I examined a portion of the area and found that the timber where Mr. Pierce desires it is scattering and of poor quality. I doubt very much if 20 million feet can be cut in this locality. The inaccessibility of this timber at present does not warrant a high stumpage value, since a flume about 12 miles in length will necessarily have to be built to get the timber down the canyon to the Iron Dyke mining district.

In general, the timber sales in the Wallowa Forest Reserve will not be a big business for some years to come as large holdings outside the reserve will supply the demand of adjacent settlers for all necessary purposes until the further development of the country warrants the use of reserve timber. Perhaps the incentive toward making the most of the resources of this region will be increased by the fact that two railroads, one from the Grande Ronde River is being extended up the Wallowa River along the north edge of the reserve to eventually connect with Lewiston, Idaho, and one which will no doubt traverse down the Snake River from Huntington to Lewiston within a year or two and border immediately on the east boundary of the Wallowa Reserve.

### SAWMILL PRIVILEGES

There have been no applications for sawmill privileges within the Wallowa Forest Reserve.

### TIMBER TRESPASS

#### **W.D. PIERCE TIMBER TRESPASS. 5-4-06.**

Trespasser cut 264 lineal feet mining timbers and 1,036 feet white fir for developing mining claim. This timber was not cut on his own claim but on public reserve land and had been taken before the creation of the reserve. A proposition of settlement for \$9.32 was made and accepted. This trespass was considered innocent and the actual merchantable value placed on the timber was 33½ cents per hundred lineal feet for mining timbers and 50 cents per M for white fir. The brush has been piled satisfactorily and the trespass closed August 25. In this case there was some refuse in the way of large tops which was not fully utilized and could not be piled and burned but under the circumstances which it occurred I do not think trespass of this nature, entirely innocent, should be prosecuted so as to compel the purchaser to do the extra work of taking out and disposing of the small amount of waste material. Mr. O'Brien did not request it of him but Ranger Black thought it ought to have been done. I recommend only in case of wilful trespass where much waste is being done that damage values be assessed at the regular rates for the value of this timber where it can be used if taken out.

### **J.C. Bankhead Timber Trespass. 2-16-06**

This trespasser was found cutting timber on the forest reserve land adjacent to his own timber claim. The trespasser claimed innocence and believed he was upon his own land. This has been classed as an innocent trespass and the trespasser required to make proposition of settlement for \$1.00 per thousand feet. The amount cut was 19,094 feet. In all 13 trees were cut but the purchaser objected to piling all the brush on account of not cutting but 12 trees. Assistant Forest Ranger Giffin held that all timber paid for constituted the whole trespass and all brush resulting from such should be piled to the satisfaction of the forest officer. Mr. Bankhead flatly refused and began a denunciation of the forest reserve and forest officers in general. He has piled all the brush except that resulting from this one tree, which he refuses to do. I recommend that the case be not closed until all the brush is piled to the satisfaction of the forest officer in charge. There is a small technical question involved whether he would be required to pile the brush from this one tree. He stated that he did not cut this tree but the presumption of proof that it was cut by other parties begins with himself and he has not shown this clearly nor satisfactorily. Therefore he should accept the spirit manifested in settling an innocent trespass case by complying to the direction of the forest officer in piling this brush.

### **SUMMARY**

Timber trespasses have been very infrequent on the Wallowa Forest Reserve. The forest officers have been keen to watch for all trespasses and to explain the regulations and requirements necessary so that the people have not felt inclined to trespass. The miners in the mining districts, although opposed to the reserve at first, are taking particular pains now to request an examination of their previous timber cuttings to ascertain if any was trespass, and express willingness to settle for them if any such cuttings are found upon forest reserve land. In general the sentiment and conditions in relation to the Wallowa Forest Reserve timber interests are very encouraging.

Timber sales have been handled very satisfactorily. I have no recommendations to make for the improvement in the direction and handling of any of the sales thus far consummated. Mr. O'Brien's methods of conducting timber sales can be relied upon.

(Signed) M.L. ERICKSON  
Assistant Forest Inspector.

## CLAIMS AND PRIVILEGES.

### IMPORTANT CASES:

#### **Eagle River Electric Power Co.**

August 29, 1906

Canals

Wallowa Reserve.

Application for a canal about one-half mile in length to be used for mining purposes, and for furnishing water for Eagle Valley Power Plant, was made and approved by Mr. O'Brien. This privilege is partly commercial, and in a strict sense should have been approved by the Forester and a rental charged, but since it extends for only a distance of one-half mile through the reserve, and the water is to be used largely for irrigating Eagle Valley, I do not deem it advisable that the company be required to pay any rental charge, and so recommend.

#### **Mountain Sheep Ditch Co.**

June 29, 1906.

Irrigation Ditch

Wallowa Reserve.

