

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

WO

REPLY TO: 4060 Research Facilities

February 20, 1976

SUBJECT: Blacks Mountain Research Natural Area

TO: Regional Forester, R-5
Director, PSW



Enclosed is your copy of the approved Establishment Report and the signed Designation Order for the Blacks Mountain Research Natural Area located on the Lassen National Forest in California. A set of these documents has been retained in Timber Management Research, WO.

The Region should take action to protect the area from mineral entry through initiation of withdrawal procedures. The Research Natural Area should also be recorded in the Region's Land Status Record and noted in the plans and maps of the Ranger District.

A local press release should be prepared jointly by you. Please send information copies to this office. The WO will periodically issue a national press release to describe new RNA's and the entire RNA program, and will send copies to Regions and Stations.

A handwritten signature in cursive script, reading 'Carl M. Berntsen', is positioned above the typed name.

CARL M. BERNTSEN, Director
Timber Management Research

Enclosure

REPhares/pc

7/19/09

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

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REPLY TO: 4060 Research Facilities

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SUBJECT: Blacks Mountain Research Natural Area

TO: Director, PSW



It is with pleasure that we add the Blacks Mountain Research Natural Area to our growing system of Natural Areas.

We will make sure that this Area is included in the revised version of "Research Natural Areas 1968," the Directory of RNA's on Federal lands. We also want to provide a completed Check Sheet on this Area to the International Biological Programme, which is being done for all Forest Service RNA's.

Please have the enclosed filled out on the RNA, following IBP Handbook No. 4 and the instructions sent you March 19, 1969. Return the original to our office; we will forward it on to IBP.

Carl M. Berntsen
CARL M. BERNTSEN, Director
Timber Management Research

Enclosure

REPhaes/pc

USDA-FOREST SERVICE	ORIGINATING UNIT TMR	DATE 1/30/76
CORRESPONDENCE CLEARANCE SLIP	AUTHOR REPhares	FILE 4060

INSTRUCTIONS: Use this form to route correspondence for clearance and signature. Indicate by "X" the action to be taken by each staff officer listed. Show any special instructions, comments or explanations in the space provided. List attachments to accompany material so they will not be overlooked.

NAME	ROOM NO.	INITIAL	SIGN	RELEASE
1. Director, TMR	811 RP	x		
2. Director, Lands <i>No comment</i>	1011 RP	x		
3. Director, LC <i>No comment</i>	1004 RP	x		
4. Director, RN	4243 S		<i>see note 3</i>	
5. Deputy Chief, NFS <i>RM</i>	3016 S	x		
6. Deputy Chief, R	3007 S		x	
7. Chief	3008 S		x	
8.				
9. Please return to Rm. 811 RP-E. Thank you.				

The proposed Blacks Mountain Research Natural Area encompasses 5 separate tracts totaling 521 acres on the Blacks Mountain Experimental Forest, Lassen National Forest, Lassen County, California. The principal forest type represented is virgin interior ponderosa pine (SAF type 237). The area has high research potential because of the extreme scarcity of virgin eastside ponderosa pine in this area. The compartments proposed include a good range of representation of the type, from inclusion of grass and sagebrush to mixtures with white fir and incense cedar at the higher elevations. Individual ponderosa pine trees on the proposed RNA range up to 6 feet d. b. h.

The area is uniformly of volcanic origin; the lava is basaltic; much of it vesicular. The entire Experimental Forest has already been withdrawn from mineral entry. The impact of classifying this area as an RNA on timber harvest would be negligible because the entire Experimental Forest is in the Lassen's unallocated timber component. No other uses are expected on the proposed areas.

It is recommended that Blacks Mountain be added to the RNA system.

Bob - I agree w/ the proposal but don't really feel the report draws out why this particular area is essential to research

Robert E. Phares

uniques. Very little trade-off so no special problem here - could be in another area tho. Sam



III Views of Compartment A 21-10

7/19/04



IV Views of Compartment B 24- 4



V Views of Compartment C 4-21



VI Views of Compartment G 2-12



VII Views of Compartment P 21-28

DESIGNATION ORDER

BLACKS MOUNTAIN RESEARCH NATURAL AREA

By virtue of the authority vested in me by the Secretary of Agriculture under Title 36, Section 251.23, of the Code of Federal Regulations, I hereby designate as the Blacks Mountain Research Natural Area the lands described in the attached report by Douglass F. Roy dated November 15, 1975; said lands shall hereafter be administered as a research natural area subject to the said regulations and instructions thereunder.

2-12-76

(Date)

John. McGuire

Chief

ESTABLISHMENT REPORT

BLACKS MOUNTAIN RESEARCH NATURAL AREA

Within the Blacks Mountain Experimental Forest
Lassen National Forest, Lassen County, California

Introduction

The interior pine belt on the east slopes of the Sierra Nevada and Cascades is one of California's most important commercial forest regions. The largest part of this belt, commonly called the eastside pine type, lies on a high plateau extending from Lake Tahoe to the California--Oregon border. Timber stands cover wide level stretches of lava flows, border sagebrush flats, and clothe the slopes of irregularly distributed lava buttes.

The preponderance of pine which produced high quality lumber, easy logging conditions, and accessibility to railroads led to early and rapid exploitation of the eastside pine type. Some of the largest private timber operations, as well as some of the largest timber sales on National Forests, were located in this area.

Decadent timber stands in the eastside pine type began to suffer high losses to bark beetles in the late 1920's. Subsequently, high risk trees in this timber type could be identified and appropriate stands were logged as rapidly as possible to remove potential timber losses. Consequently, virgin eastside pine stands are extremely rare. Therefore, those remaining on the Blacks Mountain Experimental Forest are proposed as a research natural area.

Principal Distinguishing Features

The proposed research natural area consists of five compartments of virgin forest within the Blacks Mountain Experimental Forest, which was designated August 21, 1934, by F. A. Silcox, Forester. The Experimental Forest originally was selected as being typical of the "eastside ponderosa pine region," especially as constituted in northeastern California. The forest type is designated now as Society of American Foresters Type 237, Interior Ponderosa Pine. The compartments proposed include a good range of representation of the type, from inclusion of small areas of grass and sagebrush flats with adjacent pure pine, to higher elevations where white fir and incense-cedar are associated commonly with pine.

Location

The Blacks Mountain Experimental Forest lies in western Lassen County, about 45 miles by road northwest of Susanville, California (Appendix I). It is within parts of T. 33 N., R. 7 and 8 E., M.D.M. The five compartments are numbered A 21-10, B 24-4, C 4-21, G 2-12, and P 21-28, and are located as shown on the attached map (Appendix II).

Area by Cover Types

An original vegetation cover map of each compartment is attached (Appendixes IX-XIII). Compartment acreages are:

<u>Compartment</u>	<u>Non-timbered</u>	<u>Timbered</u>	<u>Total</u>
A 21-10	50.2	64.7	114.9
B 24- 4		91.2	91.2
C 4-21		72.0	72.0
G 2-12		143.1	143.1
P 21-28		99.9	99.9
All	50.2	470.9	521.1

Physical and Climatic Conditions

Elevations of compartments range from 5,600 feet to 6,400 feet. The surrounding area consists of a high plateau at 5,600 feet, with mountains emerging to about 7,000 feet. The whole area is the result of volcanism. Soils are derived from basaltic lava, are often shallow, and contain varying amounts of boulders. No live streams exist on the Experimental Forest.

Precipitation is principally snow. Snow packs are seldom more than three feet deep at the lowest elevations, but precipitation increases with elevation. Long-term records at the Blacks Mountain headquarters station, about four miles distant, at 5,600 feet, indicated an average annual precipitation of about 18 inches water equivalent. A storage precipitation gauge has been maintained on the top of Blacks Mountain at 7,200 feet for almost 30 years. This gauge indicates an annual precipitation of 22.55 inches.

Summers are dry, except for infrequent thunderstorms. Relative humidity generally is low, dropping to 10 percent many days during the summer. Temperatures range from about -15°F. to 85°F. Frost may occur in any month.

The combination of soils and weather creates medium (Site III-Site Index 125) ^{1/} to poor (Site V-Site Index 100) growing conditions. ³⁰⁰ Ponderosa pine growth begins close to ³⁰⁰ May 1 each year.

Blacks Mountain Experimental Forest is not accessible by normal wheeled vehicles during winter because of snow, nor in early spring because roads are soft. In most years, normal travel is possible from April 15 to November 30.

Values

Flora

Trees on the areas are ponderosa pine (Pinus ponderosa Laws.), Jeffrey pine (P. jeffreyi Grev. and Balf.), white fir (Abies concolor (Gord. and Glend.) Lindl.), incense-cedar (Libocedrus decurrens Torr.), and western juniper (Juniperus occidentalis Hook.).

The most prominent brush species are greenleaf manzanita (Arctostaphylos patula Greene), tobacco brush (Ceanothus velutinus Dougl. ex Hook.), squaw carpet (C. prostratus Benth.), basin sagebrush (Artemisia tridentata Nutt.), currants and gooseberries (Ribes L. spp.), snowberry (Symphoricarpos Duhamel sp.), stone-fruits (Prunus L. spp.), and antelope brush (Purshia tridentata (Pursh) DC.).

Sedges (Carex L. spp.) and bunch grasses, predominately represented by Idaho fescue (Festuca idahoensis Elmer), mountain brome (Bromus marginatus Nees) and squirreltail (Sitanion Raf. spp.), are important parts of the ground cover. The most characteristic forbs are mints (Monardella Benth. spp.), lupines (Lupinus L. spp.), and mules ears (Wyethia mollis Gray).

^{1/} Dunning, Duncan

1942. A site classification for the mixed-conifer selection forests of the Sierra Nevada. USDA For. Serv. Calif. For. and Range Exp. Stn. Res. Note 28, 21 p., illus.

Geology

The area is uniformly of volcanic origin, and consists of mountains rising from a gently undulating plateau. Topography is relatively gentle, slopes seldom exceeding 20-30 percent. Lava is basaltic, much of it vesicular.

Fauna

Domestic cattle graze the area about four months each year. Rocky Mountain mule deer (Odocoileus hemionus hemionus (Rafinesque)) and a few prong-horned antelope (Antilocapra americana) visit or live on the Experimental Forest during the snow-free seasons. Resident rodents include chipmunks (Eutamias spp.), the golden-mantled ground squirrel (Citellus lateralis), Belding ground squirrel (C. beldingi), deer mice (Peromyscus spp.), the Douglas squirrel (Tamiasciurus douglasi), porcupine (Erethizon dorsatum), the northern pocket gopher (Thomomys talpoides), the snowshoe hare (Lepus americanus), and wood rats (Neotoma spp.). The black bear (Ursus americanus) and mountain lion (Felis concolor californica) are rare visitors. The badger (Taxidea taxus) is seen occasionally, but his diggings are common. Coyotes (Canis latrans) also are common.

The Oregon junco (Junco oreganus), robin (Turdus migratorius), Steller's jay (Cyanocitta stelleri), and white-headed woodpecker (Dendrocopos albolarvatus) are the most common birds. The red-tailed hawk (Buteo jamaicensis), Swainson's hawk (B. swainsoni), and Cooper's hawk (Accipiter cooperii) are seen frequently. Turkey vultures (Cathartes aura) can be observed most days. Other birds seen often during summer are the mountain chickadee (Parus gambeli), white-breasted nuthatch (Sitta carolinensis), pygmy nuthatch (S. pygmaea), brown creeper (Certhia familiaris), and yellow-bellied sapsucker (Sphyrapicus varius).

Minerals

The entire Experimental Forest has been withdrawn from mineral entry.

Recreation

The proposed area lies within a large game refuge of long-standing, California Game Refuge 1-F. Deer hunting is the only recreation in the general area, and hunters tend to go around the refuge rather than pass through it. Rocky Mountain mule deer are not numerous in the immediate area.

Water Use

No live streams exist on the Blacks Mountain Experimental Forest. The only water use is at a constructed cattle water hole, and at a trough fed by a windmill. Neither place is closer than a half mile to any of the five research natural area compartments.

Timber

Timber volumes shown in the following tabulation were estimated from measurements obtained in 1934 when 100 percent of the Experimental Forest was cruised. Jeffrey pine volume probably is greatest on Compartment A 21-10, but even there is small. Therefore, Jeffrey pine volumes were combined with those of ponderosa pine.

Compartment	: Timber volume by tree species		
	:		
	: PP+JP	WF	IC
	: - - Board feet (Scribner) - -		
A 21-10	900,293	0	0
B 24- 4	1,464,649	44,527	72,917
C 4-21	1,251,552	217,324	68,204
G 2-12	2,399,996	48,403	16,486
P 21-28	<u>1,764,494</u>	<u>56,120</u>	<u>183,017</u>
Totals	7,780,984	366,374	340,624

Considerable timber volume has been lost, particularly from bark beetle attacks in overmature age classes. We have insufficient data to estimate these volumes.

Withdrawing the five compartments as natural areas would scarcely affect the Lassen National Forest timber harvest program. The entire Experimental Forest is in the Lassen's unallocated timber component, and the Experiment Station removes timber at its own discretion.

Other Uses

No other uses are expected on the proposed areas. Adjoining compartments and plots have been logged by a variety of methods-of-cutting. A similar variety of cuttings can be expected periodically in the future, on all adjacent compartments.

Entomologists working with the Experimental Forest have stated that bark beetle (chiefly Dendroctonus spp.) attack patterns may be heavy on isolated uncut "islands" surrounded by large areas cut by sanitation-salvage or heavier cutting systems. However, this risk seems acceptable because no other virgin areas of the interior ponderosa pine type suitable for Research Natural Areas within the National Forests in California are known.

Recommendation

We recommend that the Blacks Mountain Research Natural Area be established on the lands described in this report.

