

S D-6  
Timber surveys-Whitman  
Upper North Fork, 1918.

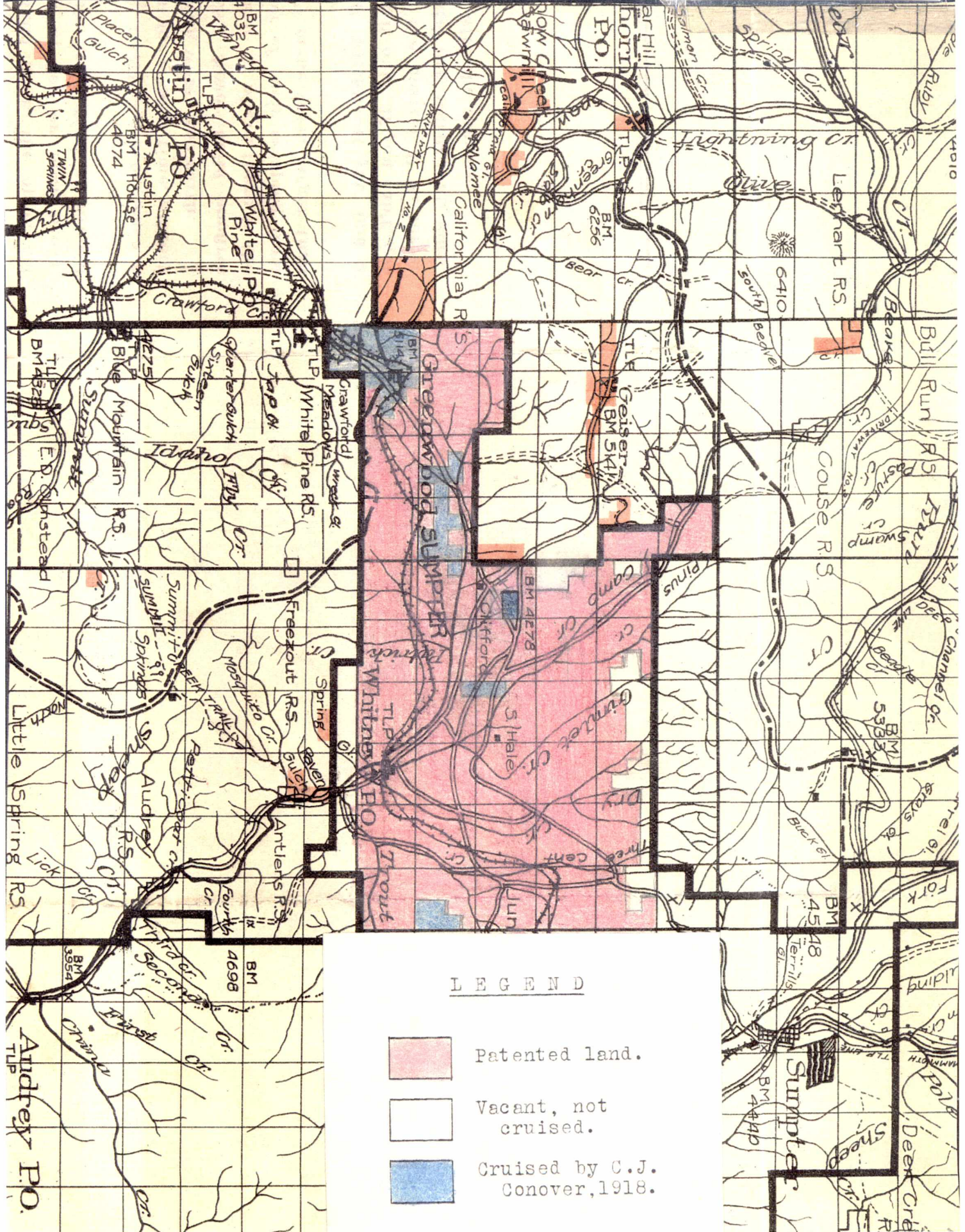
April 20, 1918

DESCRIPTIVE REPORT.<sup>1</sup>  
Upper North Fork Timber Survey Project  
Whitman National Forest




Cruised by  
O. F. Ericson  
C. J. Conover

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<sup>1</sup> This document was transcribed from a photocopy of the original, which is located in the Supervisor's Office Silviculture Library Archives. To the greatest extent possible, this version is an exact duplicate of the original text.



LEGEND

-  Patented land.
-  Vacant, not cruised.
-  Cruised by C.J. Conover, 1918.

### DESCRIPTIVE REPORT

Five small forest areas totaling 2,015.92 acres, in T. 10 S., R. 35 ½ and 36 E., and T. 11 S., R. 36 E., W.M. were cruised during March 1918 by O. F. Ericson and C. J. Conover. Valuable assistance was given by Ranger Fisk in the field and Ranger G. W. Hult and Miss Erma F. Ball in the office.

