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TABLES for the Soil-Vegetation
Map
Northeast Quarter of the
WEAVERVILLE QUADRANGLE (24C-1)

Shasta and Trinity Counties,
California

Chester O. Stone, et al
United States Forest Service
Pacific Southwest Forest and
Range Experiment Station
1975

PACIFIC SOUTHWEST Forest and Range Experiment Station

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TABLES

for the Soil-Vegetation Map

**Northeast Quarter of the
WEAVERVILLE QUADRANGLE (24C-1)
Shasta and Trinity Counties, California**

Chester O. Stone James I. Mallory W. Robert Powell

Published in cooperation
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FOREWORD

The Soil-Vegetation maps were prepared by the California State Cooperative Soil-Vegetation Survey, a research unit of the Pacific Southwest Forest and Range Experiment Station, headquartered at Berkeley, California.

For information about the symbols used in the maps and an explanation of the tables that accompany the maps, consult USDA Forest Service Resource Bulletin PSW-13, *Soil-Vegetation Maps of California*. For a copy, write to:

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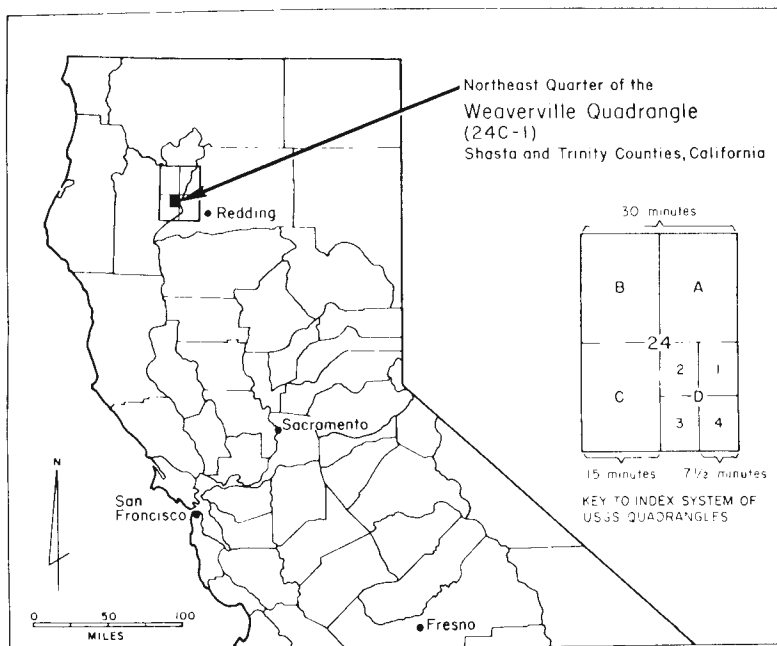


Table 1 --Soil symbols and some general characteristics of soil series mapped

Soil series symbol	Soil series name	Depth : range (inches)	Color of surface/subsoil	Texture of surface/subsoil	Reaction of surface/subsoil	Parent material	Relief and slope classes mapped
112	Barron 1/68	60 or more	Grayish brown and very pale brown/very pale brown	Coarse sandy loam/coarse sandy loam	Moderately acid/moderately acid	Granitic alluvium	Nearly level to rolling (1)
200	2/						
200W	2/						
400	2/						
700	2/						
7118	Boomer 3/71	40-80	Light brown/red	Sandy clay loam/gravelly clay loam	Moderately acid/moderately acid	Greenstone	Nearly level to very steep (1,2)
7118i	Boomer (intrusive) 3/71	40-80	Light brown/red	Sandy clay loam/gravelly clay loam	Moderately acid/moderately acid	Gabbro or diorite	Nearly level to very steep (1,2)
7118L	Boomer (landslide) 3/71	40-80	Light brown/red	Sandy clay loam/gravelly clay loam	Moderately acid/moderately acid	Basic igneous landslide debris	Nearly level to very steep (1,2,3)
7118n	Boomer (gneiss) 3/71	40-80	Light brown/red	Sandy clay loam/gravelly clay loam	Moderately acid/moderately acid	Gneiss	Nearly level to very steep (1,2)
7121M	Corbett (taxadjunct) 4/	20-40	Light brownish gray/white	Loamy coarse sand/loamy coarse sand	Slightly and moderately acid/slightly acid	Decomposed granitic rock	Very steep (3,4)
7125V2	Tish Tang variant 2 5/	20-40	Pale brown/very pale brown	Gravelly loam/loam	Moderately acid/strongly acid	Diorite porphyry	Steep to very steep (2,3)
7129	Chawanakee 4/73	12-20	Grayish brown/very pale brown	Coarse sandy loam/coarse sandy loam	Moderately acid/moderately acid	Decomposed granitic rock	Rolling to hilly and steep (2,3,4)
7132	Stump Springs 2/57	40-80	Grayish brown/light yellowish brown	Sandy loam/heavy sandy clay loam	Slightly acid/moderately acid	Decomposed granitic rock	Gently sloping to steep (2)
7132n	Stump Springs (gneiss) 2/57	40-80	Grayish brown/light yellowish brown	Sandy loam/heavy sandy clay loam	Slightly acid/moderately acid	Gneiss	Gently sloping to steep (2)
7132V	Stump Springs variant 6/	40-80	Brown and pale brown/light yellowish brown	Coarse sandy loam/sandy clay loam	Moderately acid/strongly acid	Decomposed granitic rock	Gently sloping to steep (1,2,3)
7153	Englebright 6/69	20-40	Dark brown or reddish brown/yellowish red	Loam/cobbly clay loam	Slightly or moderately acid/moderately acid	Gabbro or diorite	Gently sloping to steep (3)
7153k	Englebright (greenstone) 6/69	20-40	Dark brown or reddish brown/yellowish red	Loam/cobbly clay loam	Slightly or moderately acid/moderately acid	Greenstone	Gently sloping to steep (3)
7153n	Englebright (gneiss) 6/69	20-40	Dark brown or reddish brown/yellowish red	Loam/cobbly clay loam	Slightly or moderately acid/moderately acid	Gneiss	Gently sloping to steep (3)
7154	Hotaw 3/71	20-40	Grayish brown/light brown	Coarse sandy loam/sandy clay loam	Slightly acid/strongly acid	Decomposed granitic rock	Moderately sloping to steep (1,2,3)
7154n	Hotaw (gneiss) 3/71	20-40	Grayish brown/light brown	Sandy loam/sandy clay loam	Slightly acid/strongly acid	Gneiss	Moderately sloping to steep (3)
7158	Chaix 3/71	20-40	Grayish brown and brown/light yellowish brown	Coarse sandy loam/coarse sandy loam	Moderately acid/strongly acid	Decomposed granitic rock	Rolling to steep (2,3)

Table 1 (continued)