Submitted:

Douglas F. Ray
Project Leader, Pacific South-
west Forest and Range Exper-
iment Station

November 15, 1975
(Date)

Recommended:

Jim Berlin
Forest Supervisor, Lassen
National Forest

January 8, 1976
(Date)

Doug Lewis
Regional Forester, Region 5

Jan 15, 1976
(Date)

Robert W. Harris
Director, Pacific Southwest
Forest and Range Experiment
Station

Jan 19, 1976
(Date)

Approved:

W. T. Loolittle
Deputy Chief, Research

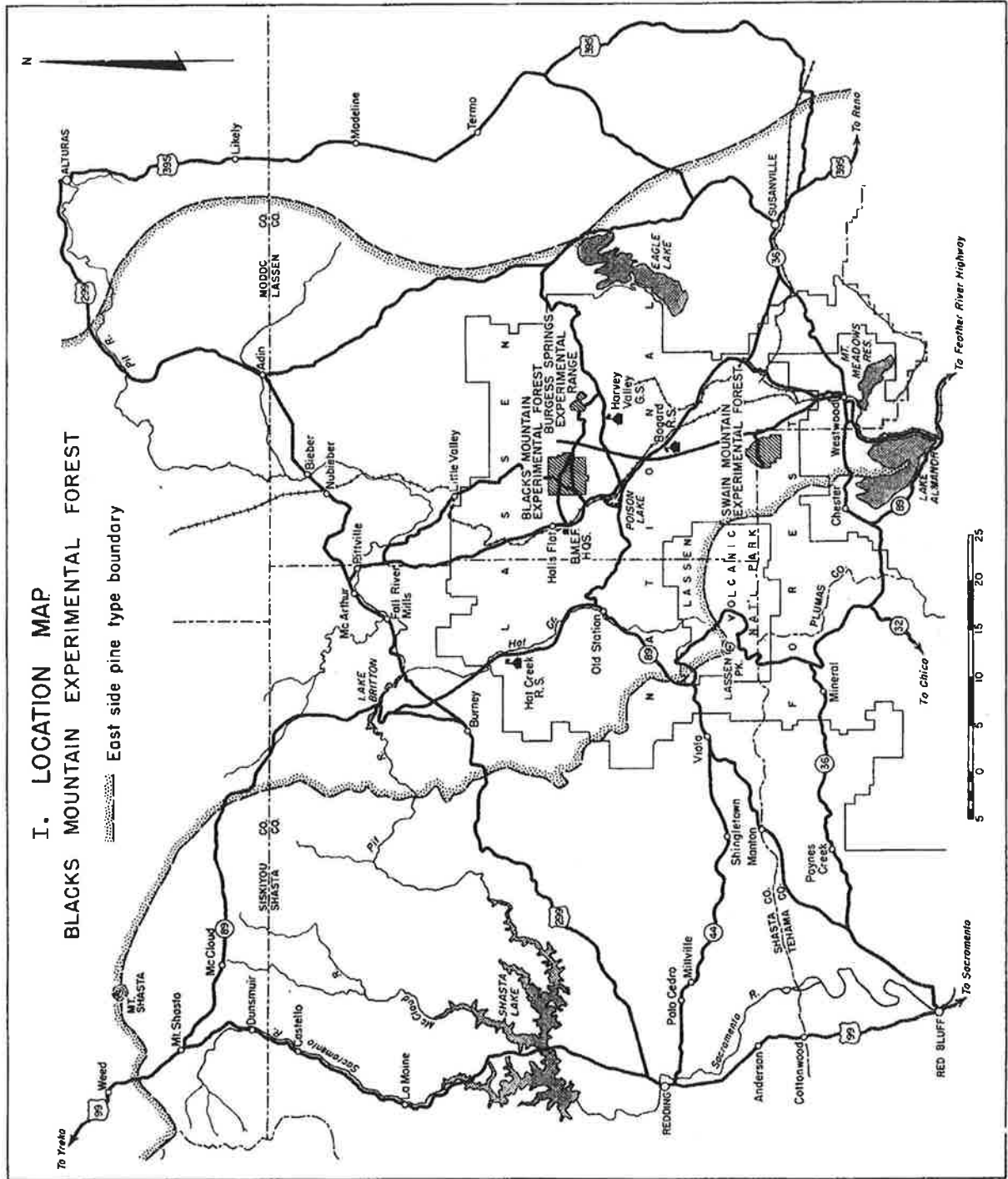
2/9/76
(Date)

Donna L. Smith
Director, Division of
Recreation

2/6/76
(Date)

APPENDIX

I	Location Map, Blacks Mountain Experimental Forest	
II	Location Map, Compartments Designated as Research Natural Areas	
III	Views of Compartment	A 21-10
IV	Views of Compartment	B 24- 4
V	Views of Compartment	C 4-21
VI	Views of Compartment	G 2-12
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XI	Cover Type Map, Compartment	C 4-21
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XXIII	Original Tree Cruise Data by Tree Class and Diameter, Compartment	G 2-12
XXIV	Original Tree Cruise Data by Tree Class and Diameter, Compartment	P 21-28



VIII Legend for Compartment Cover Type Maps

Major timber type boundaries are dotted lines. The overstory was mapped without regard to brush and reproduction.

Reproduction boundaries and boundaries of reproduction combined with brush are indicated by dashed lines.

Brush boundaries are indicated by scalloped lines.

Overstory symbols:

PP	Ponderosa pine and Jeffrey pine
WF	White fir
N	Non-timbered areas

Numerals indicate age of overstory. When numerals are absent the overstory is mature or overmature.

Reproduction symbols:

Species:	· - ponderosa pine or Jeffrey pine
	x - white fir
	□ - incense-cedar

Numerals indicate age of reproduction.

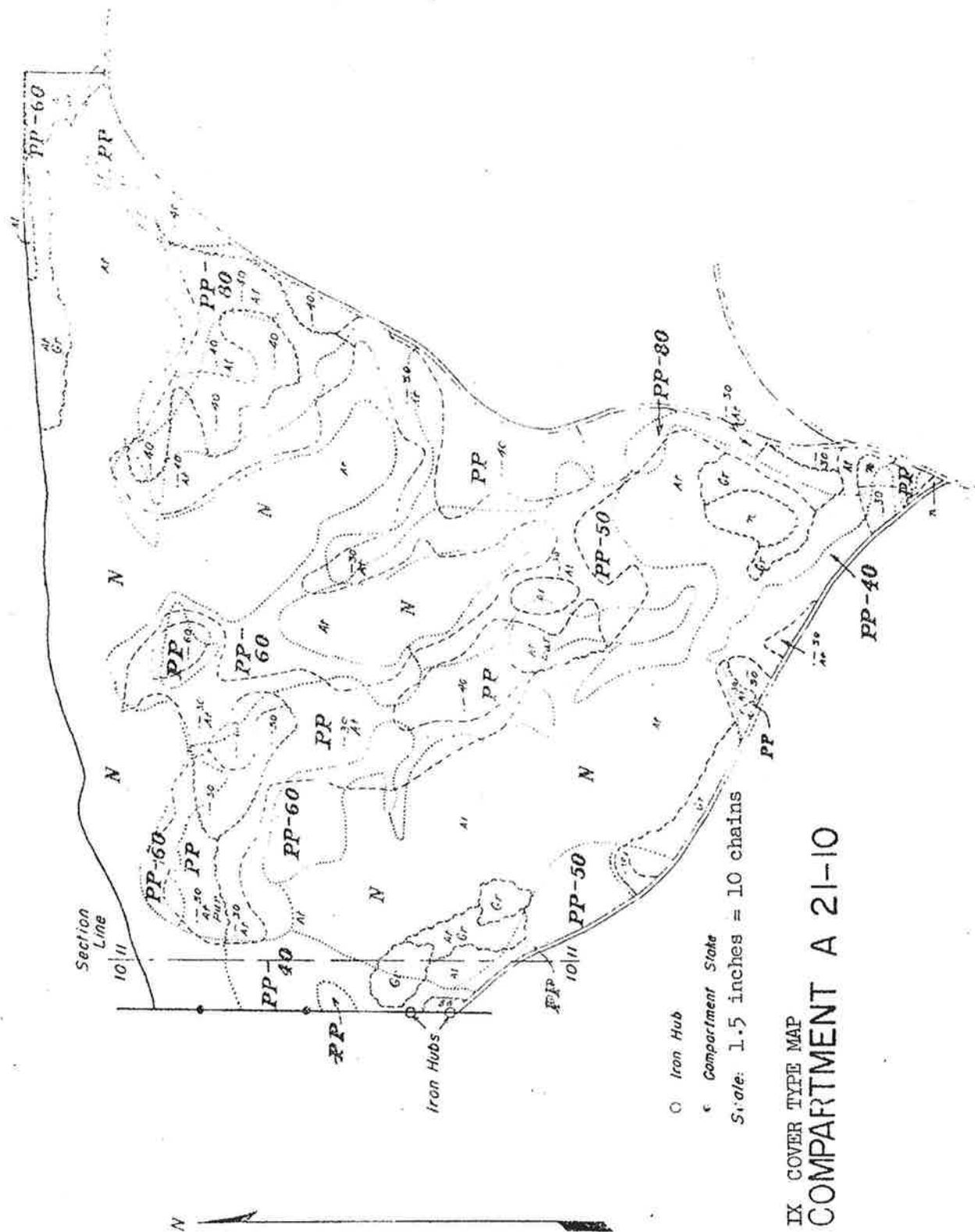
Example:

· - 40	Indicates 40-year-old pine and acknowledges
x	presence of white fir and incense-cedar.
□	

Brush symbols:

A	<u>Arctostaphylos patula</u> Greene Greenleaf manzanita
At	<u>Artemisia tridentata</u> Nutt. Basin sagebrush
Cer	<u>Cerocarpus ledifolius</u> Nutt. Mountain-mahogany
Cs	<u>Castanopsis sempervirens</u> (Kell.) Dudl. Bush chinquapin
Cv	<u>Ceanothus velutinus</u> Dougl. ex Hook. Tobacco brush
P	<u>Prunus emarginata</u> (Dougl.) Walp. Bitter cherry
Pur	<u>Purshia tridentata</u> (Pursh) DC. Antelope brush
Gr	Grasses or sedges
n	no brush or reproduction.

5-2
M-1
B.M.E.F.