The tracts are scattered over the upper part of the North Fork Burnt River drainage, except for part of the Tipton chance, which laps over the ridge and drains to the west into John Day River. Being widely separated, and much of the surrounding country being cut over or in process of being logged, each area comprises a distinct logging chance. These chances vary in size from 80 to 1,050 acres and are very accessible. The timber is tributary, by siding or spur, directly to the Sumpter Valley Railroad (narrow gauge). Good summer roads and grades of old logging spurs cross or are adjacent to the areas. The enclosed map shows these conditions.

The Forest boundary was changed January 31, 1917, to include these three townships within the Whitman National Forest, but the description of Sec. 4, T. 11 S., R. 35 ½ E., was inadvertently omitted in the Congressional Act. An act is now pending to include this Section in the Forest.

The areas cruised consist largely of cancelled claims scattered among the patented tracts, now largely cut over. It is probable, however, that these changes may be better "blocked out" by land exchanges.

The yellow pine type covers 1,461 acres, is 97% mature, and contains practically all of the merchantable timber cruised. The total stand of yellow pine is 14, 877 M ft. b.m., or 10-1/3 M ft. b.m. per merchantable acre. Omitting Section 4, T. 11 S., R. 35 ½ E., the total is 12,004 M ft. b.m.

The following tables show the compositions of average acres as to species and size, upon the Tipton chance separately and the other areas combined.

Average Stand per Acre of Yellow Pine Type

(Taken from three four-acre tracts)

North Fork, Camp 3, and Whitney Chances

D.B.H. Inches	Y	D	W L	W F	L P	Total
4-7	3				10	13
8-11	6				8	14
12	2					2
14	3					3
16	5					5
18	3					3
20	2					2
22	2					2
24	1					1
26	1					1
28	2					2
30						
32	1					1
34						
36						
38						
40						
Total	31				18	49
Vol. B.M.	9,602				70	9,672

Average Stand per Acre of Yellow Pine Type

Tipton Chance

D.B.H. Inches	Y	D	W L	W F	L P	Total
4-7	4	3	1	4	10	22
8-11	5	3	1	5	8	22
12	1	2	1			4
14	1	1	1			3
16	2	2				4
18	2	1				3
20	3	1				4
22	2					2
24	2					2
26	1					1
28	1					1
30						
32						
34						
36	1					1
38						
40						
Total	26	13	4	9	18	69
Vol. B.M.	10757	1416	489	1175	105	13948

The quality of the timber grades from good to poor, the trees being rather limby as a rule. Seldom are there more than 4 or 5 clear logs per acre, these being nearly always butt logs. Around the dry juniper-covered ridges the yellow pine is of very poor quality, being limby and stunted.

Upon the Tipton chance only about 5% of the trees are fire scarred, but on the other areas about 20% are so affected, some scars being so deep that the trees are being broken off by the wind. Insects take their annual toll of the yellow pine trees, there being scattered individuals now dying from the late fall attack. Some of these trees are still merchantable. There are, also, a few fine trees on the moist site in Sec. 25, T. 10 S., R. 36 E., which have been windthrown but are still living.

Over much of the acreage there is a more or less open understory of lodgepole pine beneath the mature yellow pine stand. Upon the Tipton area especially, reproduction under the mature stand is principally lodgepole pine, white fir, and larch, only about 10% of the area restocking with yellow pine. The areas in T. 10 S., R. 36 E., are drier and reproducing satisfactorily to yellow pine.

It is not known whether over-grazing, fires, or natural causes are bringing the lodgepole pine in under the yellow pine. It is thought, however, that by protecting the area carefully after logging the

yellow pine will overcome the shorter-lived lodgepole. The behavior of the latter should be carefully noted, as this problem is important in many localities.

The rules for timber marking can be the standard used for the Whitman, with a lowering of percentage cut near the juniper ridges. Every effort possible should be made to retain the Tipton area chiefly as a yellow pine forest by discouraging the lodgepole advance growth.

Brush disposal should be by piling and burning on localities of high fire hazard and good reproduction. In the more open stands around the juniper barrens, however, the lopping and scattering method should be thoroughly tried out. This should conserve moisture for the seedlings without making a high fire hazard.

The larch-Douglas fir type is rather indefinite, as the Douglas fir grows more often with the yellow pine, and the larch always has its understory of lodgepole pine. There is little merchantable larch on the area, most of the stand consisting of poles and saplings. Only occasionally was a larch found over 24" D.B.H. The type covers 157 acres. Larch mistletoe seems to suppress and kill much of the western larch in this section. Only on the most favorable sites are the trees able to reach merchantable size.