Soil series symbol	Soil series name	Depth range (inches)	Color of surface/subsoil	Texture of surface/subsoil	Reaction of surface/subsoil	Parent material	Relief and slope classes mapped
716	Holland 3/71	50-100	Dark grayish brown and light brown/reddish brown and light brown	Loam/clay loam and sandy clay loam	Moderately and slightly acid/moderately acid	Decomposed granitic rock	Moderately sloping to very steep (1)
7167	Hoda 3/71	40-80	Brown/yellowish red	Sandy loam/clay	Moderately acid/strongly and very strongly acid	Decomposed granitic rock	Gently sloping to very steep (2,3)
7167V	Hoda variant 7/	40-50+	Pale brown/strong brown	Silt loam/silty clay	Moderately acid/moderately acid	Decomposed granitic rock	Gently sloping to very steep (2,3)
719	Siskiyou 11/72	20-40	Very dark grayish brown/yellowish brown	Gravelly sandy loam/coarse sandy loam and loamy coarse sand	Moderately acid/moderately acid	Decomposed granitic rock	Moderately steep to very steep (2,3)
726	Dubakella 3/71	14-28	Reddish brown/yellowish brown	Stony loam and stony light clay loam/very gravelly clay	Neutral/neutral	Serpentine	Sloping to steep
726L	Dubakella (landslide) 3/3/71	14-28	Reddish brown/yellowish brown	Stony loam and stony light clay loam/very gravelly clay	Neutral/neutral	Serpentine-aceous landslide breccia	Sloping to steep (2)
728	Neuns 2/66	20-40	Dark brown/yellowish brown	Gravelly sandy loam/gravelly sandy clay loam	Moderately acid/strongly acid	Greenstone	Hilly to very steep (2,3)
728i	Neuns (intrusive) 2/66	20-40	Dark brown/yellowish brown	Gravelly sandy loam/gravelly sandy clay loam	Moderately acid/strongly acid	Gabbro or diorite	Hilly to very steep (1,2,3)
728iL	Neuns (intrusive, landslide) 3/2/66	20-40	Dark brown/yellowish brown	Gravelly sandy loam/gravelly sandy clay loam	Moderately acid/strongly acid	Landslide of gabbroic or dioritic material	Hilly to very steep (1,2,3)
728L	Neuns (landslide) 3/2/66	20-40	Dark brown/yellowish brown	Gravelly sandy loam/gravelly sandy clay loam	Moderately acid/strongly acid	Landslide of greenstone materials	Hilly to very steep (1,2,3)
728m	Neuns (schist) 2/66	20-40	Dark brown/yellowish brown	Gravelly sandy loam/gravelly sandy clay loam	Moderately acid/strongly acid	Schist	Hilly to very steep (3)
728n	Neuns (gneiss) 2/66	20-40	Dark brown/yellowish brown	Gravelly sandy loam/gravelly sandy clay loam	Moderately acid/strongly acid	Gneiss	Hilly to very steep (2,3,4)
7325V	Miramar variant 8/	10-30+	Brown to dark brown/brown	Silty clay loam/heavy clay loam	Slightly acid/neutral	Gneiss	Very steep (3)
771	Henneke 8/72	12-20	Brown/brown	Gravelly loam/very gravelly clay loam	Slightly acid/neutral	Serpentine	Rolling to steep (2)
771L	Henneke (landslide) 3/8/72	12-60+	Brown/brown	Gravelly loam/very gravelly clay loam	Slightly acid/neutral	Serpentine-aceous landslide breccia	Steep and undulating (1,2,3)
781	Goulding 7/66	8-25	Brown/brown	Gravelly loam/very gravelly loam	Slightly acid/slightly acid	Greenstone	Steep to very steep (2,3,4)
781i	Goulding (intrusive) 7/66	8-25	Brown/brown	Gravelly loam/very gravelly loam	Slightly acid/slightly acid	Gabbro or diorite	Steep to very steep (1,2,3)
781n	Goulding (gneiss) 7/66	8-25	Brown/brown	Gravelly loam/very gravelly loam	Slightly acid/slightly acid	Gneiss	Steep to very steep (3,4)

Table 1 (continued)

Soil series symbol	Soil series name	Depth : range (inches)	Color of surface/subsoil	Texture of surface/subsoil	Reaction of surface/subsoil	Parent material	Relief and slope classes mapped ¹
811	Marpa 1/68	20-40	Brown/light brown	Very gravelly heavy loam/ very gravelly clay loam	Slightly acid/ strongly acid	Shale and sandstone	Steep to very steep (2,3)
811m	Marpa (schist) 1/68	20-40	Brown/light brown	Very gravelly heavy loam/ very gravelly clay loam	Slightly acid/ strongly acid	Schist	Steep to very steep (2,3)
812	Hugo 2/66	30-60+	Pale brown/ pale brown	Gravelly sandy clay loam/ gravelly clay loam	Moderately acid/ strongly acid	Hard sedimentary rock	Steep to extremely steep (2,3)
812n	Hugo (gneiss) 2/66	30-60+	Pale brown/ pale brown	Gravelly sandy clay loam/ gravelly clay loam	Moderately acid/ strongly acid	Gneiss	Steep to extremely steep (2,3)
8121	Madonna 3/72	20-40	Pale brown/ brown	Loam/loam	Moderately acid/ moderately acid	Sandstone and shale	Rolling to very steep (2,3,4)
8121m	Madonna (schist) 3/72	20-40	Pale brown/ brown	Loam/loam	Moderately acid/ moderately acid	Schist	Rolling to very steep (2,3,4)
815	Josephine taxadjunct ₉ / 9/63	40-60	Brown to reddish brown/strong brown to yellowish red	Loam/clay loam	Moderately acid/ moderately to strongly acid	Sandstone and shale	Hilly to very steep (1,2,3)
815L	Josephine taxadjunct (landslide) ₉ / 9/63	40-60	Brown to reddish brown/strong brown to yellowish red	Loam/clay loam	Moderately acid/ moderately to strongly acid	Sedimentary rock landslide breccia	Hilly to very steep (1,3)
815m	Josephine taxadjunct (schist) ₉ / 9/63	40-60	Brown to reddish brown/strong brown to yellowish red	Loam/clay loam	Moderately acid/ moderately to strongly acid	Schist	Moderately steep to very steep (1,2,3,4)
815n	Josephine taxadjunct (gneiss) 9/63	40-60	Brown to reddish brown/strong brown to yellowish red	Loam/clay loam	Moderately acid/ moderately to strongly acid	Gneiss	Hilly to very steep (2,3)
815V2	Josephine variant 2 ₁₀ / 10/63	40-80	Grayish brown and brown/brown	Loam and silt loam/clay	Slightly acid/ moderately acid	Shale	Steep
819m	Tatu (schist)	20-40	Dark brown/ brown	Gravelly coarse sandy loam/ very gravelly coarse sandy loam	Slightly acid/ moderately acid	Schist	Steep to very steep (3,4)
820	Sheetiron 3/72	20-40	Dark grayish brown and pale brown/pale brown	Gravelly loam/ very gravelly heavy loam	Moderately and strongly acid/ strongly acid	Micaceous schist	Hilly to very steep (2,3,4)
820S	Sheetiron taxadjunct ₁₁ / 3/72	20-40	Dark grayish brown and pale brown/pale brown	Gravelly loam/ very gravelly heavy loam	Moderately and strongly acid/ strongly acid	Sandstone shale and schist	Hilly to very steep (2,3)
847	Laughlin 10/73	20-40	Brown/brown	Loam/loam	Moderately acid/ strongly acid	Sandstone and shale	Strongly sloping to very steep (4)
871	Los Gatos 2/71	24-40	Brown/brown and yellowish red	Light clay loam/ gravelly clay loam	Slightly acid/ moderately acid	Sandstone and shale	Steep to very steep (2)
871m	Los Gatos (schist) 12/48	12-36	Brown/reddish brown	Clay loam/clay loam	Slightly acid/ slightly acid	Schist	Gently sloping to very steep (3)

Table 1 (continued)

Soil series symbol	Soil series name	Depth : range (inches)	Color of surface/subsoil	Texture of surface/subsoil	Reaction of surface/subsoil	Parent material	Relief and slope classes mapped ^{1/}
872	Maymen 3/71	10-20	Brown/light yellowish brown	Gravelly sandy loam/gravelly loam	Moderately acid/strongly acid	Sandstone and shale	Rolling to very steep (2,3)
872m	Maymen (schist) 3/71	10-20	Brown/light yellowish brown	Gravelly sandy loam/gravelly loam	Moderately acid/strongly acid	Schist	Hilly to very steep (3)
874	Etsel 12/71	4-14	Light yellowish brown/	Gravelly loam/	Slightly and moderately acid/	Sandstone shale and schist	Steep to very steep (2,3,4)
9115	Weaverville	60+	Reddish brown and yellowish red/red and yellowish red	Loam/clay and sandy clay	Slightly acid/strongly acid	Weakly consolidated conglomerate	Gently sloping to very steep (1,2,3)
929	Musser	20-50	Brown/dark reddish brown and red	Gravelly loam/heavy clay loam or clay	Slightly acid/moderately acid	Weakly consolidated conglomerate	Gently sloping to very steep (1,2,3)
936	Kilarc 3/67	25-44	Grayish brown/light brownish gray and pale brown	Loam and clay loam/clay	Slightly acid/extremely acid	Weakly cemented sandstone	Gently sloping to steep (2)