This is entirely a non-commercial enterprise. The organization consists entirely of farmers in Prairie Creek Flat, who agreed on an organization to develop a large tract of irrigable land on which there was at present no water. The application calls for the construction of a canal with a capacity of 5,000 cu.ft. per second — a total length of approximately seven miles through the reserve; to take water from both Big and Little Sheep creeks. Three miles of ditch has already been constructed, but very little work has been done within the reserve. The Company is very anxious to obtain a permit early so as to begin construction work this fall. The proposition had not been reported upon by Ranger Stewart when I examined the proposed ditch. The canal is on an average of 10 ft. wide and 2 ft. deep. It will tap Little Sheep Creek about one mile within the reserve boundary, and will take the water out of several small tributary streams of Big Sheep Creek. That portion of the ditch already constructed within the reserve is built through a dense stand of lodgepole pine reproduction. The poles had been cut and thrown to one side of the ditch. The material has laid there for several years, and is now very dry and partly rotted; however, I think that a clean burning of it can be secured as it lies. The ditch will pass through a horse and cattle range, and necessarily, unless fences are constructed around it, will be tramped very much by the cattle, and much damage done to it.

I recommend that small bridges be constructed across this ditch at intervals at about one-half mile in places where stock are most apt to drift, so that they may cross the ditch without doing any damage. It may also be necessary to fence portions of the ditch, to keep the stock from damaging it.

I recommend that the privilege be approved without charge and rental, and that the company be required to construct across the ditch small bridges at intervals, designated by the forest officers; that the brush already cut be burned, and that such material which

is cut in clearing the right of way for further construction be burned clean; that logs or large poles, which are undesirable to burn, be floated down the ditch as far as the wagon road where it will be accessible, and either be sold or given away under the free use.

I was unable to examine the canal privilege on Mill Creek, applied for by the Grande Ronde Electric Company, June 12, 1906, for my time was cut short by being called to Portland to attend the Supervisors meeting. This, however, is entirely a commercial proposition, and a rental charge should be made for the privilege. Several small privilege cases, such as short roads, trails, drift fences and canals have been handled satisfactorily. Claims on the Wallowa are few and unimportant. I have not thought it necessary to report on any of them, since I could find no recommendations to make upon them.

### SUMMARY: CLAIMS & PRIVILEGES.

1. No rental recommended for the Eagle River Electric Power Company.
2. Mountain Sheep Ditch Co.:
  - a. Recommend small bridges be built at frequent intervals to permit cattle to cross the ditch without damaging it.
  - b. Since the proposition is non-commercial, I recommend the privilege be granted without rental.
  - c. Recommend that the brush cut several years ago along the right of way be burned.
  - d. Recommend large material which can not be burned clean be sawed up and floated down the ditch to the road just outside the reserve, where it can be given away under the free use or sold.

(Signed) M.L. ERICKSON  
Assistant Forest Inspector.

### DENDROLOGY.

Nothing to report.

### PRODUCTS.

Nothing to report.

### PLANTING.

Nothing to report.

### PROTECTION.

**Forest Fires:** The region comprised within the present boundary of the Wallowa Forest Reserve has been in previous years badly burned in parts. Such areas are coming up rapidly with lodgepole pine. At the heads of Little and Big Sheep creeks, and on other water sheds of the Imnaha River lodgepole pine covers extensive areas, due to the vast forest fires, which extended over the greater part of this watershed. In general, the north side of the Wallowa Divide is composed of a forest of lodgepole pine timber to the exclusion, very largely, of other species. Other areas which have been burnt over are in the canyons of the Minam river, Bear creek, and several other canyons in the northwestern portion of the reserve. In such places much dead and down timber exists, which is scarcely accessible, and would be unprofitable to exploit for commercial purposes.

No forest fires of consequence occurred this year, due to the greater care of persons using the reserve, and to the vigilance of the forest officers.

**Insect Enemies:** Fully 35% of all the lodgepole pine timber on the north side of the Wallowa Mountains is infested or killed by the lodgepole *Dendroctonus*. The damage is immense, and the beetles this year are doing more injury than in any previous years. The destruction is going on rapidly, and will result, in all probability, in a complete annihilation of lodgepole pine. The beetle is of a bark-boring type. It works directly underneath the inner bark in the sap wood, completely girdling the tree. This is evidenced in a tree which is not completely killed, as is plain by the numerous pitch tubes on the sides of the trunk. Like the pine bark beetle of the Black Hills, the adult emerges through small holes in the bark, which it bores about October 1st to 15th. The eggs are deposited at the ends of burrows in the bark or sap wood, and the larvae hatch in the spring.

I recommend, since the damage is so extensive in this reserve, that the U.S. Bureau of Entomology make a detailed study of the life history of this insect, and advise methods of lessening the damage or complete extermination of the beetle.