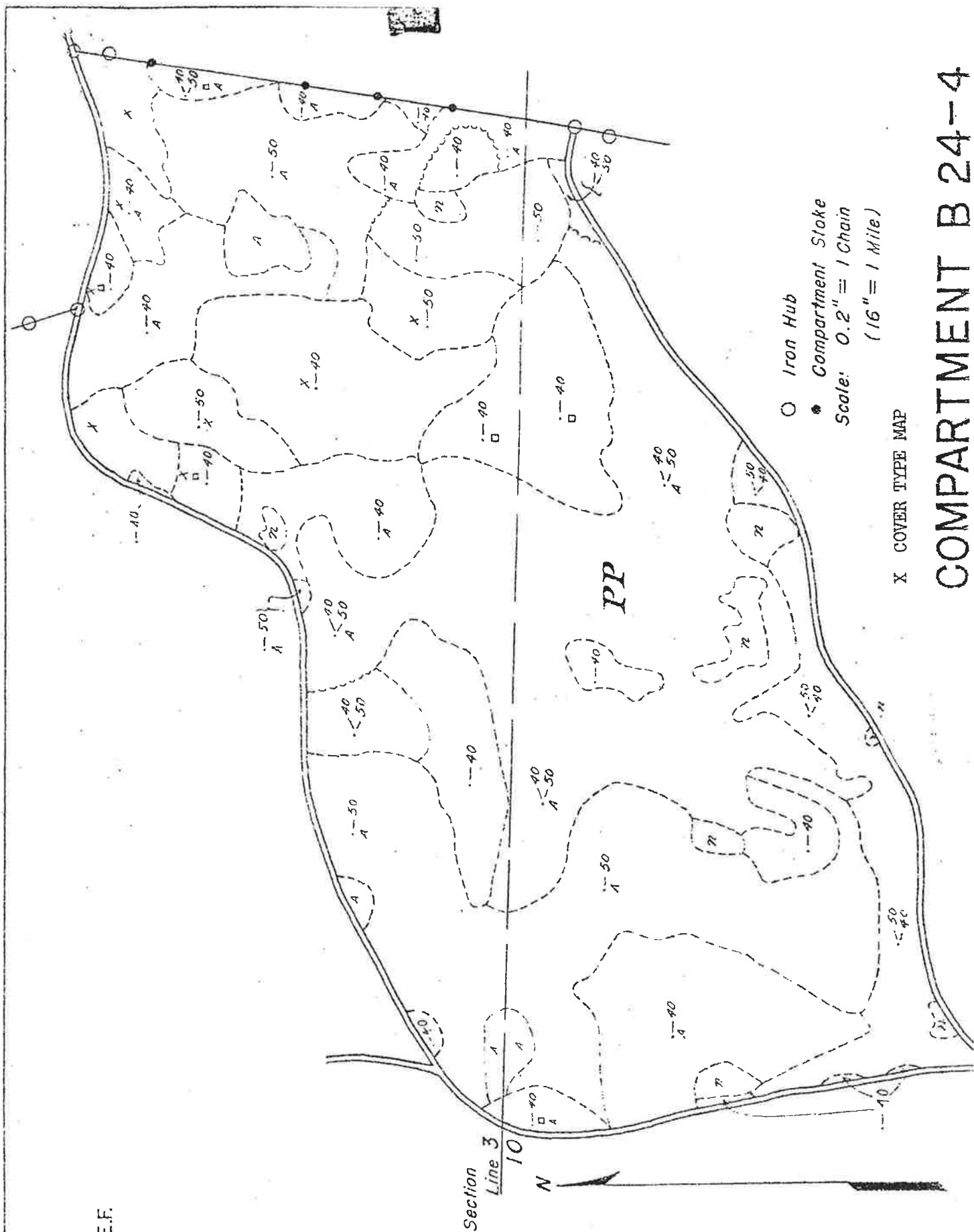


IX COVER TYPE MAP
COMPARTMENT A 21-10

RS

M-1

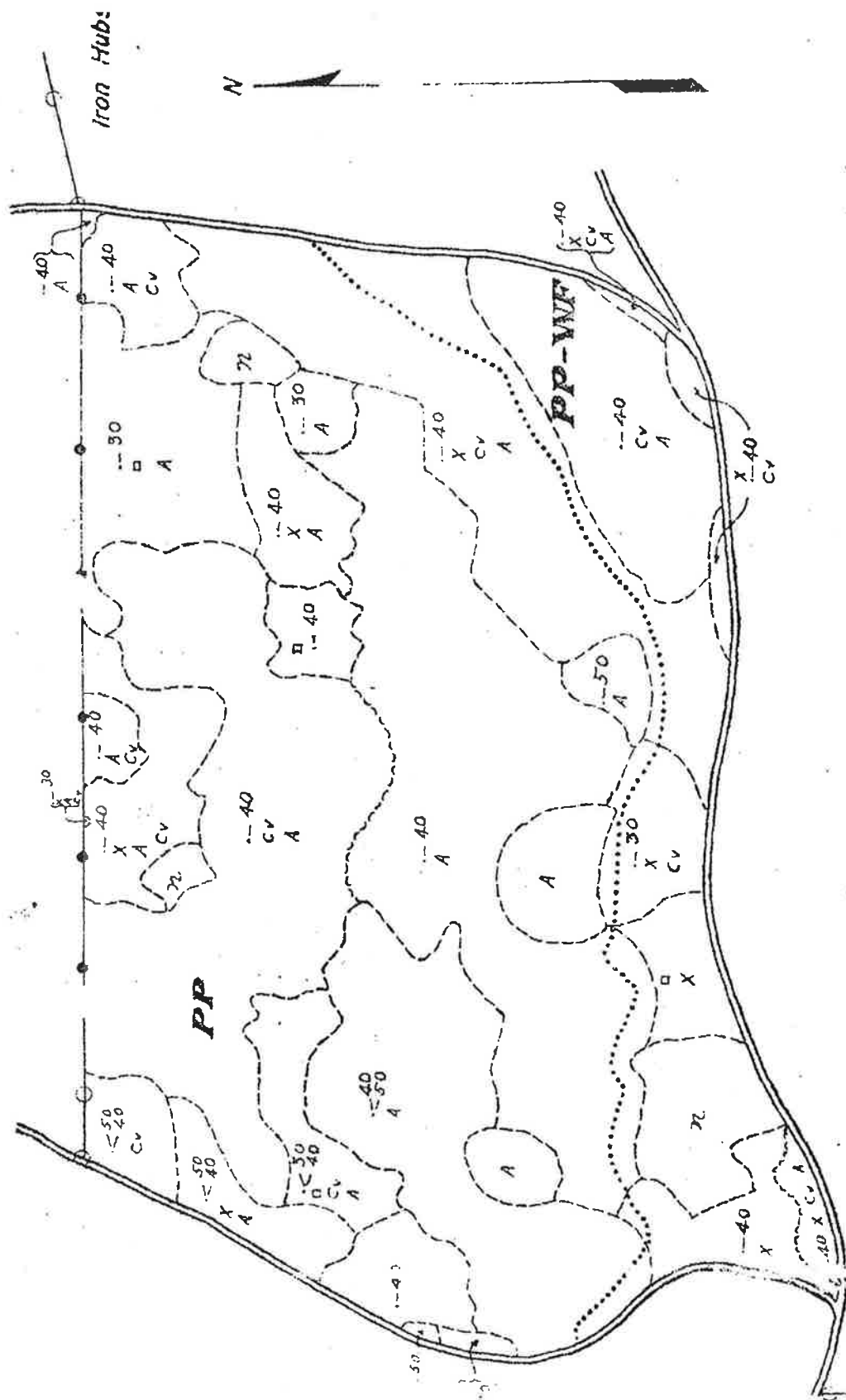
3.M.E.F.



X COVER TYPE MAP

COMPARTMENT B 24-4

RS
M-1
B.M.E.F.



○ Iron Hub
● Compartment Stake
Scale: 0.2" = 1 Chain
(16" = 1 Mile)

XI COVER TYPE MAP

COMPARTMENT C 4-21

RS

M-1

B.M.E.F.

1/4 S.C.

2223

S.C. 27 25

Iron Hubs

Iron Hubs

Iron Hubs

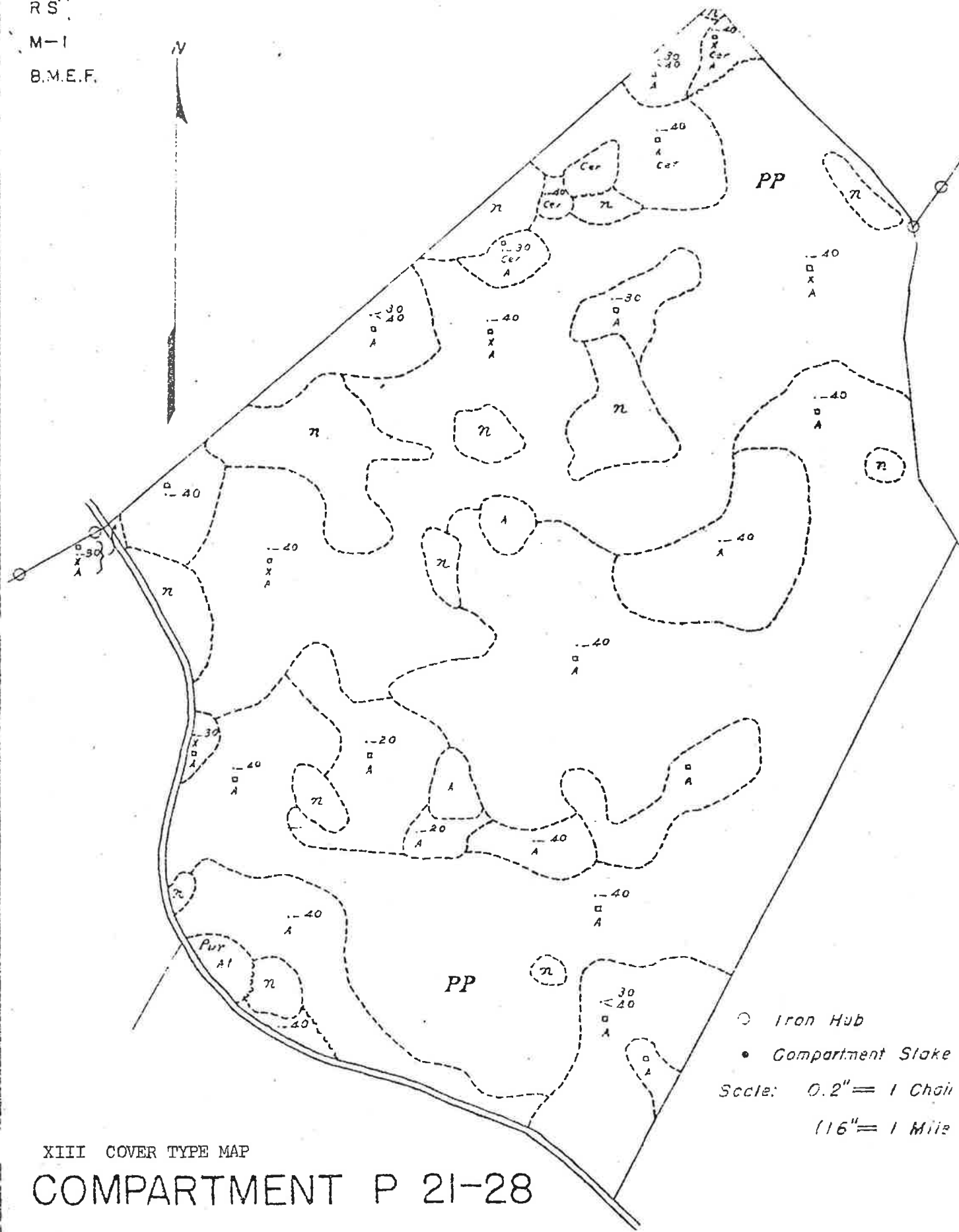
Iron

○ Iron Hub
• Compartment S
Scale 1.5 inches
= 10 cha.

COMPARTMENT G 2-12

XII COVER TYPE MAP

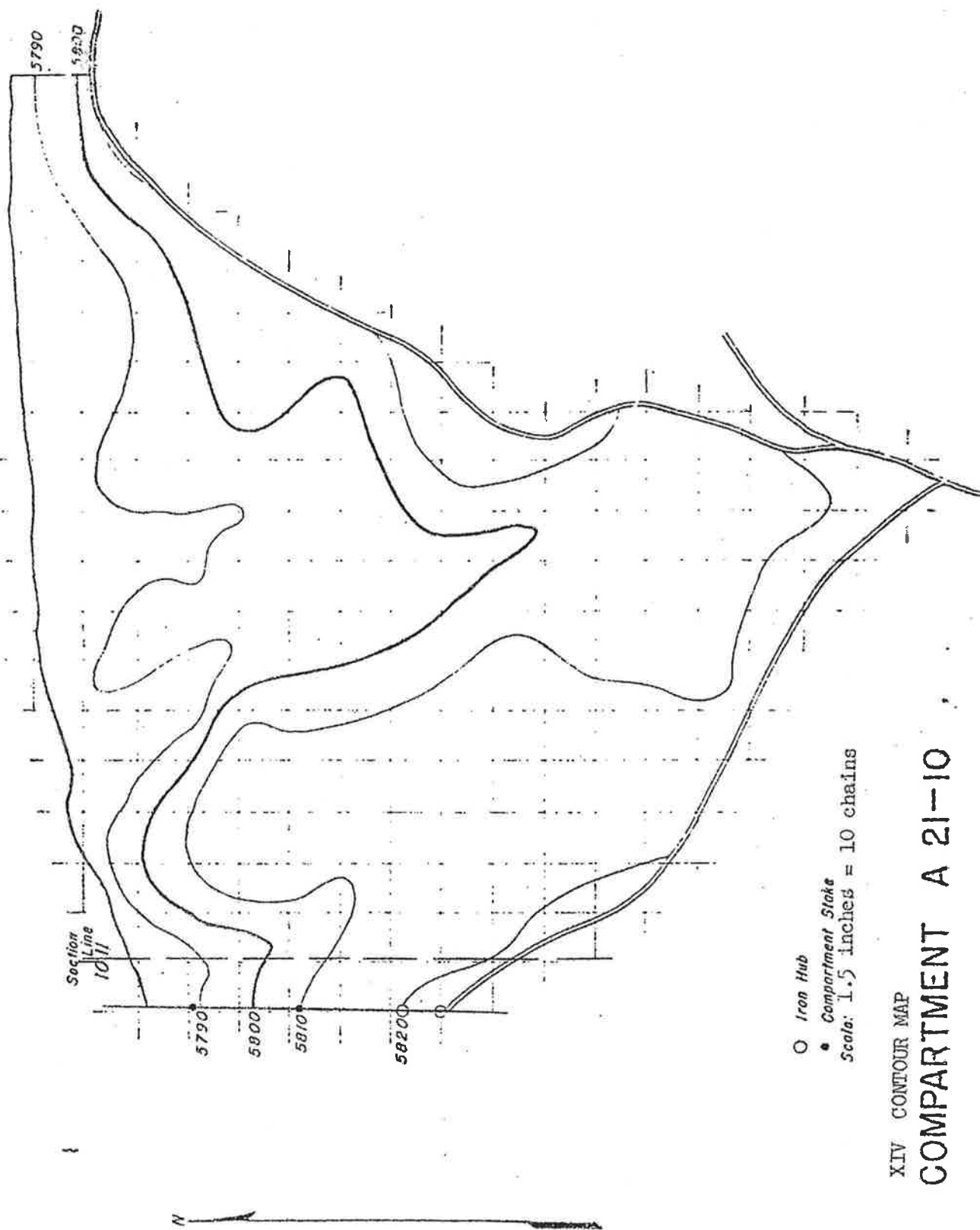
RS
M-1
B.M.E.F.



XIII COVER TYPE MAP

COMPARTMENT P 21-28

R 5
M-1
B.M.E.F.



RS

M-I

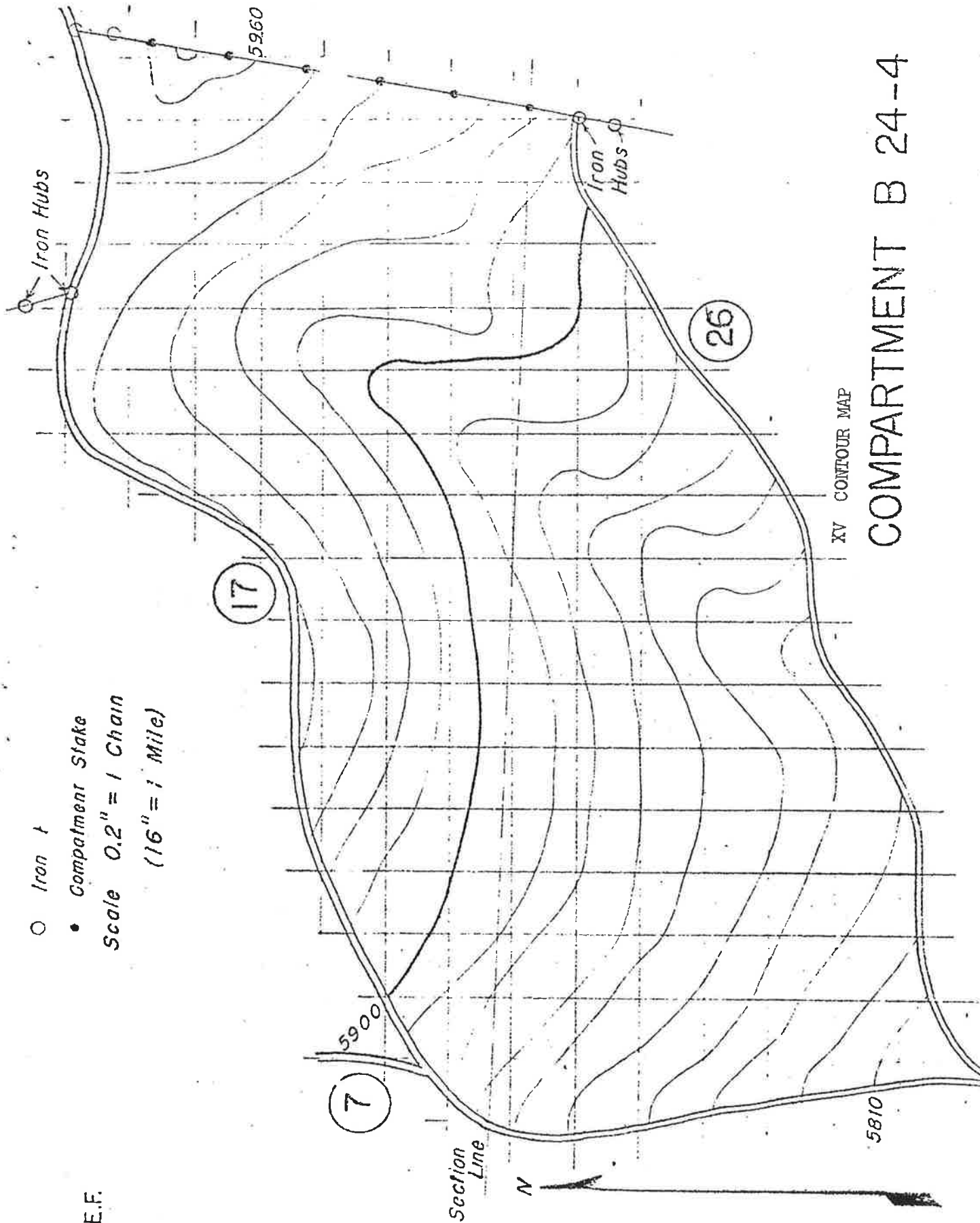
B.M.E.F.