1/ Slope class symbolPercent slope

1	0-30
2	30-50
3	50-70
4	70 and greater

2/ Unclassified soils and miscellaneous land types mapped are:Symbol

200	Alluvial land (secondary soils on bottomlands)
400	Small areas of soils on terraces and benches
700(AK)	Colluvial land of acid igneous rock materials
700(BK)	Colluvial land of basic igneous rock materials
700(BK)R	Colluvial land of basic igneous rock materials with 10-50 percent rock outcrop or surface rock
700(BO)	Rock outcrop (90-100 percent rockiness) of basic igneous rock material
700(CK)	Colluvial land of sedimentary rock material
700(CK)O	Colluvial land of sedimentary rock material with 10-50 percent rock outcrop
700(CO)	Rock outcrop (90-100 percent rockiness) of sedimentary rock material
700(DH)	Tailings (hydraulic or dredger) of mixed or undetermined rock materials
700(DK)	Colluvial land of mixed or undetermined rock materials
700(DK)R	Colluvial land of mixed or undetermined rock materials with 10-50 percent rock outcrop or surface rock
700(DS)	Landslide of mixed or undetermined rock materials
700(DP)	Placer diggings, mine dumps or pits of mixed or undetermined rock materials
700(DW)	Riverwash, beaches, and dune lands of mixed or undetermined rock materials
700(MK)	Colluvial land of schistose rock materials
700(UK)R	Colluvial land of ultrabasic rock materials with 10-50 percent rock outcrop or surface rock
700(UT)	Talus (rubble land) of ultrabasic rock materials

3/ The soil is formed on material that has undergone mass movement.

4/ Corbett taxadjunct soils differ from the Corbett series primarily in having mean annual soil temperatures between 47°F. and 59°F. rather than less than 47°F.

5/ Tish Tang variant 2 soils differ from the Tish Tang series primarily in having between 20 and 40 inches of soil over hard rock rather than more than 60 inches.

6/ Stump Springs variant soils differ from the Stump Springs series primarily in being less leached therefore having a base saturation in the subsoil greater than 75 percent rather than between 35 and 75 percent.

7/ Hoda variant soils differ from the Hoda series primarily in having strong brown silty clay subsoils rather than yellowish red clay subsoils.

8/ Miramar variant soils differ from the Miramar series primarily in having silty clay loam and heavy clay loam textures in the surface and subsoil respectively rather than coarse sandy loam and coarse sandy clay loam.

9/ Josephine taxadjunct soils differ from the Josephine series primarily in having a base saturation in the subsoil between 35 and 75 percent rather than less than 35 percent.

10/ Josephine variant 2 soils are present (see plot 4) but not extensive enough to map. They differ from the Josephine series primarily in having clay textured subsoils rather than clay loam.

11/ Sheetiron taxadjunct soils differ from the Sheetiron series primarily in having less than 40 percent by weight of mica in the soil rather than more than 40 percent.

Table 2 --Soil symbols and phases with selected behavior characteristics and productivity estimates

Map symbol	Soil series name	Soil phase symbols ^{1/}	Permeability ^{2/}	General drainage ^{3/}	Erosion hazard ^{4/}	Hydrologic soil group ^{5/}	Estimated suitability for Timber production ^{6/}	Extensive range use ^{7/}
112	Barron	5	Rapid	Somewhat excessive	High ^{10/}	B	Medium to high	Low to medium
200	<u>8/</u>		Rapid	Well ^{9/}	Slight ^{10/}	B	Unsuited	Medium
200W	<u>8/</u>		Rapid	Imperfect ^{9/}	Moderate ^{10/}	B/D	Unsuited	High
400	<u>8/</u>		Slow to moderate	Well	Slight ^{10/}	B-D	Unsuited to high	Medium
700	<u>8/</u>		Rapid to impermeable	Excessive to well	Slight to very high	A-D	Unsuited to medium	Unsuited to low
7118	Boomer	4,4S	Moderately slow	Well	Moderate	B	Medium	Low to medium
7118i	Boomer (intrusive)	4S	Moderately slow	Well	Moderate	B	Medium	Low to medium
7118L	Boomer (landslide)	4S,5S	Moderately slow	Imperfect	High ^{12/}	C	Medium	Low
7118n	Boomer (gneiss)	4S,5	Moderately slow	Well	Moderate	B	Medium	Low to medium
7121M	Corbett taxadjunct	2,2E	Rapid	Excessive	Very high ^{11/}	B	Low to medium	Unsuited ^{11/}
7125V2	Tish Tang variant 2	2,2S,3	Moderate	Well	Moderate	B	Low to medium	Very low
7125V2	Tish Tang variant 2	2E	Moderate	Well	High ^{11/}	C	Low	Unsuited ^{11/}
7129	Chawanakee	2	Moderately rapid	Somewhat excessive	High	C	Medium	Very low
7129	Chawanakee	2E	Moderately rapid	Somewhat excessive	Very high ^{11/}	C	Low to medium	Unsuited ^{11/}
7132	Stump Springs	4	Slow	Well	High to very high	B	Medium	Low
7132n	Stump Springs (gneiss)	5	Slow	Well	High to very high	B	Medium	Medium
7132V	Stump Springs variant	3,4	Slow	Well	High to very high	B	Medium	Medium to low
7153	Englebright	3S	Moderately slow	Well	High ^{11/}	C	Medium	Low ^{11/}
7153k	Englebright (greenstone)	3S	Moderately slow	Well	High ^{11/}	C	Medium	Low ^{11/}
7153n	Englebright (gneiss)	3	Moderately slow	Well	High ^{11/}	C	Medium	Low ^{11/}
7154	Hotaw	3,3S	Moderately slow	Well	High	C	Medium	Low
7154n	Hotaw (gneiss)	3	Moderately slow	Well	High ^{11/}	C	Medium	Low ^{11/}

Table 2 (continued)

Map symbol	Soil series name	Soil phase symbols ^{1/}	Permeability ^{2/}	General drainage ^{3/}	Erosion hazard ^{4/}	Hydrologic soil group ^{5/}	Estimated timber production ^{6/}	Estimated suitability for extensive range use ^{7/}
7158	Chaix	3,4	Moderately rapid	Well or somewhat excessive	High	B	Medium to high	Low
716	Holland	5	Moderately slow	Well	Moderate ^{10/}	B	Medium to high	Medium
7167	Hoda	4,5	Slow	Well	High	D	Medium	Low to medium
7167V	Hoda variant	3,4	Moderate	Moderate	High	D	Medium	Low
719	Siskiyou	3	Moderately rapid	Somewhat excessive	High	B	Medium	Low
726	Dubakella	2R,2S	Slow	Well	Moderate	C	Low	Low to very low
726L	Dubakella (landslide)	2S,3S	Slow	Well	Moderate ^{12/}	C	Medium	Low to very low
728	Neuns	2S	Moderate	Somewhat excessive	Moderate	B	Medium to low	Low
728	Neuns	3,3S	Moderate	Somewhat excessive	Moderate	B	Medium	Low
728i	Neuns (intrusive)	2S	Moderate	Somewhat excessive	Moderate	B	Medium to low	Low
728i	Neuns (intrusive)	3S	Moderate	Somewhat excessive	Moderate	B	Medium to high	Low
728L	Neuns (landslide)	2S	Moderate	Well	High ^{12/}	C	Low	Low ^{11/}
728L	Neuns (landslide)	3S	Moderate	Well	High ^{12/}	C	Medium	Low
728m	Neuns (schist)	2S	Moderate	Somewhat excessive	Moderate ^{11/}	B	Medium	Low ^{11/}
728m	Neuns (schist)	3S	Moderate	Somewhat excessive	Moderate to high ^{11/}	B	Medium to high	Low ^{11/}
728n	Neuns (gneiss)	2S,3,3S	Moderate	Somewhat excessive	Moderate	B	Medium	Low
7325V	Miramar variant	3	Moderate	Moderate	High ^{11/}	C	Unsuited	Low ^{11/}
771	Henneke	2R	Moderately slow	Well to excessive	Moderate	D	Unsuited	Very low
771L	Henneke (landslide)	2R,3,3R1	Moderately slow	Well	Moderate to high ^{12/}	D	Unsuited	Low
781	Goulding	1S	Moderate	Excessive	Moderate to high	D	Unsuited	Very low
781	Goulding	2S,3S	Moderately rapid to moderate	Well to somewhat excessive	Moderate to high	D	Unsuited	Low to medium
781	Goulding	2SE	Moderate	Well to somewhat excessive	Very high ^{11/}	D	Unsuited	Unsuited ^{11/}
781i	Goulding (intrusive)	1S,2S	Moderately rapid to moderate	Well to somewhat excessive	Moderate	D	Unsuited	Low
781n	Goulding (gneiss)	2S	Moderately rapid to moderate	Well to somewhat excessive	High ^{11/}	D	Unsuited	Low ^{11/}