I believe the only feasible remedy practicable is to attempt to market the timber at any cost, and if possible to find a purchaser for it. All the timber infested should be cut and removed from the forest and converted into lumber; or the bark should be peeled from the felled trees, so as to expose the eggs and check hatching. If this is not practicable, and if the Forester does not approve of taking advantage of Regulation 29 to dispose of it on his own responsibility, I believe the most permanent result and the most complete extermination of the insect, without sacrificing reproduction of the species, is to completely burn the area. Burning, if the fire can be controlled, will entirely exterminate the beetle, and lodgepole pine reproduction from the burn will be secured. Only the importance of ridding the reserve of this insect would warrant such a huge undertaking as burning a large area of the Forest reserve.

**Roads:** A few short roads exist in the mining region of Cornucopia. Another road, not much traveled at present, extends from Joseph to the Tenderfoot Mine near the top of the divide, a distance of about eighteen miles. It will serve as a good pack and patrol

trail. As the Tenderfoot Mine is a good trail leading to Cornucopia, so that the use of this road, although it is not the most direct route, is a very good one to use for crossing the reserve. A county road extends up the Snake River, and a portion of its length is within the reserve.

There will probably be no great amount of road building within the reserve, except perhaps, a few short roads in the mining district of Cornucopia.

**Trails:** The reserve is so extremely rough that no defined trails exist in an easterly or westerly direction on the north side of the divide across the deep canyons. Most of the trails are merely sheep trails, which are barely possible to go over. They extend along the ridges for the main part, and do not always lead to the desired portion of the reserve. Some old trails, which are hardly passable now, due to fallen timber and obliteration of sheep grazing, can be repaired and be made of great service in patrol work. An old trail in very poor condition extends up the Minam River to its very head. This would make a very good trail if it were relocated and cleaned out, since a water grade can be secured for the total distance. Several other trails, most of which are in better condition than this one, traverse the reserve in a general north and south direction. The trail up Bear Creek, crossing over on the North Fork of the Minam, is an important one, and should be worked on this fall; however, a recent application has been made by miners to build an entirely new trail up Bear creek to the Wilson group of mines at the head of the creek. This will be a much needed trail for the use of forest officers. A good trail exists from Sheep Creek east to the Coverdale headquarters cabin on the Imnaha River, and continuing from there east over the divide to Ballard's Landing on Snake river.

Several trails radiate from what is known as Lake Basin, which is the head of Imnaha, Minam, Wallowa, Lostine, and several other streams, in various directions, paralleling or following these streams. A trail known as "Sullivan Trail" on the south side of Wallowa Divide, was built by miners several years ago. It is a very good trail. It crosses from Cornucopia, main Eagle Creek to East Eagle, and from there up Eagle Creek to Lake Basin. This is a very important trail for the use of forest officers, and needs but light repairing.

I recommend that trail repairing be an important part of the rangers' work this fall and next spring. That work be begun immediately upon the Minam River trail; that since the trails are so dim and ill-defined, a system of labeling be inaugurated. I suggest that cloth posters be used, and the forest officers be furnished with a set of rubber stencils, so that the name, direction, distance and terminal of the trail may be indicated on these posters. These posters should be tacked on nearby trees at frequent intervals.

I also recommend that Regulation 57 be observed strictly. Stockmen who use the reserve should be required to repair old trails within their allotments. This seems to me to work no hardship upon them, and it will relieve the forest officers of a vast amount of work.

**Cabins:** Two cabins on ranger headquarter sites have been secured. The Coverdale cabin is very nicely situated, but needs a little repairing. It is large and comfortable and is already provided with a bedstead and cooking range. Is located in a fairly low country on the Imnaha River on a site which is good agricultural land. It should be a main ranger headquarter camp. The other cabin is located in Ranger Giffin's district, which I did not see.

Perhaps one new cabin will be all that is necessary to be built this season.

I recommend that Mr. O'Brien's suggestions in cabin constructions be approved.

**Ranger Headquarter Sites:** The same difficulty exists on this reserve as on the Blue Mountains, in that not enough ranger pastures have been secured, so as to insure feed for their horses. The headquarter sites already established are good ones, and many of them are suitable for growing hay, and a few contain agricultural land. I recommend that a great many more sites be established for pasture purposes; also that rangers be furnished grass seed by the Department of Agriculture, to re-seed these areas. The best kind of seed would be timothy and white clover.

**Telephones:** On the border of the reserve telephone lines are sufficient, and connection can be secured, but the cost of using these telephones is exorbitant. There should be a good system of telephone lines through the reserve, and connection made with private lines, with the understanding that cooperation will be secured, and no toll charge made to forest officers for the use of private lines.

I recommend that a line be built next spring from Joseph across the divide to Cornucopia. This line will be very useful and is quite necessary, since telephone from Cornucopia to Wallowa connections must be made at Baker City and La Grande. This line will pass over high altitudes, which in winter is subject to heavy snow fall. It would be almost impossible to elevate the line on tall poles to keep from being covered with snow, since 20 feet of snow is no uncommon occurrence on the Wallowa Divide.