A stand table follows:

Average Stand per Acre of Fir-Larch Type

Averaged from 3.6 acres of strip

D.B.H. Inches	D	W L	W F	L P	Total
4-7	9	2	9	10	30
8-11	6	5	9	6	26
12					
14		1			1
16		2			2
18	1				1
20		2			2
22					
24		1			1
26	1				1
28					
30					
Total	17	13	18	16	64
Vol. ft. B.M.	962	1363		110	

Pure lodgepole pine covers 129 acres and is nearly all immature, very few of the trees reaching a diameter of 12 or 14 inches. This type occurs only upon the moister sites of the Tipton area and

covers the old clearing for a townsite at Tipton. It is notable principally for the way in which it is extending itself.

Trees over 12 inches D.B.H. often contain one clear straight log which give a large percentage of clear lumber. These are, therefore, generally logged whenever encountered on the cutting areas.

Reproduction is excellent, the species gradually extending itself even among the yellow pine timber on the Tipton chance. All clearings on this area are quickly stocked with lodgepole seedlings.

Many small groups of lodgepole pine are dead as a result of insect damage (*Dendroctonus monticola*).

Juniper barrens occupy 89 acres scattered over the areas upon the dry, rocky ridges. A little poor grazing exists between the widely scattered trees. Other than this, the stand has value only as a protective covering. Grass and sagebrush take the place of juniper at lower elevations, covering about 92 ½ acres of the Clifford and Whitney chances. Here the grazing values are higher than in the juniper type, the range being good in spring and fall.

Three meadows, covering 37 acres, and the 54 acres of brushy river bottoms comprise the remainder of the tract. These bottoms and meadows, with some of the surrounding, gently rolling land, are the areas having agricultural possibilities. It is thought, however, that the elevation and consequent severe climate of the Tipton area places its agricultural development in the distant future. There remains then about 160 acres along the North Fork of Burnt River which might, by irrigation, be developed into a practical agricultural unit.

#### Snags by Sections

Sec.	No. of snags over 16' high			Total
	12-20"	21-30"	Over 30"	
T.10 S., R.35½ E.				
25	50	70	20	140
26	32	53	11	96
33	521	158	45	724
34	513	11	10	534
T.10 S., R.36 E.				
21	28	46	9	83
25	71	56		127
28		30		30
30		7		7
T.11 S., R.35½ E.				
4	410	165	37	612
Total	1625	596	132	2353

Areas and Volume by Sections.

Sec	Area - Acres			Vol. M. ft. B.M.						Per A Mer. Areas only
	Merch.	Non-Merch.	Total	Y	D	WL	LP	WF	Total	
<u>T.10 S., R.35 ½ E</u>										
25	264	56	320	2,307	107	10	4	2	2,430	9.2
26	136	64	200	1,143	101	37			1,281	9.4
33	404.92	106	510.92	4,218	1,405	649	122	354	6,748	14.1
34	252	28	280	2,137	495	230	17	608	3,487	13.8
<u>T.10 S., R.36E.</u>										
19	22.5	57.5	80	265					265	11.7
21	69.5	10.5	80	530					530	7.6
25	144.5	55.5	200	1,026		29			1,055	7.3
28	34	6	40	289					289	8.5
30	15	25	39.2	89		95			184	12.2
<u>T.11 S., r.35 ½ E. (Unsurveyed)</u>										
4	225.80	40	265.80	2,872	771	350	28	480	4,501	20
Total	1568.22		2015.92	14,876	2,879	1,400	171	1,444	20,770	13 M

77% of land has merchantable timber.

Volume by Logging Chances and Species

Chance		M. Ft. B.M.						Area Acres
No.	Name	Y	D	WL	WF	LP	Total	
1	Clifford	265					265	80.
2	North Fork	3,539	208	142	2	4	3,895	559.20
3	Whitney	1,025		29			1,054	203
4	Camp 3	819					819	120
5	Tipton	9,229	2,672	1,228	1,443	167	14,739	1053.72
Total		14,877	2,880	1,399	1,445	171	20,772	2015.92



Types of Logging Chances

Chance		Area of Types in Acres											
		Yellow Pine			Fir-Larch		Lodgepole		Juniper	Sage-brush and grass	Meadow	Bottom-land	Total
No.	Name	Mature	Poles	Saplings	Mature	Im-mature	Mature	Im-mature					
1	North Fork	402.20	3	11	5				78		11	49	559.20
2	Clifford	22.50								57.5			80.
3	Whitney	144.		26						33.			203.
4	Camp 3	104.		11								5	120.
5	Tipton	737.72			8	144		129	9		26		1053.72
	Totals	1410.42	3	48	13	144		129	87	90.5	37	54	2015.92