Table 2 (continued)

Map symbol	Soil series name	Soil phase symbols ^{1/}	Permeability	General drainage ^{2/}	Erosion hazard ^{3/}	Hydrologic soil group ^{4/}	Estimated timber production ^{5/}	Estimated suitability for extensive range use ^{6/}
811	Marpa	2S	Moderate	Well	Moderate	B	Low to medium	Low
811	Marpa	3S,4S	Moderate	Well	Moderate	B	Medium	Low to medium
811m	Marpa (schist)	3S,4S	Moderate	Well	Moderate	B	Medium	Low to medium
812	Hugo	4,4S,5S	Moderately rapid	Well	Moderate	B	High	Low
812n	Hugo (gneiss)	4,4S,5	Moderately rapid	Well	Moderate	B	High	Low
8121	Madonna	2S	Moderate	Well	High ^{11/}	C	Medium to low	Low ^{11/}
8121	Madonna	3,3S	Moderate	Well	Moderate	C	Medium to high	Medium to low
8121m	Madonna (schist)	2S,3S	Moderate	Well	Moderate	C	Medium	Low to medium
815	Josephine taxadjunct	4,4S	Moderately slow	Well	Moderate	B	Medium	Low to medium
815L	Josephine taxadjunct (landslide)	5,5S	Moderately slow	Well	High ^{12/}	B	Medium	Low
815m	Josephine taxadjunct (schist)	4S,5	Moderately slow	Well	Moderate	B	Medium to high	Low to medium
815n	Josephine taxadjunct (gneiss)	4,5	Moderately slow	Well	Moderate	B	Medium	Low to medium
815V2	Josephine variant 2	4	Slow	Well	Moderate	C	Medium	Low to medium
819m	Tatu (schist)	3S	Moderate to rapid	Well	Moderate to high ^{11/}	C	Low to medium	Low to medium ^{11/}
820	Sheetiron	2S,3S	Moderate	Well	Moderate	B	Medium	Low to medium
820S	Sheetiron taxadjunct	2S	Moderate	Well	Moderate	B	Low to medium	Low to medium
820S	Sheetiron taxadjunct	3S	Moderate	Well	High ^{11/}	B	Medium	Low ^{11/}
847	Laughlin	2S	Moderate	Well	Moderate	B	Unsuited	Low
871	Los Gatos	3S	Moderate to moderately slow	Well	Moderate	B	Unsuited	Low
871m	Los Gatos (schist)	2S	Moderate to moderately slow	Well to excessive	High ^{11/}	C	Unsuited	Very low ^{11/}
872	Maymen	1S,2S	Moderate or moderately rapid	Well or somewhat excessive	High	D	Unsuited	Very low
872m	Maymen (schist)	2S	Moderate or moderately rapid	Well or somewhat excessive	High ^{11/}	D	Unsuited	Very low ^{11/}
874	Etsel	1S	Moderate	Somewhat excessive	High	D	Unsuited	Very low
874	Etsel	1SE	Moderate	Somewhat excessive	High	D	Unsuited	Unsuited
9115	Weaverville	4S,5,5S	Slow	Well	Moderate	B	Medium	Low to medium

Table 2 (continued)

Map symbol	Soil series name	Soil phase symbols ^{1/}	Permeability ^{2/}	General drainage ^{3/}	Erosion hazard ^{4/}	Hydrologic soil group ^{5/}	Estimated suitabilities for Timber production ^{6/}	Extensive range use ^{7/}
9115	Weaverville	4E	Slow	Well	High	C	Medium	Unsuited
929	Musser	2E	Slow	Well	High	D	Low to unsuited	Unsuited
929	Musser	2S	Slow	Well	Moderate	D	Low to medium	Medium to low
929	Musser	3S,4S	Slow	Well	Moderate	D	Medium	Medium to low
936	Kilarc	4S	Slow	Moderately well	Moderate	D	Low	Medium

^{1/} Phase symbols listed here are:

Symbol	Depth class	Depth (feet)	Symbol	Surface rock (percent)	Symbol	Stoniness	Symbol	Erosion
1	Very shallow	<1	R	10-50	S	Coarse fragments in the soil (gravel, cobbles, or stones) making up 20 percent or more of the soil's volume	E	Severe
2	Shallow	1-2	R1	2-10				
3	Moderately shallow	2-3						
4	Moderately deep	3-4						
5	Deep	>4						

^{2/} Permeability: rate of water movement through the soil profile. Relative terms used, based on the least permeable layer within or directly beneath the soil after prolonged wetting (at saturated conditions) are: slow, moderately slow, moderate, moderately rapid, rapid.

^{3/} General drainage: rate and extent of removal of water from the soil, both by runoff and by percolation. Relative terms used are: excessive, somewhat excessive, well, moderately well, somewhat poor, poor.

^{4/} Erosion hazard: probable susceptibility of a soil to surface erosion on a 30 to 50 percent slope (slope class 2) when all vegetation cover including litter is removed. Relative terms used are: slight, moderate, high, very high.

^{5/} Hydrologic group: classification of soils into four groups, A through D, are based on estimate of intake of water and runoff potential after the profile is thoroughly wetted and has had opportunity to swell. The soil surface is assumed to be undisturbed and without vegetation or litter. The grouping is tentative and subject to change as additional data are gathered. The four groups from lowest to highest runoff potential are:

Group A--Low runoff potential. Soils are deep (greater than 36 inches {90cm}) and have a high infiltration rate and a high rate of water transmission through the profile. They are well or excessively drained and consist chiefly of sand and gravel, or both.

Group B--Soils of moderately low runoff potential. Soils are moderately deep to deep (20 to 60 inches {50-150cm}) and have a moderate rate of infiltration and water transmission through the soil profile. They are well to moderately well-drained, and are medium to moderately coarse-textured.

Group C--Moderately high runoff potential. Soils are shallow to moderately deep (10 to 36 inches {25-90cm}), or deep (greater than 36 inches) containing greater amounts of clay than groups A and B, or soils underlain by a slowly permeable layer at moderate depth (20 to 40 inches {50-100cm}) such as hard bedrock, hardpans, or a dense clay horizon. They have a slow infiltration and water transmission rate and are moderately fine or fine-textured.

Dual ratings are given in some cases. These are for soils with areas that have been drained or for soils that, because of variable depth or drainage class, may vary in hydrologic group. In the first case the rating is shown as X/Y, with the first rating for the drained phase of the series. The second case is indicated by a hyphen, as X-Y.

^{6/} Estimated suitability for commercial timber production: based on predominant site index determinations as related to soil and climatic characteristics regardless of current vegetative cover in an area. Relative terms for Dunning's site class symbols are: unsuited = nontimberland; low = sites 1, 2; medium = sites 3, 4; high = site 5; very high = site 6; extremely high = site 7; questionable = conclusive evidence of suitability is lacking. In areas where productivity is lower than normal for the site index class, the site class symbol is underlined (e.g. 4). Soils in these areas cannot support fully stocked stands because of natural limiting factors such as shallow soils, very stony soils, rock outcrops, unstable terrain, limited moisture, etc. Individual trees may grow at the indicated rate.