I recommend that insulated wires be used for that portion of the line crossing the highest part of the Divide, so that the wires need not be raised a great height from the ground. This line should connect with Tenderfoot Mine, and this mining company be requested to aid in its constructions, and be given the privilege of using the line at all times.

Other telephone lines should be erected from time to time, when more money for this purpose can be expended. Mr. O'Brien's recommendations in this respect should be approved.

## **EQUIPMENT.**

This subject will be reported upon in detail when an examination of the Chesnimnus Reserve is made. The equipment is used more or less in common with the administration of the reserve.

**Maps:** The existing maps of the Wallowa Reserve are extremely poor. It was impossible to define clearly on the map the boundaries of allotments. The region is very largely unknown, but is an interesting one. A large number of small lakes formed by snow- and land-slides exist at the headwaters of most streams. None of these have been mapped.

I recommend that as soon as possible the United States Geological Survey take up the work of making a complete topographical map of this section. A small amount of primary control work by the U.S.G.S. has already been done, but no geological maps of this region exist.

The office records were found to be in excellent shape. The only comment to make is the manner of filing carbon copies of replies. These are filed chronologically in a separate drawer not attached to letters to which each reply refers. This error was pointed out and the filing system rearranged properly.

The Supervisor's office is located in a back room on the second floor over a general merchandise store; to a stranger it would be impossible to locate without inquiry. A painted signboard should be prepared and tacked on the outside of the building at the entrance to the stairway.

#### SUMMARY OF RECOMMENDATIONS ON PROTECTION AND EQUIPMENTS.

1. The lodgepole pine bark-boring beetle is doing immense damage to the lodgepole pine forests on the reserve. Recommend that in cooperation with the Bureau of Entomology a detailed study of the habits and life history of this beetle be made to determine the best means of exterminating it. Probably the timber can not be marketed profitably, and it may be best to burn the area, which will not sacrifice renewed reproduction to keep the insect from spreading over larger areas.
2. That trail repairing be an important part of the Rangers' work this fall and spring.
3. That work be begun immediately upon the Minam River trail.
4. That the Rangers be furnished with a set of rubber stencils for marking cloth posters to be used in labeling trails.
5. That Regulation 57 be observed strictly.
6. That Mr. O'Brien's recommendation relative to cabin construction be approved.
7. That many more ranger sites for pastures be located.
8. That Rangers be furnished free timothy and white clover seed for re-seeding such pastures.
9. That a telephone line be built from Joseph to Cornucopia.
10. Since the existing maps of the Wallowa Reserve are very poor and the region largely unsurveyed land, which makes it difficult for forest officers to map, I

recommend that the U.S.G.S. be asked to take up the work of making a complete topographic map of the region.

11. That a suitable sign be prepared to designate the location of the forest reserve office.

## **PERSONNEL.**

**Ranger in charge, Howard K. O'Brien.** Is a product of the civil-service examination. He is on the list of eligibles for the position of Forest Supervisor. His first experience in reserve work was obtained last fall, when he took charge of the Wallowa and Chesnimnus reserves. He is entirely a new man. His only guide in the methods of conducting reserve business was the Use Book, and he succeeded remarkably well in interpreting correctly, and putting into practice the rules and regulations of forest reserve, as given in it. O'Brien is apt, clear-headed and quick of conception. He possesses a keen analytical mind, capable of sound reasoning and good judgment. He is direct, frank and business like in his dealings with people. The success achieved by him in the administration of these two reserves, in view of the difficulties he had to meet in grazing matters, deserves commendation. He has handled the grazing business most excellently, and the fact that he put into effect the allotment system the first year without serious difficulties resulting, show that he is fully competent to administer to the Wallowa and Chesnimnus reserves, in which grazing is a very important business. O'Brien has made no appalling mistakes, and the few minor ones he is responsible for are of but slight significance. He has exercised good judgment in all matters thus far brought to his attention. Mr. O'Brien is a hard worker and a hustler, and has accomplished much thorough work. He is a perfect gentleman, and is well liked by every one, especially his rangers, who have done, for the most part, very good work under his direction.

Due to the immense amount of clerical work in handling the grazing last spring, Mr. O'Brien found that it was impossible for him to get in the field to learn conditions on the reserves; accordingly he asked for and secured the services of a clerk. The clerk resigned August 1st, last.

Since the same amount of office work will accrue next spring, I recommend he be allotted a clerical assistant next season from April 1st to Sept. 30th.

I strongly recommend that Mr. O'Brien be promoted to Forest Supervisor at a salary of \$1500 per annum on January 1st, 1907.