○ Iron t

• Compartment Stake

Scale 0.2" = 1 Chain

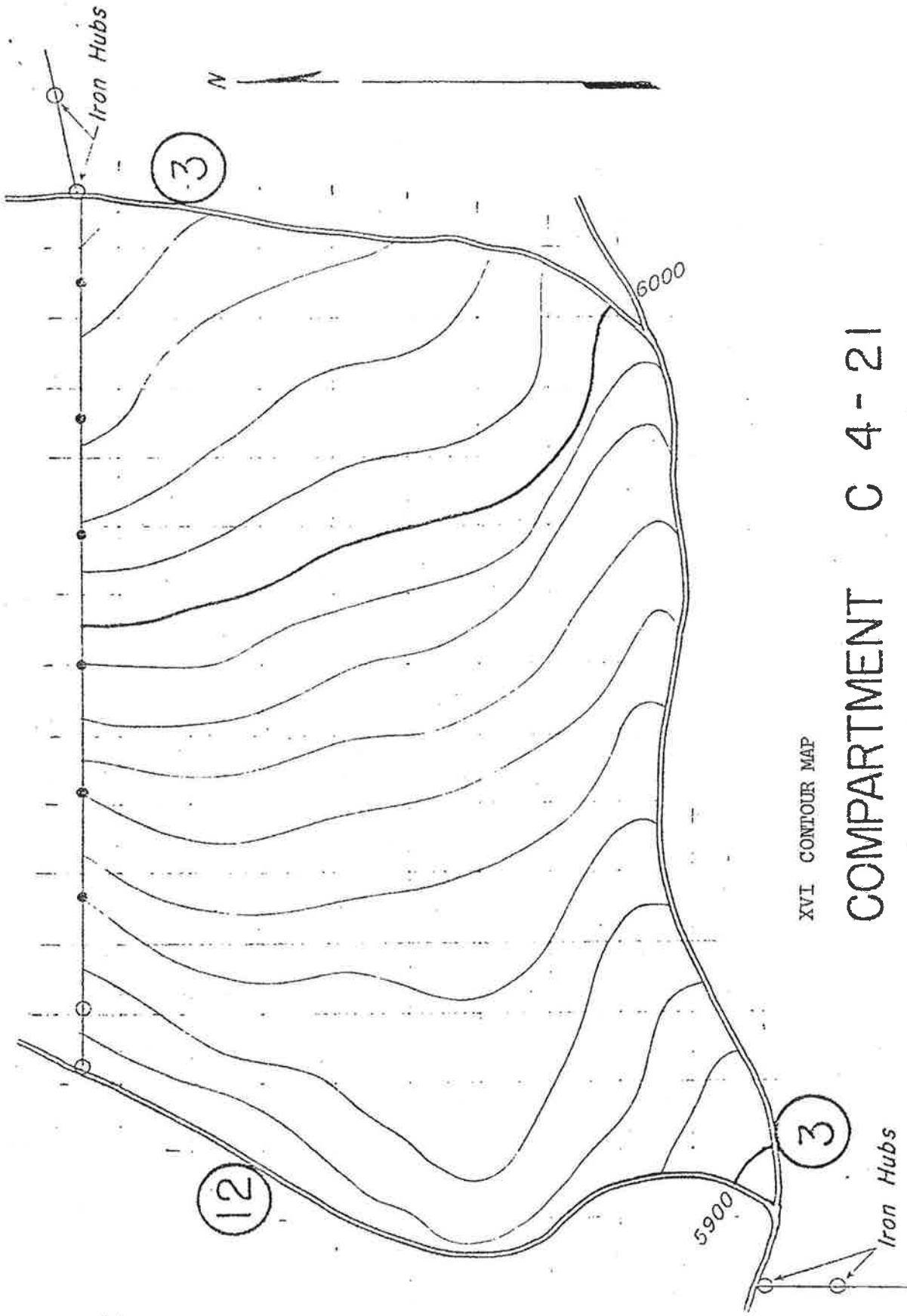
(16" = 1 Mile)



XV CONTOUR MAP

COMPARTMENT B 24-4

RS
M-1
B.M.E.F.



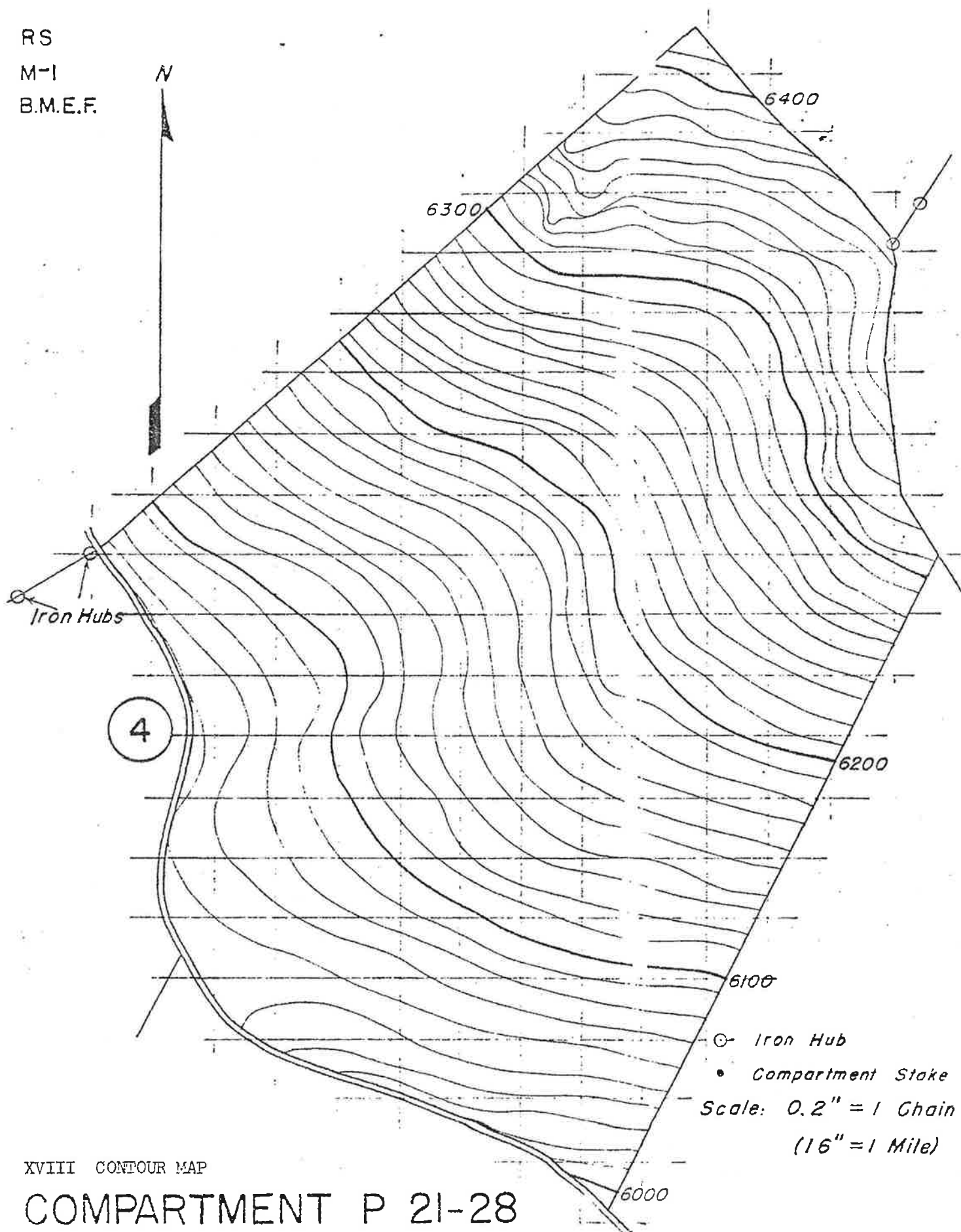
XVI CONTOUR MAP

COMPARTMENT C 4-21

Scale: 0.2" = 1 Chain
(16" = 1 Mile)

○ Iron Hub
● Compartment Stake

RS
M-1
B.M.E.F.



XVIII CONTOUR MAP

COMPARTMENT P 21-28

XIX Legend for Compartment Summary by Tree Class and Diameter.

D. - Indicates 2-inch tree diameter classes.

T. - Indicates number of trees.

Vol. - Volume in board feet (Scribner).

Class 1 to Class 7 - Indicate tree classes as described in:

Dunning, Duncan

1928. A tree classification for the selection forests of
the Sierra Nevada. J. Agric. Res. 36(9): 755-771, illus.

A. - Indicates acres.

PS
M-1
BMEF

SPECIES	PP&JP
BLOCK	A
COMPT.	21-10
TIME. AREA	64.7
SITE	3 1/2

CF&RES 559

Note: No white fir or incense-cedar present on this compartment.

PS
M-1
BNEF

XXI NUMBER OF TREES AND BOAL FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES PP&JP
BLOCK B
COMPT. 24-4
TIMB. AREA 91.2 A
SITE 3 1/2

CF&ES 559

Original Cruise (8-'34)

Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre	
T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.
1	7249		8587							226.8				1820		20	
2	5097		3384							90.9	0.2			938		10	
3	2874		105.2							64.6	3.0			380		4	
4	1089		105.3							43.1	4.7			262		3	
5	1166	13759	91.0	10738			0.4	47		22.0	2596	6.9	814	236.9	27954	2.6	307
6	91.0	13468	74.9	11025			3.2	474		12.0	1776	12.8	1894	193.9	28697	2.1	315
7	83.5	15531	42.2	7849	2.3	614	43.7	8128	3.0	558	2.0	372	4.9	182.6	33944	2.0	372
8	70.7	16544	25.0	5850	19.0	4446	65.3	15280	1.6	374			3.2	184.8	43243	2.0	474
9	53.0	16324	8.1	2495	29.0	8932	58.1	17895	12.5	3850				160.7	49496	1.8	543
10	42.5	18190	2.0	856	56.2	24054	39.8	17034	36.3	16392				178.8	76526	2.0	839
11	11.2	6586	0.1	59	87.1	51215	24.7	14524	77.2	45394				300.3	117776	2.2	1291
12	7.6	5875			71.4	55192	6.7	5179	102.4	79155				188.1	145401	2.1	1594
13	0.2	196			29.4	38651	2.0	1962	107.3	105261				148.9	146071	1.6	1602
14					14.7	17905			123.0	149814				137.7	167719	1.5	1839
15					10.7	15665			108.6	158990				119.3	174655	1.3	1915
16					1.9	3268			76.9	123668				73.8	126986	0.8	1392
17					2.3	4605			52.2	104504				54.5	109109	0.6	1196
18					1.0	2307			36.4	83975				37.4	86282	0.4	946
19									16.2	42671				16.2	42671	0.2	468
20									12.3	36752				12.3	36752	0.1	403
21									8.0	26984				8.0	26984	0.1	296
22									0.6	2274				0.6	2274	—	25
23									5.0	21210				5.0	21210	0.1	233
24									0.2	929				0.2	929	—	10
25																	
26																	
27																	
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67																	
68																	
69																	
70																	
71																	
72																	
TOTAL (12" and over) IN COMPARTMENT																	
476.5	106473	3433	28922	3360	246254	2439	85523	7767	1002755	360	4744	27.8	4368	21408	146449		
TOTAL (12" and over) PER ACRE (Based on timbered area)																	
5.2	1167	2.7	217	3.7	2487	2.7	833	8.5	10995	0.4	52	0.3	48	23.5	15060		

P.S
M-1
BMEF

SPECIES W.F.
BLOCK B
COMPT. 24- 4
TIMB. AREA 91.2 A
SITE 3 1/2

Original Cruise (8-'34)

[illegible]

PS
M-1
BMEF

XXI NUMBER OF TREES AND BOAF FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES TC
BLOCK B
COMPT. 24-4
TIMB. AREA 91.2 A
SITE 3 1/2

Original Cruise (8-'34)

CF&RES 559

Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre	
T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.
4	82.4		71.2							59.4				213		2	
6	48.4		46.9							8.8				104		1	
8	11.7		2.5							2.8				17		—	
10	2.4		2.8							3.0				8		—	
2	2.3	51	1.4	31						1.8	40			5.5	121	0.1	1
4	0.3	11	0.3	11										0.6	22	—	—
6			0.3	19		2.0	128							2.3	147	—	2
8			2.4	450		2.8	291							5.2	541	0.1	6
10	1.0	143	0.1	14		4.2	601	0.2	29					5.5	786	0.1	9
2	1.0	194	0.2	39		1.8	349	1.2	233					4.2	815	—	9
4	1.0	244	0.9	220										19	464	—	5
6					5.1	1581		4.0	1240					9.1	2821	0.1	31
8					4.1	1566		5.3	2025					9.4	3591	0.1	39
10					1.0	464		4.8	2227					5.8	2691	0.1	30
2								8.1	4520					8.1	4520	0.1	50
4								7.4	4854					7.4	4854	0.1	53
6								4.4	3344					4.4	3344	—	27
8								4.2	3671					4.2	3671	—	40
10								5.9	5900					5.9	5900	0.1	65
2								3.2	3626					3.2	3626	—	40
4								5.4	6863					5.4	6863	0.1	75
6								3.6	5098					3.6	5098	—	56
8								2.2	3432					2.2	3432	—	38
10								3.8	6479					3.8	6479	—	71
2								0.9	1674					0.9	1674	—	18
4																	
6								1.4	3031					1.4	3031	—	33
8								1.0	2330					1.0	2330	—	26
10								0.1	250					0.1	250	—	3
2																	
4																	
6								1.0	3010					1.0	3010	—	33
8																	
10																	
2								0.8	2836					0.8	2836	—	31
TOTAL (12" and over) IN COMPARTMENT																	
5.6	643	5.6	584	10.2	3611	10.8	1369	689	66672	1.8	40			102.9	72117		
TOTAL (12" and over) PER ACRE (Based on timbered area)																	
0.1	7	0.1	6	0.1	40	0.1	15	0.8	731	—	—			1.1	800		

RS
M-1
BMEF

XXII NUMBER OF TREES AND BOA FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES PP&JP
BLOCK C
COMPT. 4-21
TIMB. AREA 72.0 A
SITE 3 1/2

Original Cruise (8-'33)