7/ Estimated suitability for extensive range use: based on observations of natural forage production, use experience over wide areas, and soil and climatic characteristics. Regardless of current vegetative cover, estimates are potential suitability applied to open areas, either natural or cleared, under extensive management (without seeding or fertilization) with average herbaceous cover conditions as related to soil type. Factors such as rockiness, topography, and erosion are also considered. Estimates should not be interpreted as necessarily applying to suitability of soils for forage production under more intensive management involving seeding, fertilization or irrigation. Relative terms are: unsuited, very low, low, medium, high, very high. Unless otherwise indicated, they are applicable to soils of slope classes 1 and 2 (0 to 50 percent).

8/ Unclassified soils and miscellaneous land types mapped are listed in footnote 2 to table 1.

9/ Occasionally subject to flooding.

10/ For soils with slopes less than 30 percent.

11/ For soils with slopes greater than 50 percent.

12/ May be unstable after prolonged rainfall or disturbance.

Table 3 --Plant species and miscellaneous elements mapped, including their growth habit, sprouting nature, and browse values

Map symbol :	Common name :	Scientific name :	Growth habit :	Sprout nature ^{1/} :	Browse value ^{2/} :				
					H :	C :	S :	G :	D :
A	White alder	<i>Alnus rhombifolia</i>	Tree	S	5	4-5	3-4	3-4	3-5
Aa ^{4/}	Western serviceberry	<i>Amelanchier pallida</i>	Shrub	S	3-4	2-3	2-3	2	2-3
Af	Chamise	<i>Adenostoma fasciculatum</i>	Shrub	S	5	4-5	2-3	2-3	2-3
Ap	Greenleaf manzanita	<i>Arctostaphylos patula</i>	Shrub	S	5	5	4-5	4-5	3-4
Av	Whiteleaf manzanita	<i>Arctostaphylos viscida</i>	Shrub	N	5	5	5	4-5	4-5
B	California black oak	<i>Quercus kelloggii</i>	Tree	S	4-5	2-4	3-4	3-4	1-2
Ba ^{3/}	--	--	--	--	--	--	--	--	--
C	Canyon live oak	<i>Quercus chrysolepis</i>	Tree	S	5	5	5	5	3-4
Cb	Birchleaf mountain-mahogany	<i>Cercocarpus betuloides</i>	Shrub	S	2-4	2	1-2	1-2	1
Cc	Buckbrush, Wedgeleaf ceanothus	<i>Ceanothus cuneatus</i>	Shrub	N	5	4	2-3	2-3	3
Cca	Creek dogwood	<i>Cornus californica</i>	Shrub	S	5	5	3-4	3-4	3-4
Cec ^{4/}	California redbud	<i>Cercis occidentalis</i>	Shrub	S	4-5	4-5	4	3-4	4-5
Ci	Deerbrush	<i>Ceanothus integerrimus</i>	Shrub	S,N	3	2-3	1-2	1-2	1-2
Cle	Lemmon ceanothus	<i>Ceanothus lemmonii</i>	Shrub	S	5	4-5	3-4	3-4	3-4
Cn	Pacific dogwood	<i>Cornus nuttallii</i>	Shrub, Tree	S	5	5	3-4	3-4	3-4
Cpo	Squaw carpet	<i>Ceanothus prostratus</i>	Shrub	N	5	5	4-5	3-4	2-4
Cr	California hazelnut	<i>Corylus cornuta californica</i>	Shrub	S	4-5	4-5	4	3-4	3-4

Table 3 (continued)

Map symbol :	Common name :	Scientific name :	Growth : habit :	Sprout : nature ^{1/} :	Browse value ^{2/} :				
					H :	C :	S :	G :	D :
<u>Cu^{3/}</u>	--	--	--	--	--	--	--	--	--
D	Douglas-fir	<i>Pseudotsuga menziesii</i>	Tree	N	5	5	4-5	4-5	4-5
Dp	Digger pine	<i>Pinus sabiniana</i>	Tree	N	5	5	5	5	5
Ec	California yerba santa	<i>Eriodictyon californicum</i>	Shrub	S	5	5	4-5	4-5	3-4
G	Oregon oak, Garry oak	<i>Quercus garryana</i>	Tree	S	5	4-5	4-5	4-5	2-3
Gf	Fremont silktassel	<i>Garrya fremontii</i>	Shrub	S	5	4-5	2-3	2-3	2-3
<u>Gr^{3/}</u>	--	--	--	--	--	--	--	--	--
I	Incense-cedar	<i>Calocedrus decurrens</i>	Tree	N	5	4-5	4-5	3-5	3-5
J	Jeffrey pine	<i>Pinus jeffreyi</i>	Tree	N	5	5	4-5	3-5	3-5
K	Knobcone pine	<i>Pinus attenuata</i>	Tree	N	5	5	5	5	5
<u>Kxm^{4/}</u>	Knobcone-monterey pine hybrid	<i>Pinus attenuuradiata</i>	Tree	N	5	5	5	5	5
Ide	Shrub tan-oak	<i>Lithocarpus densiflorus echinoides</i>	Shrub	S	5	5	5	4-5	1-2
M	Madrone	<i>Arbutus menziesii</i>	Tree	S	5	4-5	4-5	4-5	3-5
<u>M</u>	Bigleaf maple	<i>Acer macrophyllum</i>	Tree	U	5	4-5	4	4	3-4
<u>O</u>	Oregon ash	<i>Fraxinus latifolia</i>	Tree	S	4-5	3-4	3	3	4-5
Pta	Bracken fern	<i>Pteridium aquilinum pubescens</i>	Herb	S	5	5	5	5	5
Qc	Shrub canyon live oak	<i>Quercus chrysolepis nana</i>	Shrub	S	5	5	5	4	4
Qgb	Brewer oak	<i>Quercus garryana breweri</i>	Shrub	S	5	4-5	4-5	4-5	3-4
Qk	Shrub california black oak	<i>Quercus kelloggii cibata</i>	Shrub	S	4-5	2-4	3-4	3-4	1-2
<u>Qw^{4/}</u>	Shrub interior live oak	<i>Quercus wislizenii frutescens</i>	Shrub	S	5	4	3-5	3-4	1-2
<u>Rd^{4/}</u>	Poison-oak	<i>Rhus diversiloba</i>	Shrub	S	2-3	3-4	3-4	3-4	2-3
<u>Rix^{4/}</u>	Gooseberry, Currant	<i>Ribes species</i>	Shrub	S,N	4-5	4	3-4	3	2-3
<u>Rop^{4/}</u>	Cluster rose	<i>Rosa pisocarpa</i>	Shrub	S	4	4-5	2-3	2-3	2-3
<u>Rox^{4/}</u>	Rose	<i>Rosa species</i>	Shrub	S	4-5	4-5	3	2-3	2-3
<u>Rr^{4/}</u>	Sierra gooseberry	<i>Ribes roezlii</i>	Shrub	S,N	4-5	4	3	3	3-5
Rt	Squaw bush	<i>Rhus trilobata</i>	Shrub	S	4	4-5	4	4	3-4
<u>Rur^{4/}</u>	California blackberry	<i>Rubus ursinus</i>	Vine	S	5	5	4	3-4	3-4
<u>Rr^{4/}</u>	Blackberry, Raspberr	<i>Rubus species</i>	Vine	S	5	5	4	3-4	3-4
S	Sugar pine	<i>Pinus lambertiana</i>	Tree	N	5	5	4-5	4-5	4-5
<u>Sal^{4/}</u>	Upright snowberry	<i>Symphoricarpos rivularis</i>	Shrub	U	4	3-4	3	2-3	3
<u>Scu^{4/}</u>	Spreading snowberry	<i>Symphoricarpos acutus</i>	Shrubby vine	U	4	3-4	2-3	2-3	3-4
Sx	Willow	<i>Salix species</i>	Shrub, Tree	S	5	4-5	3-4	3-4	2-3
<u>Sxg^{4/}</u>	Parish nightshade	<i>Solanum parishii</i>	Herb- Shrub	S	4-5	4-5	3-4	2-3	1-3

Table 3 (continued)

Map symbol	Common name	Scientific name	Growth habit	Sprout nature ^{1/}	Browse value ^{2/}				
					H	C	S	G	D
U	Pacific yew	Taxus brevifolia	Tree	U	5	5	5	5	5
Uc	Shrub californica laurel, Bay	Umbellularia californica	Shrub	S	5	3-4	3-4	3-4	2-3
Ui ^{3/}	--	--	--	--	--	--	--	--	--
V	Valley oak	Quercus lobata	Tree	S	5	4	4-5	4-5	3-4
Vc	California wild grape	Vitis californica	Vine	S	4-5	4-5	3-4	3-4	3-4
W	White fir	Abies concolor	Tree	N	5	4-5	4-5	3-4	3-4
Xs	Nuttall willow	Salix scouleriana	Shrub, Tree	S	4	3	2-3	2-3	3
Y	Ponderosa pine	Pinus ponderosa	Tree	N	5	5	4-5	4-5	4-5

1/ Sprout nature:

- S = Sprouts after fire.
 N = Normally will not sprout if top is fire killed.
 S,N = Sprouts after fire in some cases and is completely killed in others.
 U = Post-fire sprouting capacity unknown.