**Assistant Forest Ranger, Chas. Black:** Comes from Sumpter, where he has been engaged previously in mining work. Mr. O'Brien very wisely gave him a district in which the principal mining business exists. Mr. Black is an intelligent, honest, hardworking pleasant fellow. He probably did more work, and had more difficulties to contend with in his district than any other ranger on the reserve. He handled the grazing situation where conflicts and overlapping allotments caused trouble between the stockmen, in a highly satisfactory way. Black is a hustler, and has succeeded very well in getting about

and learning of everything in his district. I consider Black a very efficient forest officer, who is gaining much from his experience in the work, and is showing faster improvement than most men. He writes a well-worded clear report. His handwriting, however, can be improved upon.

I recommend he be retained this winter, and be promoted to Deputy Forest Ranger at \$1,000 per annum on January 1st, 1907.

**Assistant Forest Ranger William A. Stewart:** Is inclined to be lazy. He has accomplished probably not more than one-half the work the other boys on the Wallowa reserve have done. He is always late in getting started to work in the morning, and equally late in getting through in the evening. He does not seem to care whether a certain work, no matter how urgent, is accomplished within a reasonable time or not. Nothing can spur him on to hustle, but he will continue to move along at the same aggravatingly slow pace in spite of all attempts to show him the necessity for hurry. He was instructed by Mr. O'Brien to report immediately on the Mountain Sheep Ditch application for an irrigation ditch within his district. The Company was in a hurry to secure a permit so as to begin construction work this fall. Stewart had examined the proposed ditch, but neglected making any report, and hung up the matter for nearly a month. I suggested to him to send in his report immediately. There was nothing difficult to report on in the proposition. I went over the ground with him and showed him how to make out his report. When I returned to Wallowa, after completing my inspection, I learned he had not yet made any report, giving the reason that he was not feeling well, and asked that Forest Guard Keeler be sent up to his district to examine the proposed ditch, and aid him in making the report. That an Assistant Forest Ranger should need the services of a Forest Guard to assist him in making a report upon a special privilege, does not speak well for his own ability. Stewart had the misfortune to fall off his horse, resulting in breaking a rib, which was due, I believe, entirely to his own neglect and carelessness. This happened about a week before I met him, but did not interfere with his accompanying me over a portion of his district with apparent comfort. The accident happened while Stewart, in company with two sheepmen who were ahead of him were traveling up a trail where the grade was steep. The cinch of his saddle was loose, and the saddle slid back over the rump of his horse. Stewart stayed in his saddle instead of getting off to adjust it. The saddle finally slid off the back of the horse, and Stewart fell with it. The cinch tripped the horse and it fell, rolling down the hill over Stewart, and ending up in some brush a considerable distance below the trail. The horse received slight bruises, but Stewart discovered he had a broken rib. Stewart told me this incident himself, from which I drew my own conclusion, that he was too lazy to get off the horse to cinch up the saddle.

Stewart is a plausible, jolly fellow, always good natured. He received a good rating in the Civil-Service examination, and makes a good first impression. He is intelligent enough, and gets along with people whom he meets very satisfactorily, but his usefulness in the Forest Service is questionable.

I recommend Stewart be furloughed Nov. 1st, for an indefinite period, and his name be held on a probation list. He should not be again appointed if a suitable Assistant Forest Ranger can be secured to fill the vacancy next spring.

**Assistant Forest Ranger Marshall F. Giffin:** I was unable to see Mr. Giffin, since he could not be located when I attempted to make my arrangement to meet him. Will report on him later when I go into the Wallowa country to examine the Chesnimnus Reserve in November.

**Forest Guard Alva L. Keeler:** Is a promising young man who took the civil-service examinations last spring. He has done good work this year in handling the grazing business in his district. He shows an aptitude for learning and improving and will undoubtedly make a good Ranger in course of a year or two, should his ratings put him on the list of eligibles. I recommend he be appointed Assistant Forest Ranger and go on duty next spring.

A force of but four men are employed on the Wallowa Reserve this season. The amount of work connected with this reserve is too great to handle properly in the summer season with but four men. Patrol was neglected, grazing occupying practically all of the time of the forest officers, and even then many allotments could not be visited by the forest officers.

I recommend that two Deputy Forest Rangers, two Assistant Forest Rangers and four Forest Guards be employed next summer. There will be but two rangers on the reserve this winter, according to the present allotment.

I recommend that one additional year-long Assistant Forest Ranger be employed on January 1st, 1907, and another Assistant Forest Ranger serve from May 1st to November 30th, and that two Guards be on duty from May 15th to October 15th, and the two other Guards serve from June 1st to Sept. 30th.