CF&RES 559

CLASS 1-5														SUM		3 1/2	
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Total	Per Acre								
D.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.	T. Vol.				
4	488.4	151.4					27.8			668		9					
6	170.3	91.1					17.9			379		5					
8	163.8	61.7					13.5			244		3					
10	110.9	47.6					13.8	2.7		17.5		2					
12	95.1	1122.2	37.3	440.1	0.2	24	1.2	142		1.4	165	9.7	1145	144.9	170.98	2.0	237
14	95.4	1411.9	29.6	438.1	3.3	488	14.4	2131		1.8	266	12.9	1909	157.4	232.95	2.2	324
16	56.0	1041.6	19.0	353.4	11.9	2213	25.3	4706				3.6	670	115.8	215.39	1.6	299
18	19.3	451.6	4.4	103.0	63.0	14742	45.6	10670	1.2	281		1.7	398	135.2	316.37	1.9	439
20	4.9	150.9			65.0	20020	49.7	15308	3.9	1201				123.5	380.38	1.7	528
22	2.2	94.2			73.0	31244	45.9	19645	18.4	7875				139.5	597.06	1.9	829
24	1.5	88.2			65.9	38749	33.9	19933	69.7	40984				171.0	1005.48	2.4	1396
26					43.4	33548	12.2	9431	82.7	63927		1.0	773	139.3	1076.79	1.9	1496
28					25.0	24525	4.5	4414	89.5	87800				119.0	1167.39	1.7	1621
30					19.0	23142	1.2	1462	96.7	117781				116.9	1423.84	1.6	1978
32					6.7	9309	1.5	2196	86.5	126636				94.7	1386.41	1.3	1926
34							0.5	860	83.5	143620				84.0	1444.80	1.2	2007
36					0.8	1602			51.7	103503				52.5	1051.05	0.7	1460
38									34.8	80284				34.8	802.84	0.5	1115
40									17.6	46358				17.6	463.58	0.2	644
42									10.6	31673				10.6	316.73	0.1	440
44									5.0	16865				5.0	168.65	0.1	234
46									5.0	18950				5.0	189.50	0.1	263
48									1.0	4242				1.0	42.42	—	59
50																	
52																	
54																	
56									1.0	6291				6291	—	87	
58																	
60																	
62																	
64																	
66																	
70																	
72																	
TOTAL (12" and over) IN COMPARTMENT																	
2744 43606 90.3 13394 3772 200106 235 990898 6588 898271 3.2 431 28.9 4895 1668 1251552																	
TOTAL (12" and over) PER ACRE (Based on timbered area)																	
3.8 606 1.3 185 5.2 2779 3.3 1262 9.1 12476 — 6 0.4 68 23.2 17383																	

PS
M-1
BMEF

XXII NUMBER OF TREES AND BOARD FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES W.F.
BLOCK C
COMPT. 4-21
TIMB. AREA 72.0 A
SITE 3 1/2

CF&ES 559

Original Cruise (8-'33)

	Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre	
	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.
4	184.6		57.3								3.1				345		5	
6	124.2		21.3								0.4				153		2	
8	75.4		7.1								3.9				86		1	
10	31.5		5.8								1.8	0.6			40		1	
12	19.4	1921	4.7	465	0.6	59	0.9	89			0.8	79			26.4	2614	0.4	36
14	9.6	1306	3.2	435	4.8	653	2.0	272					0.8	109	20.4	2774	0.3	39
16					18.9	3289	4.6	800							23.5	4089	0.3	57
18					17.2	3904	3.4	772							20.6	4676	0.3	65
20					10.9	3161	4.6	1334	2.3	667					17.8	5162	0.2	72
22					5.8	2094	2.9	1047	4.1	1480					12.8	4621	0.2	64
24					2.9	1346	0.8	371	11.0	5104					14.7	6821	0.2	95
26					1.5	832			10.0	5880					11.5	6762	0.2	94
28									13.7	9878					13.7	9878	0.2	137
30					0.7	612			12.4	10850					13.1	11462	0.2	159
32									15.7	16281					15.7	16281	0.2	226
34									12.7	15837					12.7	15837	0.2	220
36									13.3	19817					13.3	19817	0.2	275
38									12.1	21756					12.1	21756	0.2	302
40									7.1	14569					7.1	14569	0.1	202
42									6.1	14658					6.1	14658	0.1	204
44									4.1	11193					4.1	11193	0.1	155
46									5.2	15735					5.2	15735	0.1	219
48									2.4	8016					2.4	8016	—	111
50									1.2	4464					1.2	4464	—	62
52									1.4	5775					1.4	5775	—	80
54																		
56									1.2	5988					1.2	5988	—	83
58									0.8	4376					0.8	4376	—	61
60																		
62																		
64																		
66																		
68																		
70																		
72																		
TOTAL (12" and over) IN COMPARTMENT																		
	2744	43605	903	13346	3772	20010	2359	90898	4388	398271	3.2	431	28.9	4895	16687	1251552		
TOTAL (12" and over) PER ACRE (Based on timbered area)																		
	3.8	606	1.3	185	5.2	2779	3.3	1262	9.1	12476	—	6	0.4	68	23.2	17383		

RS
M-1
BNEF

XXII NUMBER OF TREES AND BOARD FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES IC
BLOCK C
COMPT. 4-21
TIMB. AREA 72.0 A
STTE 3 1/2

CF&RES 559

Original Cruise (8-'33)

	Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre	
	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.
4	57.4		4.6												62		1	
6	22.6		2.0												25		—	
8	15.3		1.0							0.8					16		—	
10	5.2														5		—	
12	4.1	90	1.5	33			1.0	22							6.6	145	0.1	2
14	3.6	133			0.6	22	0.6	22							4.8	178	0.1	2
16					0.7	45	1.0	64							1.7	109	—	2
18					8.2	853	4.3	447							12.5	1300	0.2	18
20					9.4	1344									9.4	1344	0.1	19
22					3.9	757	2.9	563	0.2	39					7.0	1358	0.1	19
24					1.0	244	0.2	49	4.0	976					5.2	1269	0.1	18
26					2.2	682	1.0	310	4.1	1271					7.3	2263	0.1	31
28					5.3	2025			2.2	840					7.5	2865	0.1	40
30					0.4	186	0.8	371	11.3	5243					12.5	5200	0.2	81
32					0.2	112			7.6	4241					7.8	4352	0.1	60
34									4.8	3149					4.8	3149	0.1	44
36									3.0	2280					3.0	2280	—	32
38									5.7	4982					5.7	4982	0.1	69
40									1.2	1200					1.2	1200	—	17
42									3.2	3626					3.2	3626	—	50
44									4.6	5847					4.6	5847	0.1	81
46									2.4	3398					2.4	3398	—	47
48									3.0	4680					3.0	4680	—	65
50									1.9	3240					1.9	3240	—	45
52									2.9	5394					2.9	5394	—	75
54									1.0	2010					1.0	2010	—	28
56									0.7	1516					0.7	1516	—	21
58																		
60																		
62									1.0	2660					1.0	2660	—	37
64									0.4	1132					0.4	1132	—	16
66									0.7	2107					0.7	2107	—	29
68																		
70																		
72																		
TOTAL (12" and over) IN COMPARTMENT																		
	7.7	223	1.5	33	31.9	6270	11.8	1848	65.9	59831					118.8	68204		
TOTAL (12" and over) PER ACRE (Based on timbered area)																		
	0.1	3	—	—	0.4	87	0.2	26	0.9	831					1.6	947		

RS
M-1
BMEF

SPECIES	<u>PP&JP</u>
BLOCK	<u>G</u>
COMPT.	<u>2-12</u>
TIME. AREA	<u>143.1</u> A
SITE	<u>3 1/2</u>

Original Cruise (7-'33)

Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre		
T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	
4	2178.2		1147.5							652.2		3.0		450.3		31		
6	1136.4		711.8							170.3		2.9		207.1		14		
8	675.5		277.4							54.6		3.9		101.1		7		
10	320.8		119.4			2.6				24.6		9.3		477		3		
12	181.9	21464	71.8	8472	1.8	212	13.1	1546			5.3	62.5	21.9	2534	295.9	34904	2.1	244
14	150.4	22259	49.4	7311	2.0	296	15.2	2250	1.0	148	4.4	65.1	26.2	3878	243.6	36793	1.7	857
16	97.9	18209	39.4	7328	11.7	2176	25.0	4650			1.0	186	16.9	3143	191.9	35673	1.3	849
18	60.4	14134	18.4	4306	27.8	6585	54.0	12636	2.7	632			18.4	4306	181.7	42518	1.3	297
20	49.5	15246	11.4	3511	52.9	16293	53.2	16386	14.3	4404			5.8	1786	187.1	57627	1.3	403
22	27.7	11856	9.6	4109	64.2	27478	57.4	24547	43.0	18404			3.4	1455	205.2	87868	1.4	614
24	13.0	7644	5.4	3175	91.7	53920	44.2	26990	76.6	45041			0.2	118	231.1	135387	1.6	950
26	6.9	5334			85.7	66246	37.9	29297	121.0	93533			4.0	3092	255.5	197502	1.8	1380
28	0.2	196	2.0	1962	56.6	55525	24.6	24133	134.1	131552			1.2	1177	218.7	214545	1.5	1499
30			1.0	1218	52.4	63823	15.2	18514	156.6	190739			2.6	3167	227.8	277460	1.6	1939
32					36.4	53290	8.8	12883	144.3	211255					189.5	277428	1.3	1939
34					19.0	32680	6.0	10320	103.7	178364					121.7	221364	0.9	1547
36					11.7	23423	2.2	4464	92.3	184785					106.2	212613	0.7	1486
38					3.4	7844	0.4	923	73.3	169103					77.1	177870	0.5	1243
40					2.6	6348			48.0	126432					50.6	132287	0.4	931
42					1.0	2988			33.3	99500					34.3	102488	0.2	716
44					1.0	3373			12.7	42837					13.7	46210	0.1	323
46									9.8	37142					9.8	37142	0.1	260
48									10.8	45814					10.8	45814	0.1	320
50									3.9	18108					3.9	18108	—	127
52									0.2	1039					0.2	1039	—	7
54									0.8	4586					0.8	4586	—	32
56									0.2	1258					0.2	1258	—	9
58																		
60																		
62																		
64																		
66																		
68																		
70																		
72																		
TOTAL (12" and over) IN COMPARTMENT																		
587.9 116 342 203.4 413.9 521.9 422.2 20 357.2 1324.9 1074.6 64.7 12.7 146.2 100.6 24706 2443.3 111.6																		
TOTAL (12" and over) PER ACRE (Based on timbered area)																		
4.1	813	1.5	289	3.6	2955	2.5	1317	7.6	11214	0.1	10	0.7	173	20.1	16771			

RS
M-1
BMEF

XXIII NUMBER OF TREES AND BOARD FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES
BLOCK G
COMPT. 2-12
TIMB. AREA 143.1 A
SITE 3 1/2

CP&RES 559

Original Cruise (7-'33)

Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre	
T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.
98.4		41.0								31.0				170		1	
16.0		30.1								7.8				104		1	
40.7		7.3								4.0				50		-	
22.6		2.0												25		-	
8.6	851	0.9	89			1.0	99							105	1040	0.1	7
6.2	843											0.9	122	7.1	966	-	7
1.5	261				452									4.1	713	-	5
0.9	204			1.7	386	0.8	182							3.4	772	-	5
1.4	406													1.4	406	-	3
1.0	361													1.0	361	-	3
								0.8	470					0.8	470	-	3
								1.0	875					1.0	875	-	6
								0.8	830					0.8	830	-	6
								0.9	1122					0.9	1122	-	8
								2.8	4172					2.8	4172	-	29
								3.5	6293					3.5	6293	-	44
								4.6	9439					4.6	9439	-	66
								3.0	7209					3.0	7209	-	50
								2.7	7371					2.7	7371	-	52
								1.6	5952					1.6	5952	-	42
								0.1	412					0.1	412	-	3
TOTAL (12" and over) IN COMPARTMENT																	
19.6	2926	0.9	87	4.3	838	1.8	281	2.8	4445			0.9	122	49.3	48403		
TOTAL (12" and over) PER ACRE (Based on timbered area)																	
.1	20	-	1	-	6	-	2	.2	308			-	1	.3	338		

PS
M-1
BMEF

XIII NUMBER OF TREES AND BOAF' FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES IC
BLOCK G
COMPT. 2-12
TIMB. AREA 143.1 A
SITE 3 1/2

CF&RES 559

Original Cruise (7-'33)

D.	Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre	
	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.
4	22.8		12.2								6.3				41		-	
6	19.7		11.2								5.9				37		-	
8	8.0		1.4								0.7				10		-	
10	4.4														4		-	
12	4.6	101													4.6	101	-	1
14	0.4	15													0.4	15	-	-
16	1.0	64			0.8	51									1.8	115	-	1
18	1.0	104													1.0	104	-	1
20																		
22					0.8	155									0.8	155	-	1
24					3.4	830									3.4	830	-	6
26					0.1	31	0.9	279	1.0	310					2.0	620	-	4
28					0.4	153	0.4		0.1	38			0.4	153	0.9	344	-	2
30									0.1	46					0.1	46	-	-
32					1.0	558			0.8	446					1.8	1004	-	7
34					0.4	262	0.1	66							0.5	328	-	2
36									2.0	1520					2.0	1520	-	11
38							0.1	87	2.4	2098					2.5	2185	-	15
40									0.8	800					0.8	800	-	6
42																		
44									1.1	1398					1.1	1398	-	10
46									0.9	1274					0.9	1274	-	9
48									1.0	1560					1.0	1560	-	11
50									1.0	1705					1.0	1705	-	12
52																		
54																		
56									1.1	2382					1.1	2382	-	17
58																		
60																		
62																		
64																		
66																		
68																		
70																		
72																		
TOTAL (12" and over) IN COMPARTMENT																		
7.0	284		6.1	1835	1.9	587	12.3	13577			0.4	153	27.7	16486				
TOTAL (12" and over) PER ACRE (Based on timbered area)																		
-	2		-	13	-	4	0.1	95			-	1	0.2	115				

RS
M-1
BMEF

SPECIES	PP&JP
BLOCK	P
COMPT.	21-28
TIMB. AREA	99.9 A
SITE	3 1/2

Original Cruise (10-'34)

[illegible]

RS
M-1
BMEF

XXIV NUMBER OF TREES AND BOARD FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES W.F.
BLOCK P
COMPT. 21-28
TIMB. AREA 99.9 A
SITE 3 1/2

Original Cruise (10-'34)