Note: Some species, though killed by fire, will stump sprout after cutting in the absence of fire.

2/ Browse value over-all ratings, including sprouts after burning or cutting:

- 1 = Very high
 2 = High
 3 = Medium
 4 = Low
 5 = Very low

Kind of animal:

H = Horses; C = Cattle; S = Sheep; G = Goats; D = Deer.

3/ Miscellaneous vegetation and landscape elements mapped are:

Symbol:

- Ba Rock, bare, or litter-covered ground, essentially devoid of vegetation.
 Cu Cultivated or fallow field, natural hayland, or irrigated pasture.
 Gr Grasses and other associated herbaceous plants, includes dry meadow species.
 Ui Urban or industrial area, frequently with no mappable soil due to industrial activity.

4/ Species not mapped but recorded as browse on type-acre plots (see table 4).

Table 4.--Data on type-acre sampling plots^{1/}

Plot No.	Location ^{2/}			Aspect & percent slope	Soil symbol ^{3/}	Cover class ^{4/}	Date sampled	Soft chess ^{5/}		Ground cover ^{6/}						Woody species with available browse ^{7/}
	T	R	S					Height	Stage	H	L	B	RG	I	W	
1	33N	8W	9	W-55	8121 3-3	2	22 Jun 65	20	D	-----percent-----						Av,Qw,Cle,Cb,B,G, Ap,Cec,D,Y,Cc
2	33N	8W	16	SW-58	8121 3S-3	3	22 Jun 65	33	D	20	21	57	2	0	(8/)	G,Rt,Ci,Y,Av,Cc, Rix,Qw,Cb,D
3	33N	8W	31	W-64	7325V 3-3	2	22 Jun 65	-	-	5	15	25	-	25	30	Cb,Ap,Cle,Rd,G,B, Dp,D,C,Cec,Cc
4	33N	8W	22	NW-38	815V2 4-2	2	30 Jul 64	-	-	40	15	30	-	5	10	D,Ci,B,Rd,Y,M, S,Rox,C,Scu,Qw
5	33N	9W	34	W-28	929 5S-1	5	24 Jun 65	30	D	30	3	54	13	-	(8/)	Cc,Kxm,Rv,Ap,Y,B, Rr,Av,C,Cle,Sxg
6	32N	8W	5	SE-40	7132V 4-2	3	15 Jun 72	-	-	20	52	28	-	-	(8/)	Ci,Cle,D,B,G,Y, Av,Ap,Cb,S,C
7	32N	8W	3	E-69	7121m 2E2-3	3	15 Jun 72	-	-	5	10	70	-	(8/)	15	C,S,B,Y,D,Ap, Cle,Ci
8	32N	8W	3	SE-50	719 3-3	3	15 Jun 72	-	-	(8/)	90	10	-	-	(8/)	C,D,Y,S,B,Rop, Ci,Ap
9	33N	9W	1	NE-60	8121 4S-3	1	11 May 72	-	-	(8/)	75	5	(8/)	(8/)	20	D,B,G,Rd,M,Cr, Sal,C,Y,S,Ci,Rix
10	33N	9W	3	W-25	7167 5-1	1	23 Jun 65	-	-	(8/)	75	10	-	10	5	I,B,D,S,Aa,Av, Rox,C,Scu,W,Cn,Rd
11	33N	9W	3	NW-30	7167V 3-2	1	23 Jun 65	-	-	(8/)	75	15	(8/)	5	5	D,I,Av,Aa,Y,Rox, B,Cle,G,S

1/ More detailed information is on file at Dept. of Agronomy and Range Science, U.C., Davis, and at the Pacific Southwest Forest and Range Experiment Station, U.S.F.S., Berkeley.

2/ Plots shown on the map by circled numbers in the township (T), range (R), and section (S) indicated.

3/ Soil series and phases. See tables 1 and 2 for key.

4/ Area covered by crowns of all woody plants:

Symbol	Cover class	Ground covered (percent)
1	Dense	>80
2	Semidense	50-80
3	Open	20-50
4	Very open	5-20
5	Extremely open	<5

5/ Mean maximum height (cm.) and stage of maturity of soft chess (*Bromus mollis*):

- V = vegetative stage (plant not yet flowering)
- F = flowering stage (plant has seed stalk and is still green)
- D = dry stage (plant is dead)

6/ Ground space covered or occupied by these vegetation and landscape units below a reference plane 4.5 feet above the ground:

- H = herbage--all herbaceous plant material of the current growing season
- L = litter--dead plant material on the ground exclusive of heavy woody material
- B = bare soil--particle s less than 2 mm.
- RG = rock and gravel--surface coarse fragments greater than 2 mm and bedrock
- I = inaccessible--space that grazing animals physically cannot occupy owing to presence of tree stems, logging debris, tall and dense brush, and other obstructions
- W = woody vegetation available for browsing--small twigs and foliage of all woody plants regardless of palatability less than 4.5 feet tall and accessible to grazing animals

Note: Browse species are listed in last column of this table. Herbaceous and all woody species are listed in table 5.

7/ Listed in decreasing order of abundance. See Table 3 for key to species symbols and browse values.

8/ Unit is present but too scarce to measure (usually less than 5 percent).