The present allotment for the personnel on the Wallowa Reserve is as follows:

1 Supervisor, six months .....	\$500.00
1 Clerk.....	300.00
2 Assistants For. Ranger.....	1,800.00
1 Assistant For. Ranger.....	600.00
1 Forest Guard .....	<u>240.00</u>
	\$3,440.00

I recommend the distribution of funds remain as approved until Jan. 1, 1907, and recommend for the year Jan. 1, 1907 to Dec. 31, 1907, the following instead:

1 Supervisor, one-half to Chesnimnus .....	\$750.00
1 Clerk, six months, one-half to Chesnimnus .....	225.00
2 Deputy Forest Rangers .....	2,000.00

1 Ass't Forest Ranger.....	900.00
2 Forest Guards, 5 months.....	600.00
2 Forest Guards, 4 months.....	<u>480.00</u>
	\$5,470.00

This does not include any provision for a Forest Assistant; because I deem it much more desirable to secure a necessary force of rangers instead of sacrificing the practical assistance for a technical man, when the funds will not warrant the employment of both. Ordinary timber sale and other work, which a technical assistant could be engaged in will hardly be sufficient to demand his permanent services. In the event the Pierce sale for twenty million feet of timber is consummated this year, I recommend a Forest Management Assistant be detailed to the Wallowa to handle it.

**Ranger Meetings:** The greatest benefit from these meetings will be secured by combining with Supervisors and adjacent reserves. The situation for such a general meeting in eastern Oregon is very favorable.

I recommend that the Supervisors of the Blue Mountains, both divisions, of the Wenaha, Chesnimnus and Wallowa be instructed to prepare for, and advise their ranger force of a general Rangers meeting which I advise to be held at La Grande, Oregon, Dec. 15th, 1906, under the direction of a Forest Inspector.

#### SUMMARY OF RECOMMENDATIONS ON PERSONNEL.

1. That Ranger in charge, Howard K. O'Brien be promoted on January 1, 1907 to Forest Supervisor at a salary of \$1500.00 per annum.
2. That Assistant Forest Ranger, Chas. Black, be retained on duty the year long, and on January 1, 1907, be promoted to Deputy Forest Ranger at \$1000.00 per annum.
3. That Assistant Forest Ranger, William A. Stewart, be furloughed on November 1, 1906.
4. That Forest Guard Alva Keeler be appointed Forest Ranger and go on duty January 1, 1907.
5. That the present allotment be changed January 1st, 1907, to stand as follows:

1 Supervisor, charge one-half to Chesnimnus.....	\$720.00
1 Clerk 6 mo., charge one-half to Chesnimnus.....	225.00
1 Deputy Forest Ranger .....	2,000.00
1 Assistant Forest Ranger .....	900.00
1 Assistant Forest Ranger for 7 months .....	525.00
2 Forest Guards for 5 months.....	600.00
2 Forest Guards for 4 months.....	<u>480.00</u>
	Total \$5,470.00

6. That no technical assistant be assigned to the Wallowa Reserve next year.
7. That a general meeting of forest Rangers of all the reserves in eastern Oregon be held at La Grande Dec. 15, 1906.

(Signed) M.L. ERICKSON  
Assistant Forest Inspector.

## **GRAZING.**

Grazing applications were received as early as November on the Wallowa Reserve. A stock meeting was held at Wallowa at which Superintendent Sheller assisted Mr. O'Brien in receiving applications and making allotments. Of course, the allotments made here were only provisional and were adjusted afterwards by Mr. O'Brien when the stock were ready to enter the reserve. At this meeting the provisional boundaries of the horse and cattle ranges were established and since both interests (cattle and sheep) were well represented by committees, this division of the horse and cattle range was quite satisfactory from the start. While the forest guards were on duty during the winter and mostly engaged in running reserve boundaries, Mr. O'Brien had an opportunity of receiving grazing applications and in that way was given ample time in making the proper allotments. Although he was more fortunately situated in this respect than most Supervisors put in charge of new reserves he has done remarkably well in allotting the range. The only part of the reserve where there were conflicts in allotments and differences to adjust was mostly in Ranger Black's district on the south side. This difficulty resulted mostly from the inadequate description furnished by the stockmen themselves in defining the allotments. It was proven later that the country was none too well known by them, consequently many allotments overlapped. The trouble was apparent when the stock entered the reserve. Both Mr. O'Brien and Mr. Black did very good work in adjusting these allotments so as to give every one a satisfactory range as far as the conditions of the range warranted. The total number of sheep on the reserve amounted this year, counting one-half the increase, to approximately 260,000 head. The area of the Wallowa Reserve is 7??,000 acres of which about one-? is set aside for horse and cattle range. It is safe to say that an additional one-? of this area is too rough for sheep grazing, consequently not much more than ???,000 acres were available for sheep grazing this season. This, as is evident, gave but very little range per acre when reckoned by the head but it was so allotted as to furnish good feed and consequently the best available use was made of the reserve. This acreage is computed on the horizontal scale but since the country is so fearfully cut up by steep ridges and high mountains, the slopes of which furnish excellent feed, the land surface is fully twenty-five per cent greater. The feed on the Wallowa Reserve is excellent, otherwise it would not support the number of sheep allowed this year. With the division of the cattle ranges, and other areas which are not available for grazing, a very particular consideration must be given to the allotment of the range, since the area is not great.