CP&RES 559

D.	Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre	
	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.
4	103.1		79.4								23.4				206		2	
6	68.7		29.1								5.8				100		1	
8	23.2		11.4								1.6				36		-	
10	20.1		10.4												44		-	
12	17.3	1317	10.8	1069							0.1	10			24.2	2396	0.2	24
14	8.6	1170	2.0	272			1.8	245							12.4	1686	0.1	17
16	15.4	2680	5.6	974			1.0	174					1.0	174	23.0	4002	0.2	40
18	9.5	2156	3.7	840			2.5	568							15.7	3564	0.2	36
20	4.2	1218	1.4	406	3.0	870	0.7	203							9.3	2697	0.1	27
22	4.0	1444	2.0	722	1.8	650	4.0	1444							11.8	4260	0.1	43
24			1.0	464	2.4	1114	2.4	1114							5.8	2691	0.1	27
26					8.5	4998									8.5	4998	0.1	50
28					8.7	6273									8.7	6273	0.1	63
30					4.1	3588			0.1	88					4.2	3675	-	37
32					2.6	2696									2.6	2696	-	27
34					1.0	1247			3.1	3866					4.1	5113	-	51
36									2.0	2980					2.0	2980	-	30
38									2.2	3956					2.2	3956	-	40
40																		
42									1.0	2403					1.0	2403	-	24
44									1.0	2730					1.0	2730	-	27
46																		
48																		
50																		
52																		
54																		
56																		
58																		
60																		
62																		
64																		
66																		
68																		
70																		
72																		
TOTAL (12" and over) IN COMPARTMENT																		
55.0	9185	21.5	1471	12.1	21436	12.4	3748	9.4	16023	0.1	10	1.0	174	136.5	56120			
TOTAL (12" and over) PER ACRE (Based on timbered area)																		
0.6	100	0.3	48	0.3	215	0.1	38	0.1	160	-	-	-	2	1.4	562			

PS
M-1
BNEF

XXIV NUMBER OF TREES AND BOARD FOOT VOLUME
COMPARTMENT SUMMARY BY TREE CLASS AND DIAMETER

SPECIES IC
BLOCK P
COMPT. 21-28
TIMB. AREA 99.9 A
SITE 3 1/2

CF2PES 559

Original Cruise (10-'34)

Class 1		Class 2		Class 3		Class 4		Class 5		Class 6		Class 7		Total		Per Acre	
T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.	T.	Vol.
90.5		64.5								20.0				175		2	
35.3		21.1								7.0				63		1	
16.8		6.3								3.6				27		—	
10.0		7.1								1.4				18		—	
8.6	189	2.6	57							0.5	11	1.3	29	13.0	286	0.1	3
6.9	255	5.4	200			2.0	74			1.0	37	1.0	37	16.3	603	0.2	6
9.3	595	8.9	570			2.2	141					1.0	64	21.4	1370	0.2	14
4.7	489	6.3	655			2.1	218							13.1	1362	0.1	14
5.0	715	2.0	286			5.4	772					1.0	143	13.4	1916	0.1	19
7.2	1397	2.5	485	2.0	388	10.5	2037	0.6	116					22.8	4423	0.2	44
4.0	976	0.7	171	4.0	976	10.5	2562							19.2	4685	0.2	47
2.2	682	1.0	310	17.2	5332	13.4	4154							33.8	10478	0.3	105
2.0	764	0.6	229	10.1	3858	12.9	4928	2.0	764					27.6	10543	0.3	106
				14.6	6774	5.0	2320	3.0	1392					22.6	10486	0.2	105
				13.2	7366	3.6	2009	8.4	4687					25.2	14062	0.3	141
				1.5	984	3.0	1968	12.2	8003					16.7	10955	0.2	110
				4.1	3116	2.9	2204	11.7	8892					18.7	14212	0.2	142
				1.6	1398	1.3	1136	12.3	10750					16.2	13285	0.2	133
				1.0	1000			9.4	9400					10.4	10400	0.1	104
				0.8	906	1.6	1813	6.4	7251					8.8	9970	0.1	100
								9.5	12074					9.5	12074	0.1	121
						1.0	1416	3.8	12461					9.8	13877	0.1	139
								5.7	8892					5.7	8892	0.1	89
								5.3	9036					5.3	9036	0.1	90
								4.0	7440					4.0	7440	—	74
								3.6	7236					3.6	7236	—	72
								1.7	3680					1.7	3680	—	37
								0.7	1746					0.7	1746	—	17
TOTAL (12" and over) IN COMPARTMENT																	
49.9	6062	30.0	2963	70.1	32098	77.4	27752	105.3	113820	1.5	48	4.3	273	338.5	183017		
TOTAL (12" and over) PER ACRE (Based on timbered area)																	
0.5	61	0.3	30	0.7	321	0.8	278	1.1	1139	—	—	—	3	3.4	1832		

forestry research news

PC. Rie. in
B.M. RNA file
(4060)
at Nat. Gov.

March 26, 1976

Pacific Southwest
Forest and Range
Experiment Station
1960 Addison St.
Berkeley, California 94701

FOR IMMEDIATE RELEASE

RESEARCH AREA DESIGNATED IN LASSEN NATIONAL FOREST

The tenth Research Natural Area in California has been established on the Lassen National Forest, western Lassen County, by order of John R. McGuire, Chief, Forest Service, U.S. Department of Agriculture.

The designation means that the Area will be preserved in its natural state and used for educational and research programs by scientists, teachers and students.

The new Research Natural Area (RNA), which totals 521 acres, was selected because it contains some of the best old-growth stands of interior ponderosa pine in California's National Forests. It is located in Blacks Mountain Experimental Forest, about 45 miles northwest of Susanville, California. The Area will be administered by the Pacific Southwest Forest and Range Experiment Station, a Forest Service research organization headquartered in Berkeley.

(MORE)



News contact: John K. McDonald (415) 486-3111

Forest Service • U.S. Department of Agriculture

7/19/04

John K. McDonald, Pacific Southwest
Forest and Range Experiment Station
USDA Forest Service
1960 Addison, P.O. Box 245
Berkeley, CA 94701 (415) 486-3111

-2-2-2-2-2-

Although there will be no timber cutting in the 521 acres, their withdrawal will not affect the timber-harvesting programs of the Lassen National Forest, according to Douglas R. Leisz, Regional Forester for the National Forests of California. "The entire Blacks Mountain Experimental Forest is outside our regular timber-allocation area, and timber removal is under the jurisdiction of the Experiment Station," Leisz said.

The new Research Natural Area ranges in elevation from 5,600 to about 7,000 feet. The whole Area is uniformly of volcanic origin and consists of mountains rising from a gently undulating plateau.

Within the Research Natural Area small grassy areas, sagebrush flats, and shrubs, such as manzanita, tobacco brush, antelope brush, currant, and gooseberry provide food and cover for wildlife. Rocky Mountain mule deer, badger, and coyotes are either frequent visitors or permanent residents. Black bear and mountain lion are rare visitors. Numerous species of smaller animals and birds abound.

A unique aspect of the Research Natural Area that makes it especially valuable to scientists is the availability of data on climatic, geologic, hydrologic, and vegetation analysis, some of which date back to the establishment of the Blacks Mountain Experimental Forest in 1934.

#

forestry research news

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INTERNATIONAL BIOLOGICAL PROGRAM

SECTION CT: CONSERVATION OF TERRESTRIAL BIOLOGICAL COMMUNITIES

CHECK SHEET (Mark VII) FOR SURVEY OF IBP AREAS*

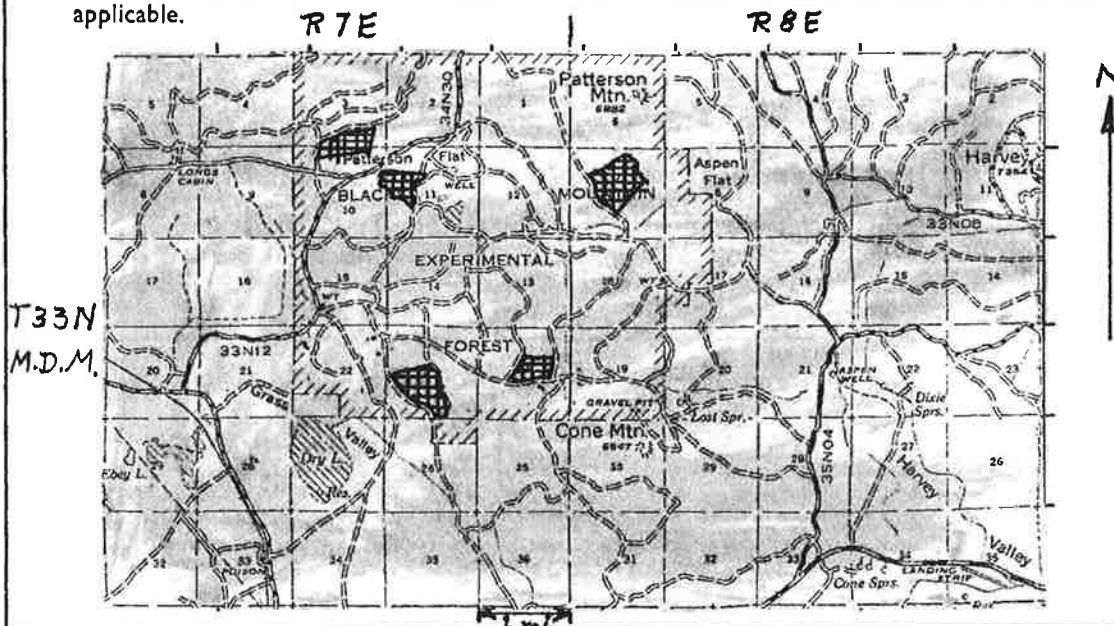
To be completed with reference to the GUIDE TO THE CHECK SHEET

Serial Number

For Data
Centre Use
only

1. 1. Name of surveyor Douglass F. Roy
2. Address of surveyor Pacific Southwest Forest & Range Experiment Station
1615 Continental Street
Redding, California 96001
3. Check Sheet completed (a) on site (b) from records X
4. Date Check Sheet completed March 26, 1976

2. 1. Name of IBP Area Blacks Mountain Research Natural Area
2. Name of IBP Subdivision (or serial letter)
3. Map of IBP Area* showing boundaries attached? Yes X No
4. Sketch map of IBP Area*. Please mark direction of north, the scale and grid numbers where applicable.



Heavy cross-hatching shows 5 parts of natural area.

* For "IBP Area", read IBP Area and/or IBP Subdivision.

7/19/04

3. Location of IBP Area*

1. Latitude 40° 45' N/S Longitude 121° 10' E/W
2. Country United States of America
- State or Province California County Lassen
- (State or Province County)

4. Administration

National 1. Official category Department of Agriculture, Forest Service

2. Address of administration Pacific SW Forest & Range Experiment Station
- P.O. Box 245
- Berkeley, California 94701
-
-

International Class

3. Included in U.N. List	Rejected from U.N. List	Area with formal conservation status	No formal cons. status
(A)	(B)	(C) X	(D)

5. Characteristics of IBP Area*

1. Surface area (state units of measurement) Total 521.1 acres
2. Altitude (state units of measurement) Maximum 6400 ft.
- Minimum 5600 ft.

6. Climate

Nearest climatological station :

1. Name (abandoned) Blacks Mountain Branch Station
2. Climatological station on IBP Area*? Yes No X.....
3. If (2) not, distance from edge of IBP Area* (state units) 5 miles
4. Direction from IBP Area* W
5. Additional data sheet attached? Yes X..... No
18-year ppt. record

7. Vegetation and Soil

1

Vegetation

Community Reference Number	Vegetation Code					Plant communities (give usual name using full Latin names of a species where applicable)	Area (state units)
	Primary Structural Group	Class	Group	Formation	Sub-Formation		
1	1	A	1	7	(a)	S.A.F. Type 237 Interior Ponderosa Pine (<i>P. ponderosa</i> Laws.)	470.9
2	2	B	1	4	(b)	Open sagebrush (<i>Artemesia tridentata</i> Nutt.)	50.2
3							521.1
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Please give information about further communities on a separate sheet.

7.
(cont.)

2

Soil

Community Reference Number	Soil type	Other notes
		(All soils derived from basic igneous lava.)
1	P2	Brown gritty loam, choc. brown clay subsoil; gravelly clay substratum. Neut. to slightly acid, young alluvium.
2		
3	P2	Brown or gray-brown clay loam, some stony, choc. brown clay subsoil with nut structure. Consolida- ted substratum at 18" to 60".
4		
5	F3	Reddish-brown clay loam or loam, shallow phases stony, over same subsoil. 6" to 60" to lava bedrock.
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

[illegible]

9. Landscape

1. General Landscape (give brief description) Gently undulating lava plateau (at about elevation 5600') from which single or groups of volcanic mountains rise to 6500'-7500'.

2. Relief Type	Flat	Undulating (0)-200 m.	Hilly 200-1000 m.	Mountainous > 1000 m.	%
Sharply dissected					
Gently dissected	30			70	100
Incised					
Skeletonised					
%	30			70	100%

3. Special landscape features (list) Four of the separate areas are on hillsides with slopes 5-30%. One of the areas includes 50 acres of "sage-brush flat" and 65 acres gently sloping timberland.

10. Coastline of IBP Area* None

1. Protected bays and/or inlets Many ☐ Few ☐ None ☐

2. Substratum. % of coast

Rock	Boulder Beach	Shingle Beach	Sand Beach	Shell Beach	Mud	Coral	Ice
☐	☐	☐	☐	☐	☐	☐	☐

3. Physiography. % of coast

Cliffed	Sloping	Flat
☐	☐	☐

4. Special Coastal Features (list)

5. Tide. Maximum range (state units of measurement)

6. Total length of coastline :

Less than 1 km. ☐ 1-10 km. ☐ Above 10 km. ☐

11. Freshwater within IBP Area* None

1.

Permanent

Intermittent

General

Standing

Running

2. Standing Water

Permanent

Intermittent

Unproductive

Productive

Swamps

Ponds

Lakes

3. Running Water

Permanent

Intermittent

Springs, cold

Springs, hot

Streams

Rivers

4. Special freshwater features

12. Salt and Brackish Water within IBP Area* None

Salt Lakes

Lagoon

Estuaries

Salt pools

.....
.....

13. Adjacent Water Bodies (not within IBP Area*) None

1. Fresh

--

Lake

--

River

--

Stream

--

2. Salt and Brackish

Estuary	Salt lake	Salt pool	Lagoon	Ocean		

14. Outstanding Floral and Faunal Features

1. NoneX.....

2. Fauna

	Species diversity	Abundance of individuals	Superabundance of individuals	Rare species	Threatened/Relict species	Spp. of biogeographical interest	Exceptional Associations	Breeding or Nesting Populations	Migrating Populations	Wintering Populations		
Mammalia												
Aves												
Reptilia												
Amphibia												
Pisces												
Insecta												

3. Names of main threatened, endemic, relict and rare species

... (The area has been within California Game Refuge 1F for several
decades. No hunting of any kind permitted.)