Table 5.--Plant species recorded or observed for the quadrangle^{1/}

Scientific name	Common name	Locations where plants found ^{2/}
<u>ANNUAL GRASSES:</u>		
<i>Aira caryophylla</i>	Silver hairgrass	1,2,3,5,6,7,8,11
<i>Avena barbata</i>	Slender wild oats	2
<i>Bromus carinatus</i>	California brome	3,4
<i>Bromus catharticus</i>	Rescue grass	5
<i>Bromus commutatus</i>	Hairy chess	5
<i>Bromus diandrus</i>	Rippgut	2,3,4,5
<i>Bromus mollis</i>	Soft chess	1,2,3,5
<i>Bromus tectorum</i>	Cheatgrass, downy brome	1,2,3,5,6,7,8
<i>Festuca eastwoodae</i>	Eastwood fescue	2
<i>Festuca grayi</i>	Gray fescue	11
<i>Festuca megalura</i>	Foxtail fescue	2,3,5,6,7
<i>Festuca microstachys</i>	Pubescent reflex fescue	7
<i>Festuca pacifica</i>	Pacific fescue	3
<i>Festuca reflexa</i>	Reflex fescue	1,5,6,7,8,9,11
<i>Gastridium ventricosum</i>	Nitgrass	5
<i>Taeniatherum asperum</i>	Medusahead	5
<u>PERENNIAL GRASSES AND GRASS-LIKE PLANTS:</u>		
<i>Agropyron parishii laeve</i>	Parish wheatgrass	6,7,8
<i>Bromus</i> sp.	Perennial brome	7
<i>Bromus laevipes</i>	Woodland brome	3
<i>Bromus orcuttianus</i>	Orcutt brome	4
<i>Bromus vulgaris</i>		11
<i>Carex multicaulis</i>	Many-stem sedge	4,5,7,8,9
<i>Elymus glaucus glaucus</i>	Blue wild rye	3,4,6,9
<i>Elymus glaucus jepsonii</i>	Jepson wild rye	5
<i>Festuca californica</i>	California fescue	4,10,11
<i>Festuca idahoensis</i>	Idaho fescue	5,6,7,8,11
<i>Festuca occidentalis</i>	Western fescue	7,9,10,11
<i>Holcus lanatus</i>	Velvetgrass	5
<i>Luzula subsessilis</i>	Foothill wood rush	4,6,7,8,10,11
<i>Melica harfordii</i>	Harford melic	9,10,11
<i>Melica</i> sp.	Melic grass	5
<i>Poa</i> sp.	Perennial bluegrass	9
<i>Poa pratensis</i>	Kentucky bluegrass	5
<i>Poa scabrella</i>	Pine bluegrass	1,2,3,4,5,7,8
<i>Sitanion hystrix californicum</i>	Squirreltail	1,2,3,5,6,8
<i>Stipa lemmonii</i>	Lemmon stipa	2,3,5,6,8
<i>Trisetum cernuum canescens</i>	Tall trisetum	10,11
<u>ANNUAL FORBS:</u>		
<i>Arenaria</i> sp.	Sandwort	7
<i>Athysanus pusillus</i>	Athysanus	2
<i>Centaurea melitensis</i>	Napa star thistle	2
<i>Centaurea solstitialis</i>	Yellow star thistle	5
<i>Cerastium glomeratum</i>	Mouse-ear chickweed	5
<i>Cirsium proteanum</i>	Venus thistle	1
<i>Cirsium vulgare</i>	Bull thistle	5
<i>Clarkia</i> sp.	Farewell-to-spring	6
<i>Clarkia purpurea quadrivulnera</i>	Four-spot godetia	2,3,5
<i>Clarkia rhomboidea</i>	Forest clarkia	3,7,8,10
<i>Collinsia</i> sp.	Collinsia	3,7,9,11
<i>Collinsia parviflora</i>	Small-flowered collinsia	10
<i>Collomia</i> sp.	Collomia	1,4
<i>Collomia grandiflora</i>	Mountain collomia	5
<i>Cryptantha</i> sp.	Cryptantha	7
<i>Daucus pusillus</i>	Rattlesnake weed	1,2,3
<i>Draba verna</i>	Whitlow-grass	7
<i>Epilobium minutum</i>	Slender annual fireweed	2,5,6,7,11
<i>Epilobium paniculatum</i>	Annual fireweed	5
<i>Eremocarpus setigerus</i>	Turkey mullein	5

Table 5 (continued)

Scientific name	Common name	Locations where plants found ^{2/}
<u>ANNUAL FORBS:</u>		
<i>Eriogonum vimineum</i>	Wicker buckwheat	5
<i>Galium aparine</i>	Goosegrass	3,9,10
<i>Galium parisiense</i>	Wall bedstraw	2
<i>Gilia</i> sp.		1
<i>Gilia capitata</i>	Blue field <i>gilia</i>	3
<i>Hesperolinon micranthum</i>	Common dwarf flax	3
<i>Lactuca serriola</i>	Prickly lettuce	5
<i>Lessingia</i> sp.	<i>Lessingia</i>	6
<i>Linanthus ciliatus</i>	Whisker linanthus	7,8
<i>Lotus humistratus</i>	Hill lotus	1,3
<i>Lotus micranthus</i>	Small-flower lotus	8
<i>Lotus purshianus</i>	Spanish clover	3,5
<i>Lupinus bicolor marginatus</i>	Bicolor annual lupine	1,2
<i>Madia</i> sp.	Tarweed	7,8
<i>Madia citrigracilis</i>	Shasta tarweed	5
<i>Madia exigua</i>	Little tarweed	1,3,5,6,7
<i>Madia gracilis</i>	Gumweed <i>madia</i>	2,3,4
<i>Micropus californicus</i>	<i>Micropus</i>	1,3,5
<i>Mimulus</i> sp.	Monkey flower	7,8
<i>Montia perfoliata</i>	Miners lettuce	4,7,8,9,10,11
Moss and Moss-like plants		7,9,11
<i>Navarretia intertexta</i>	Needle-leaf <i>navarretia</i>	5
<i>Nemophila</i> sp.		10
<i>Nemophila pedunculata</i>	Meadow <i>nemophila</i>	9
<i>Orthocarpus</i> sp.	<i>Orthocarpus</i>	2
<i>Pectocarya pusilla</i>	<i>Pectocarya</i>	6
<i>Plagiobothrys</i> sp.	Popcorn flower	2,5,6,7
<i>Plectritis</i> sp.	<i>Plectritis</i>	5
<i>Scleranthus annuus</i>	<i>Scleranthus</i>	5
<i>Thysanocarpus curvipes elegans</i>	Lace pod	7
<i>Torilis arvensis</i>	Field hedge parsley	3
<i>Trichostema lanceolatum</i>	Vinegar weed	5
<i>Trifolium ciliolatum</i>	Tree clover	2
<i>Trifolium microcephalum</i>	Maiden clover	2,5
<i>Verbascum thapsus</i>	Common mullein	5
<u>PERENNIAL FORBS:</u>		
<i>Achillea lanulosa</i>	Mountain yarrow	3,4,5,6,7,8
<i>Adenocaulon bicolor</i>	Trail plant	4,10
<i>Agoseris grandiflora</i>	Grand mountain dandelion	5
<i>Agoseris retrorsa</i>	Spear-leaf mountain dandelion	1,3,6,8
<i>Allium</i> sp.	Onion	10
<i>Plantago lanceolata</i>	Rib-grass	5
<i>Polygala cornuta</i>	Sierra milkwort	9,10,11
<i>Polystichum munitum</i>	Sword fern	10,11
<i>Potentilla</i> sp.	Cinquefoil	4
<i>Pteridium aquilinum pubescens</i>	Bracken fern	M,4,6,7,8
<i>Pyrola picta picta</i>	White-vein shinleaf	9
<i>Pyrola picta aphylla</i>	Leafless <i>pyrola</i>	9
<i>Rumex acetosella</i>	Sheet-sorrel	5,8
<i>Sanicula bipinnatifida</i>	Purple sanicle	1,2,3,4,5,6,8,11
<i>Senecio aronicoides</i>	California groundsel	7
<i>Silene lemmonii</i>	Lemmon campion	7
<i>Taraxacum officinale</i>	Common dandelion	9
<i>Verbena robusta</i>		2,5
<i>Vicia americana oregana</i>	American vetch	9
<i>Vicia californica</i>	California vetch	2,8,9
<i>Viola purpurea</i>	Mountain violet	6,7,8
<i>Wyethia angustifolia</i>	Narrow-leaf mule ears	6
<i>Zigadenus fremontii</i>	Star-lily	10,11

Table 5 (continued)