### Grazing Conditions and Allotments.

The difficulty in making allotments and defining them clearly in a new reserve is very great unless one takes the time to go over the country and learn it carefully. Mr. O'Brien from his previous knowledge of the Wallowa Mountains knew a great deal of the country

and in that way was more able to make proper allotment than an entirely new man who knew nothing of the reserve could possibly do. A very essential thing in making and describing allotments is a good map of the reserve. The present map is entirely inadequate and could not be relied upon this year. The next best thing to a good map is thorough familiarity with the reserve. Ranger Black had the greatest difficulty in the overlapping of allotments. He says he can now define and describe the areas so as to result in no conflicts in the range whatever.

The Pine cattle and horse range is sufficient in area but improperly laid out. It is defined on the north by an arbitrary line crossing ridges and creeks at right angles. The division should be made so as to follow up the slopes of the creeks and have the boundaries defined by ridges, as such a one is a natural range for cattle to range in. A great deal of trouble has resulted in this cattle district from the cattle wandering above the limits of their range and into the sheep country and eating out the herders' camps. This could be alleviated to a great extent by properly salting the stock within their districts. If the salt is brought in early and placed within the cattle district, the cattle will find it and not wander out so much as when no salt is there to hold them. The custom in previous years has been to turn the cattle loose and let them run at large throughout the mountains, not giving them any attention until the fall when a general round-up is had and the cattle gathered at the home range. In fact the stockmen never knew where their cattle were during the summer time. Eagle Valley, Catherine, Cove and other cattle districts are quite well laid out. I was not able to examine these sufficiently to determine whether or not changes would be made but the recommendations of Mr. O'Brien have been good in matters of this kind and any that he may make in the future for a change of the cattle and horse districts should be approved. The total number of cattle and horses in the Wallowa Reserve for this season is 18,436, but from the information of the forest officers, no more than seventy-five per cent of this number have been actually using the reserve. The stockmen believing it was necessary to show a large number of cattle in order to secure sufficient range made application in most instances for the whole number they owned, whether it was desired to graze them on the reserve or not.

In general the stockmen of all classes are well pleased with the allotment system and the working out of it. They have done all possible to assist the rangers in making the reserve a success and it is difficult to find a single stockman opposing the policy of the Forest Reserve.

Many sheepmen are talking strongly of re-seeding their allotments and caring for them in the best way possible should they be assured that they will be given the same allotment in the future. This attitude of the stockmen should be encouraged in every way possible and I think on the Wallowa Reserve definite allotments and assurances of continued use can be made next year, for the working out of the plan this year has proved the entire possibility of it. I recommend that Mr. O'Brien be instructed to carry this policy out as far as possible so that it will start sheepmen to reseed and protect their allotments for their own interests.

The condition of the range is much better than could be expected with the number of sheep on it, if allowed to run at large. This is probably due to the excellent arrangement of the allotments. In general, the range on the south side of the reserve is more overstocked than on the north side, also the feed in previous years has been cropped closer. Umatilla sheep which are classed as transient and not allowed on the reserve this year would formerly come on the south side of the Wallowa range, would reach this territory about two weeks earlier than sheep from the vicinity could get there because the lambing in the lower Snake River country is approximately this much earlier than the country surrounding the Wallowa Reserve. It is very gratifying that all these transient sheep were cut out without any difficulty which gave the rightful users of the reserve first privilege.

Certain portions of the sheep range in Ranger Black's district are much overstocked. Most of the allotments are eaten closely. There are exceptions to this rule, even here. Love, Bennett, Sturges, and Colton have excellent range, although it is no larger in proportion to the number of sheep run on it than other allotments, yet they have handled their areas most advantageously. They did not come on the reserve until after fifteen or twenty-five days from the date of entering, hence permitted the grass to be in excellent condition. Now they find they can remain on their allotments until the end of the grazing season and still have good feed for their sheep. Many stockmen who entered the reserve as early as the season permitted are now trailing their sheep out of the reserve after grazing but two months. Some left the reserve earlier than was absolutely necessary because of the scare resulting from a snow storm on September 15.

The extent of the cut was determined at the Portland meeting and I think that with this uniform per cent cut the range can be properly handled next season. I noticed one area along the Minam River about four miles in length and one-half mile wide extending from Rock Creek to the mouth of the North Fork of the Minam River on which sheep have not been this season, and although this area was assigned and included in an allotment, apparently enough feed was found on the upper side of the canyon, thus saving the difficulty of bringing the sheep into the dense brush along the river. This area is not too densely covered with underbrush and fallen timber to prevent sheep grazing.

I recommend that Mr. O'Brien instruct his Rangers to see that this area is utilized in the allotment next season. It will support one or two bands comfortably and thus relieve to a large extent the congestion on the remaining range.

The size of the bands should be limited to 1200 breeding ewes which will make, with the increase reckoned at eighty-five per cent, a band of approximately 2200 sheep. I recommend that this be the maximum size of bands allowed in the reserve.