.....

.....

.....

.....

.....

4. Flora

	Species diversity	Abundance of particular species	Rare species	Threatened/relict species	Spp. of biogeographical interest	Exceptional associations	Outstanding specimens				
Angiospermae :											
trees											
shrubs											
herbs											
grass											
Gymnospermae											
Pteridophyta											
Bryophyta											
Lichens and Algae											

5. Names of main threatened, endemic, relict and rare species

.....

.....

.....

15.

Exceptional Interest of IBP Area*

Includes timber growing sites of medium to low productivity in an area which may become of increasing importance to general timber supply because of improbability of development for homesite or recreational purposes.

.....

16. Significant Human Impact

1. General : None in entire IBP Area*

None in part of IBP Area*

Impact on entire IBP Area*X.....

2. Particular

	Past impact	Present impact	Trend			
			Increasing	Decreasing	No change	No information
Cultivation						
Drainage						
Other soil disturbance						
Grazing	X	X		X		
Selective flora disturbance						
Logging		X			X	
Plantation						
Hunting		see 14-3				
Removal of predators						
Pesticides						
Introductions — plants						
Introductions — animals						
Fire	X	X		X		
Permanent habitation						
Recreation and tourism						
Research						

3. Additional details on each type of impact attached?

YesX..... No

16. Significant Human Impact

3. Additional details on each type of impact:

Grazing. Historical records show that vast numbers of sheep grazed in the general area in the latter part of the nineteenth century and early part of the twentieth century. The abundant young growth appears to have become established very soon after sheep grazing was reduced or prohibited in parts of the region. Cattle grazing continues at a relatively fixed level.

Fire. Wild fires have been extinguished as policy since 1905. Because the ponderosa pine type expressed here is considered to be a fire-maintained subclimax, fire exclusion policy will probably continue to cause abundance of white fir and incense-cedar, both tolerant in their early years.

Logging. IBP areas are unlogged, undisturbed, but logging is gradually removing from all nearby areas the trees most susceptible to bark beetle attack (Dendroctonus-CERAMBYCIDAE). Beetle-caused mortality, especially to older trees, is therefore at a higher level in the IBP areas than when there was a vast expanse of uncut timber.

17. Conservation Status

	Protection			Utilisation			Conservation Management			Permitted Research		
	none	partial	total	none	controlled	uncontrolled	none	to alter status	to maintain status	experimental	observational	prohibited
Flora		X			X		X				X	
Fauna			X	X			X				X	
Non-living			X									

18. References

1. List major biological/geographical references for the IBP Area.

Sheet attached? Yes ...X..... No

2. List main maps available for the IBP Area.

List attached? Yes ...X..... No

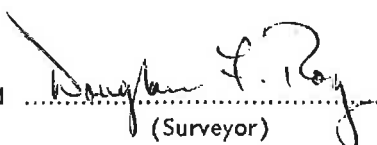
3. Aerial photographs for the IBP Area available?

For whole areaX..... For part of area None

19. Other Relevant Information

Dispersion of the 5 areas reduces probability that all could be eliminated in a holocaust-type fire. The experimental forest within which the areas are located receives the highest level of U.S. Forest Service fire protection.

Signed



(Surveyor)

18. References

1. Major biological/geographical reference:
Hallin, William E. 1959. The application of unit area control in the management of ponderosa-Jeffrey pine at Blacks Mountain Experimental Forest. USDA For. Serv. Tech. Bull. No. 1191, 96 p.
2. Main maps available:
 - a. U.S. Dept. of the Interior, Geological Survey:
 - (1) Harvey Mtn. quadrangle, California, Lassen County, 15 minute series (topographic), scale 1:62,500.
 - (2) Little Valley quadrangle, California, Lassen County, 15 minute series (topographic), scale 1:62,500.
 - b. U.S. Dept. of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station, 1615 Continental Street, Redding, California 96001.
 - (1) various maps prepared at scales of 8"=1 mile, 16"=1 mile, etc., showing boundaries, roads, topography, vegetation type.

Boundary of Blacks Mtn. Research Natural Area

BLACKS MOUNTAIN EXPERIMENTAL FOREST

PACIFIC SOUTHWEST
FOREST AND RANGE
EXPERIMENT STATION

FOREST SERVICE - U.S. DEPARTMENT OF AGRICULTURE

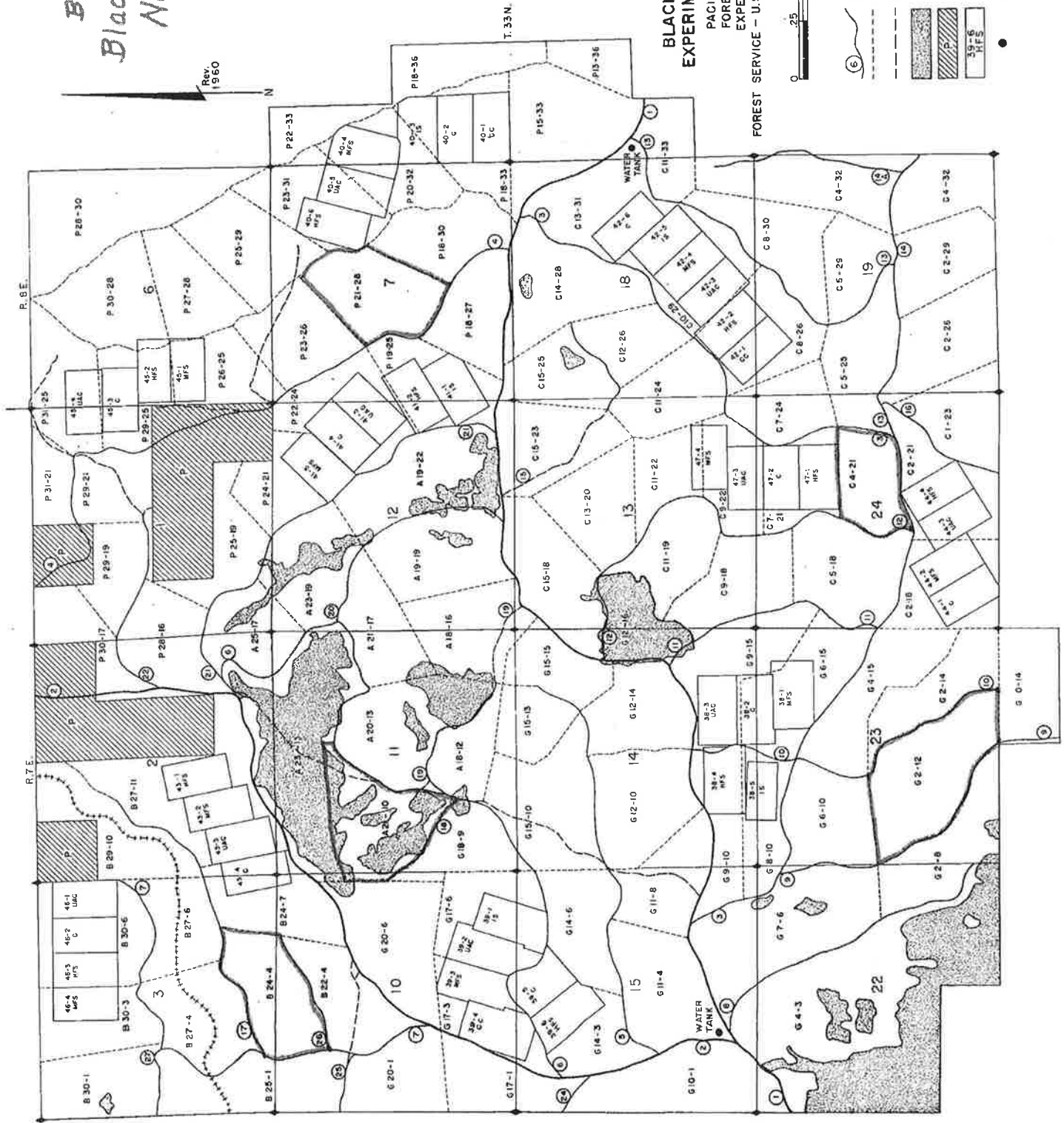
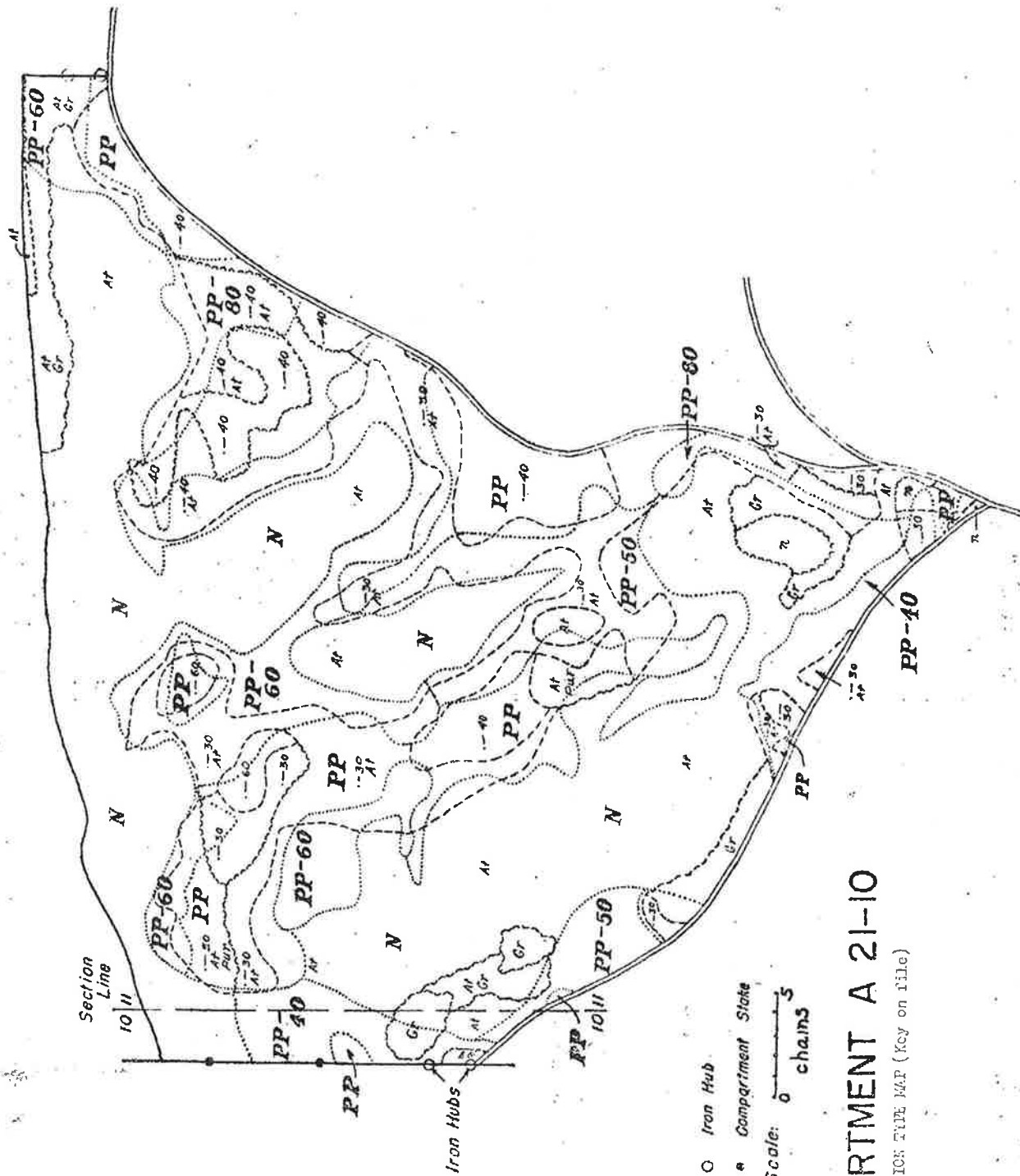


Table ---Monthly precipitation at Blacks Mountain Branch Station
September 1935 - August 1953

Season	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Total
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1935-36	-	1.37*	1.40*	1.89*	4.29*	3.68*	1.03*	.59*	1.10	1.13	.01	.01	16.57
1936-37	.60	.04	T	1.57	2.02	3.91	2.74	1.64	.49	1.04	.27	-	14.32
1937-38	T	2.15	4.68	5.29	2.01	6.97	4.29	1.65	.56	.32	1.32	-	29.24
1938-39	.65	1.39	.62	.28	1.27	.45	1.99	.28	.85	.27	.50	.54	9.09
1939-40	.09	1.31	.19	2.84	2.65	6.41	2.16	1.41	.73	.59	.05	.48	18.91
1940-41	1.89	1.53	2.15	4.14	2.15	4.28	.99	1.41	1.60	.39	.48	.27	21.28
1941-42	.05	.79	1.78	5.30	3.18	3.03	1.04	2.04	1.91	1.01	-	-	20.13
1942-43	.41	.43	2.09	1.63	3.39	1.70	3.90	.39	.35	1.72	.25	-	16.26
1943-44	T	.88	.57	.80	1.84	2.53	1.68	2.08	.38	2.70	.23	-	13.69
1944-45	.38	.84	3.40	1.40	.22	1.89	2.09	.78	3.64	2.34	.04	.33	17.35
1945-46	.03	3.19	2.15	2.67	1.49	2.24	1.91	-	.81	.30	.63	-	15.42
1946-47	.60	.57	2.81	.80	.60	.98	2.17	1.85	1.39	.76	-	.65	13.18
1947-48	.08	3.15	1.44	.55	1.63	1.07	5.07	3.77	4.66	2.39	-	.14	23.95
1948-49	.38	1.11	1.33	2.67	1.38	1.89	3.10	.91	2.26	.16	.01	1.17	16.37
1949-50	.47	.21	1.45	.69	4.17	1.83	3.26	1.99	1.80	1.41	-	-	17.20
1950-51	1.33	2.49	2.53	2.71	3.36	3.13	.55	1.59	.52	.50	-	.59	19.30
1951-52	.37	2.06	1.89	5.86	6.65	2.57	2.37	.70	.63	1.24	.52	-	24.86
1952-53	1.67	.14	2.02	4.50	3.15	.34	2.81	1.45	3.06	.72	-	.08	19.94
total	9.00	23.65	32.50	45.59	45.45	48.90	43.15	24.53	26.74	18.99	4.31	4.26	327.07
18-yr. mean	.50	1.31	1.81	2.53	2.52	2.72	2.40	1.36	1.49 1.73	1.06	.24	.24	18.17

* Interpolated from Susanville record.

RS
M-1
BM.E.F.

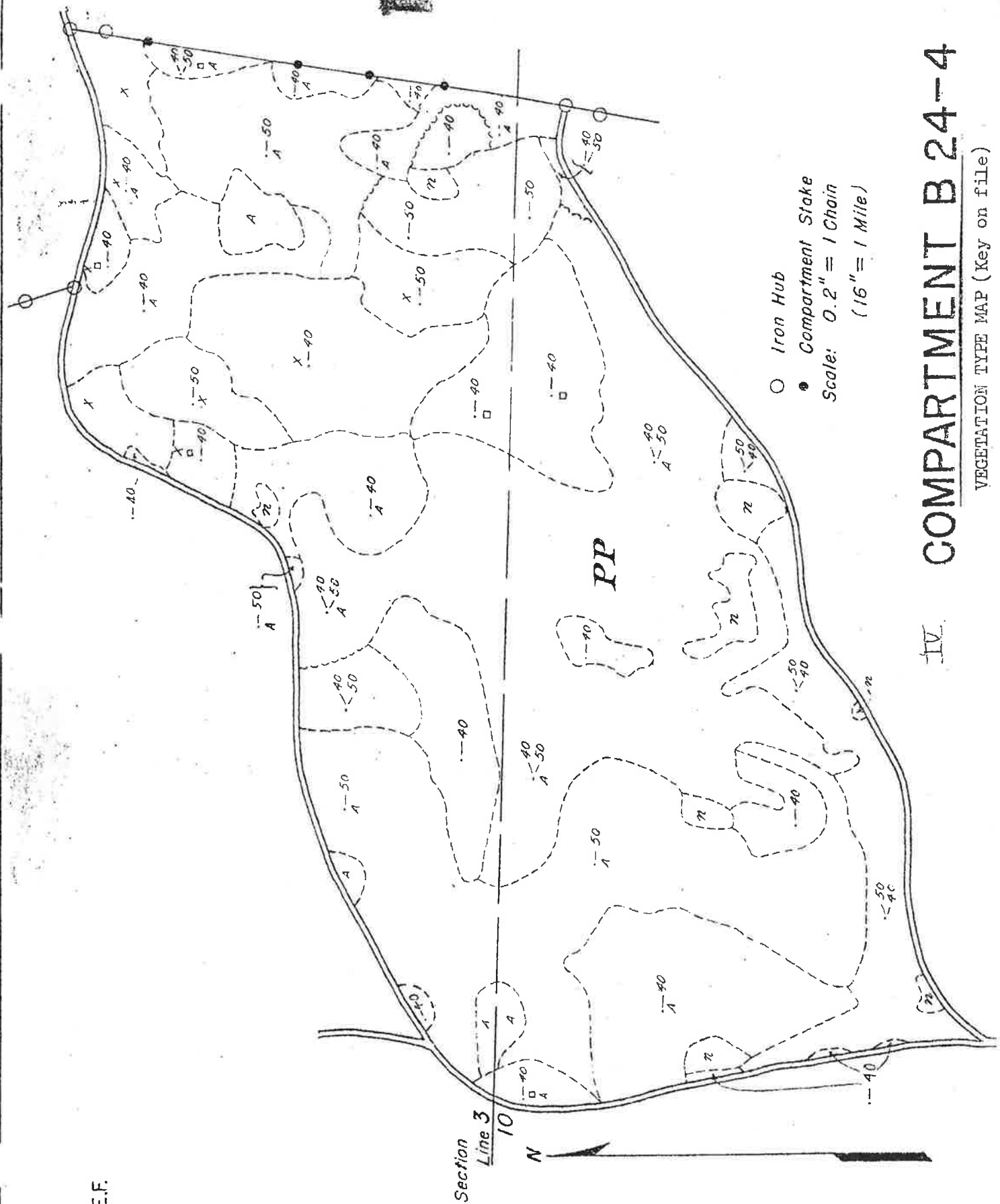


○ Iron Hub
• Compartment Stake
Scale: 0 chains 5

COMPARTMENT A 21-10

VEGETATION TYPE MAP (Key on file)

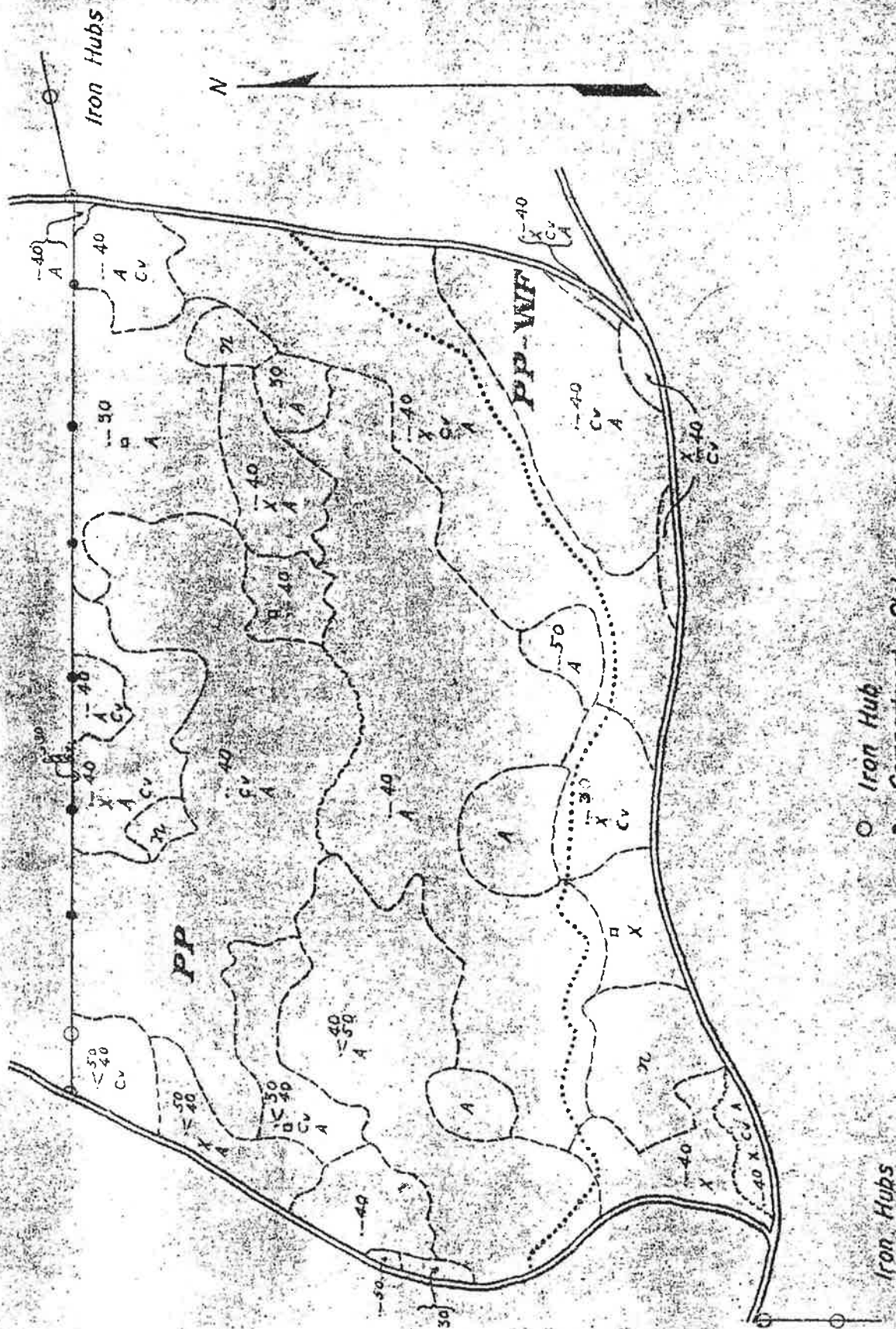
RS
M-1
B.M.E.F.



COMPARTMENT B 24-4

VEGETATION TYPE MAP (Key on file)

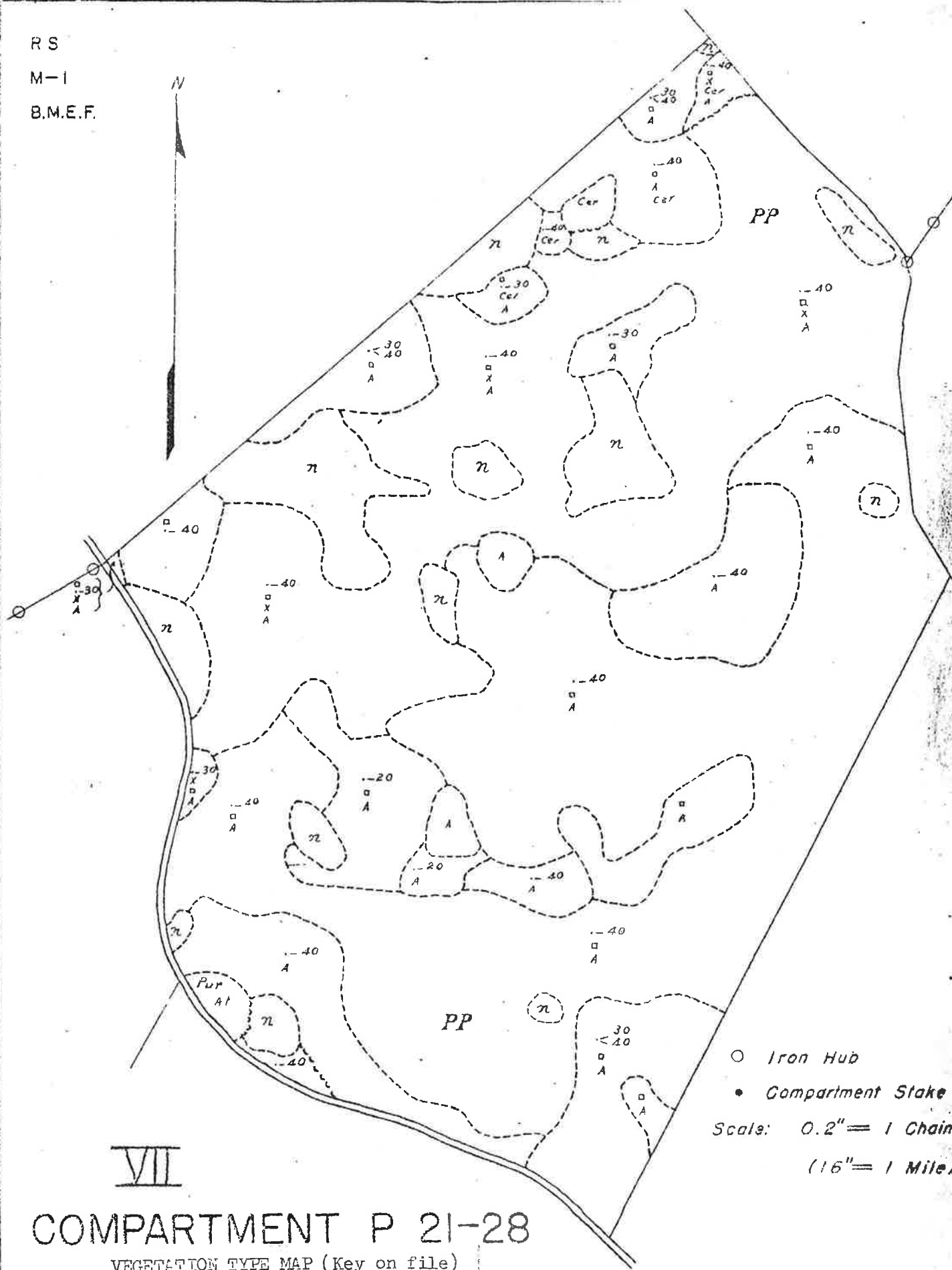
RS
M-1
S.M.E.F.



V COMPARTMENT C 4-21

VEGETATION TYPE MAP (Key on file)

RS
M-1
B.M.E.F.



COMPARTMENT P 21-28

VEGETATION TYPE MAP (Key on file)

NAT. AREA NOMINATION FORM

Instructions: Complete and forward to Committee along with a sketch type map of the area and a location map (highway map) indicating general location of proposed area. Information on past ownership and management, scientific or educational use, hydrologic features, rare plants or animals or other pertinent facts should be included. Please type. Photos, if available, will be welcomed.

Name of Proposed Natural Area: Blacks Mountain Natural Area

Location: State: California County: Lassen Total Area: 521.1 Acres

Nearest Town and Distance: Susanville 45
Name Miles

Agency/Owner: USDA Forest Service

Administrative Unit: Lassen National Forest
Natl. Forest, Natl. Park, Wildlife Refuge, State, Univ., etc.

Address: 707 Nevada Street, Susanville, CA 96130

Permanence Afforded How: 36 CFR 251.23
Laws, Regulation, Will, Endowment, Letter of Agreement, etc.

Primary Forest Type:

SAF: 237 Interior Ponderosa Pine 470.9 Acres
Type Number Type Name Type Area

Dominant Trees: D.B.H. 4-72" Hgt. Age

Other Important Types or Vegetation:

	Dominant Trees:	Name	D.B.H.	Hgt.	Age	Area
SAF Type, Number and Name:	<u>Sagebrush</u>					<u>50.2</u> acres

Barren, Water, Buffer Zone, etc: None Acres
Area and Nature

Description of Vegetation and Other Distinguishing Characteristics:
Virgin interior ponderosa on each of five tracts--range in diameter due to shallowing of soil.

Elevation: 5600-7000 Feet Topography: Rolling slopes 20-30 percent
Range and Average Level, Rolling, Steep, etc.

Geology and Soils Basaltic lava soils
Alluvial, Volcanic, Moraine, Podsol, Serpentine, Etc.

7/19/64

Justification Briefly outline why this tract should be designed an SAF natural area:

The area is in Lassen National Forest's unallocated timber component, so removal of the area from production will not effect harvesting practices in the surrounding region. This is the only area of virgin interior ponderosa pine type within National Forests in California suitable for research. Future research will include studies of the effects of bark beetles in the area.

Submitted by: Russell M. Burns Title: RNA Coordinator Forest Service Date: _____

Mailing Address: USDA Forest Service
P.O. Box 2417
Washington, D.C. 20013

Approved: _____
Section Natural Area Chairman or
Natural Area Liaison Officer

Approved for Listing in Register of SAF Natural Areas: _____
Chairman, Committee on Natural Areas Date

Committee on Natural Areas, Society of American Foresters,
5400 Grosvenor Lane, Washington, D.C. 20014