The percentage of increase is slightly low for the north side but exceedingly high for the south side of the reserve. Most of the sheep on the north have an increase of ninety per cent while on the south sixty-five per cent is an average but this percentage basis will not be considered next season, and even though the scrub sheep from the Snake

River country do not receive as good a proposition on the flat rate basis as others, it will stimulate the desirability of improving their herds.

The horse and cattle ranges, generally, are not overstocked. The cattle in the Pine Valley range have not sufficient grass although the area is large enough. The reason for the lack of feed here is that the range has been wrongly laid out and should extend along the creeks to the headwaters of them, as recommended above. The Bear Creek range is the only example of a completely overstocked range in the reserve which can not be improved by modifying the limits. A reduction will necessarily have to be made in the number of cattle allowed in this district and so I recommend.

### Grazing Trespass.

There has been very little tendency for stockmen to trespass on the reserve. They have observed the regulations remarkably well. The following four cases are minor trespasses:

**1. M.B. and E.C. Rees, May 5, 1906.**

Fifteen head of cattle were allowed to drift onto the reserve before the season opened. This trespass was reported by Ranger Giffin. The case was taken up and upon recommendation of the Forester their permit for 205 head horses and 15 head cattle was canceled for the cattle and a new permit was issued for 26 head horses. The trespasser was very pleasant to deal with and showed a disposition to settle the case in a manner entirely satisfactory to the forest officers. No prejudice was established against him in consideration of a new application for next season.

**2. S.V. Laam. August 29, 1906.**

Had two bands of sheep which were given an allotment on the reserve. He evidently did not desire to comply with the forest reserve regulations and willfully strayed from his allotment to the cattle range. When reported by Ranger Black he gave as his excuse that his allotment possessed no feed. This was investigated and it was found that considerable feed remained on the area. The camp tender was notified to move the sheep off the reserve and he loitered on the pretense that he was unable to do so since Mr. Laam had taken away the camp outfit and he was compelled to wait until his return. In the mean time his sheep mixed with those of W.G. Ayer, another trespasser. At this point the ranger secured the hire of Mr. Love, a camp tender, to move the Laam camp outfit from the reserve and to aid in separating the sheep and driving them off the reserve. He at this time also took Ayer's sheep off the reserve. This was a malicious trespass and I recommend that Laam be denied further grazing privileges on the reserve.

**3. W.G. Ayer. Aug. 29, 1906.**

This is a case similar to that of S.V. Laam, his sheep trespassing on horse and cattle range. He did not notify Ranger Black about the condition of his range but when found on the horse and cattle range stated he was compelled to move off his allotment for lack of feed. Mr. Black gave him additional range in the Wallace allotment until he investigated the conditions. When the sheep of S.V. Laam mixed with those of Ayer and refused to leave the reserve when ordered by Black, Black practiced the same method of removal as he did in the case of Laam. Ayer is really not entitled to range on the Wallowa Reserve. He has secured exclusive grazing in a district southeast of the reserve in Snake River where his numerous other sheep graze. He should be denied further grazing privileges and I recommend in his cast that a reasonable fine be incurred.

**4. A.M. Whittier. September 20, 1906.**

At the time he desired to trail his sheep out of the reserve he brought them on the Eagle Creek cattle range and attempted to get several days' feed before leaving the reserve. Ranger Black and myself passing through this region September 20 found his sheep off their allotment and on the edge of the cattle range. We counted the sheep in a nearby counting corral and started them on the main trail out of the reserve early the next morning. It is a case of carelessness rather than maliciousness on the part of the owner who had been very considerate to deal with. I recommend that these bands be excluded from the reserve next season. In fact A.M. Whittier is really a class "C" owner, his home being in Huntington, Oregon, and his sheep have been accustomed to range in the Seven Devils region of the Weiser Reserve more than in the Wallowa Reserve.

### SUMMARY OF RECOMMENDATIONS — GRAZING

1. That the Pine Horse and Cattle range be adjusted to conform more closely to topographic features. Mr. O'Brien and Ranger Black can outline the boundary of this district more satisfactorily than I can, and the Supervisor's recommendations should be approved.

2. Any additional changes in the boundaries of the Horse and Cattle ranges should be approved.
3. Instruct the Supervisor to attempt to make long time allotments as far as possible so as to encourage the stockmen to reseed and otherwise protect their individual allotments.
4. That the area in the canyon of Minam River from Rock Creek to North Fork of Minam River be reallocated so as to more fully utilize the range than last season.
5. Limit size of bands to 1200 breeding ewes.
6. Reduce the number of cattle in the Bear Creek Horse and Cattle district.
7. That S.V. Laam and W.C. Ayer, both malicious trespassers, be denied future grazing privileges.
8. That A.M. Whittier be reduced to two bands which trespassed on horse and cattle range.

(Signed) M.L. ERICKSON  
Assistant Forest Inspector.