Scientific name	Common name	Locations where plants found ^{2/}
<u>TREES AND SHRUBS:</u>		
<i>Abies concolor</i>	White fir	M,10
<i>Acer macrophyllum</i>	Bigleaf maple	M,9
<i>Adenostoma fasciculatum fasciculatum</i>	Chamise	M
<i>Alnus rhombifolia</i>	White alder	M
<i>Amelanchier pallida</i>	Western serviceberry	10,11
<i>Arbutus menziesii</i>	Madrone	M,4,10,11
<i>Arctostaphylos patula patula</i>	Greenleaf manzanita	M,1,3,5,6,7,8
<i>Arctostaphylos viscidula</i>	Whiteleaf manzanita	M,1,2,5,6,10,11
<i>Calocedrus decurrens</i>	Incense-cedar	M,10,11
<i>Ceanothus cuneatus</i>	Buckbrush, wedgeleaf cean.	M,1,2,3,5
<i>Ceanothus integerrimus</i>	Deerbrush	M,2,3,4,6,7,8,9
<i>Ceanothus lemmonii</i>	Lemmon ceanothus	M,1,3,5,6,7,11
<i>Ceanothus prostratus prostratus</i>	Squaw carpet	M
<i>Cercis occidentalis</i>	California redbud	1,3
<i>Cercocarpus betuloides</i>	Birchleaf mountain-mahogany	M,1,2,3,6
<i>Cornus californica</i>	Creek dogwood	M
<i>Cornus nuttallii</i>	Pacific dogwood	M,10
<i>Corylus cornuta californica</i>	California hazelnut	M,9
<i>Eriodictyon californicum</i>	California yerba santa	M
<i>Fraxinus latifolia</i>	Oregon ash	M
<i>Garrya fremontii</i>	Fremont silktassel	M
<i>Lithocarpus densiflorus echinoides</i>	Shrub tan-oak	M
<i>Phoradendron flavescens villosum</i>	Mistletoe	1,4
<i>Pinus attenuata</i>	Knobcone pine	M
<i>Pinus attenuata</i>	Knobcone-monterey pine hybrid	5
<i>Pinus jeffreyi</i>	Jeffrey pine	M
<i>Pinus lambertiana</i>	Sugar pine	M,4,6,7,8,9,10,11
<i>Pinus ponderosa</i>	Ponderosa pine	M,1,2,4,5,6,7,8,9,10,11
<i>Pinus sabiniana</i>	Digger pine	M,1,3
<i>Pseudotsuga menziesii</i>	Douglas-fir	M,1,2,3,4,5,6,7,8,9,10,11
<u>PERENNIAL FORBS:</u>		
<i>Antennaria</i> sp.	Pussytoes	6
<i>Apocynum pumilum pumilum</i>	Mountain hemp	4
<i>Apocynum pumilum rhomboideum</i>	Pubescent mountain hemp	6
<i>Asarum hartwegii</i>	Hartweg wild ginger	9
<i>Asclepias cordifolia</i>	Purple milkweed	7
<i>Aster</i> sp.		6
<i>Balsamorhiza deltoidea</i>	Deltoid balsamroot	9
<i>Calochortus</i> sp.	Mariposa lily	4,10,11
<i>Calochortus tolmiei</i>	Tolmie star-tulip	6,9
<i>Comandra umbellata californica</i>	Bastard toad-flax	10
<i>Cynoglossum grande</i>	Western houndstongue	3,7
<i>Cystopteris fragilis</i>	Bladder fern	11
<i>Dentaria tenella tenella</i>	Toothwort	4,9
<i>Dichelostemma congestum</i>	Ookow	6
<i>Dichelostemma parviflorum</i>	Many-flower dichelostemma	11
<i>Dichelostemma pulchellum</i>	Wild-hyacinth	1,3,9
<i>Dodecatheon</i> sp.	Shooting stars	6,7,9
<i>Erigeron</i> sp.	Wild daisy	10
<i>Eriogonum nudum</i>		7,8
<i>Eriogonum nudum oblongifolium</i>		2,5
<i>Eriophyllum lanatum</i>	Common wooly-sunflower	7,8
<i>Eriophyllum lanatum grandiflorum</i>	Common wooly-sunflower	1,3
<i>Frasera albicaulis nitida</i>	Shining fraseria	6
<i>Galium ambiguum</i>		1,5,11
<i>Galium bolanderi</i>	Bolander galium	3,6,7,8,10

Table 5 (continued)

Scientific name	Common name	Locations where plants found ^{2/}
<u>PERENNIAL FORBS:</u>		
<i>Galium nuttallii</i> tenue	Climbing galium	1,7
<i>Gnaphalium</i> sp.	Everlasting	4,7,9
<i>Goodyera oblongifolia</i>	Rattlesnake plantain	10
<i>Habenaria unalascensis</i>	Rein orchid	10
<i>Helianthella californica nevadensis</i>	Sierra helianthella	6,9
<i>Hieracium albiflorum</i>	White-flower hawkweed	4,6,7,8,9,10,11
<i>Horkelia iridentata</i>	Three-tooth horkelia	6
<i>Hypericum perforatum</i>	Klamath weed	4,5,9
<i>Iris tenuissima</i>	Iris	2,4,5,6,7,8,9,10,11
<i>Lathyrus sulphureus</i>	Sulfur pea	4,9
<i>Lithophragma</i> sp.	Woodland star	9
<i>Lithospermum</i> sp.		6
<i>Lomatium</i> sp.	Lomatium, hog-fennel	1,5
<i>Lotus</i> sp.		6
<i>Lotus crassifolius</i>	Big deervetch	7,8
<i>Lupinus andersonii</i>	Anderson lupine	7
<i>Lupinus latifolius</i>	Big-leaf lupine	6,8
<i>Lupinus sellulus</i>		6,7,8
<i>Monardella</i> sp.	Monardella	6,9
<i>Monardella villosa sheltonii</i>	Coyote-mint	1,3
<i>Osmorhiza chilensis</i>	Mountain sweet-cicely	4,9,10
<i>Pedicularis semibarbata</i>	Pine lousewort	4
<i>Phacelia</i> sp.	Phacelia	7
<i>Phacelia imbricata</i>		2
<i>Phlox speciosa occidentalis</i>		4,6
<u>TREES AND SHRUBS:</u>		
<i>Quercus chrysolepis chrysolepis</i>	Canyon live oak	M,3,4,6,7,8,9,10
<i>Quercus chrysolepis nana</i>	Shrub canyon live oak	M
<i>Quercus garryana garryana</i>	Oregon oak, garry oak	M,1,2,3,5,6,7,9,11
<i>Quercus garryana breweri</i>	Brewer oak	M
<i>Quercus kelloggii kelloggii</i>	California black oak	M,1,2,3,4,5,6,7,8,0,10,11
<i>Quercus kelloggii cibata</i>	Shrub Calif. black oak	M
<i>Quercus lobata</i>	Valley oak	M
<i>Quercus wislizenii frutescens</i>	Shrub interior live oak	1,2,4
<i>Rhus diversiloba</i>	Poison-oak	3,4,9,10
<i>Rhus trilobata</i>	Squaw bush	M,2
<i>Ribes</i> sp.	Gooseberry	2,9
<i>Ribes roezlii</i>	Sierra gooseberry	5
<i>Rosa</i> sp.	Rose	4,10,11
<i>Rosa pisocarpa</i>	Cluster rose	8
<i>Rubus ursinus</i>	California blackberry	5
<i>Salix</i> sp.	Willow	M
<i>Salix scouleriana</i>	Nuttall willow	M
<i>Solanum parishii</i>	Parish nightshade	5
<i>Symphoricarpos acutus</i>	Spreading snowberry	4,10
<i>Symphoricarpos rivularis</i>	Upright snowberry	9
<i>Taxus brevifolia</i>	Pacific yew	M
<i>Umbellularia californica</i>	Shrub Calif. laurel, Bay	M
<i>Vitis californica</i>	California wild grape	M

^{1/} More data on percent composition and abundance of plants are on file at the Dept. of Agronomy and Range Science, U.C., Davis, or at the Pacific Southwest Forest and Range Experiment Station, U.S.F.S., Berkeley.

^{2/} M = Species was mapped in the quadrangle;
Number = Species recorded on a type-acre sampling plot of that number within the quadrangle (see footnote 2, Table 4).

Table 6 --Taxonomic classification of soils in the quadrangle

Order	Subgroup	Family	Series	
Alfisols	Mollic Haploxeralfs	Clayey-skeletal, serpentinitic, mesic	Dubakella	
		Fine-loamy, mixed, mesic	Stump Springs variant	
	Typic Haploxeralfs	Fine, montmorillonitic, mesic	Kilarc	
	Ultic Haploxeralfs	Fine, kaolinitic, mesic	Hoda Hoda variant	
		Fine, mixed, mesic	Josephine variant 2	
		Fine-loamy, mixed, mesic	Boomer Englebright Holland Hotaw Josephine taxadjunct Stump Springs	
		Loamy-skeletal, mixed, mesic	Marpa	
		Ultic Palexeralfs	Fine, kaolinitic, mesic	Weaverville
	Entisols	Lithic Xerothents	Loamy-skeletal, mixed, nonacid, mesic	Etsel
		Typic Xeropsamments	Mixed, mesic	Corbett taxadjunct
Inceptisols	Dystric Xerochrepts	Coarse-loamy, mixed, mesic	Chaix	
		Fine-loamy, mixed, mesic	Hugo Madonna Tish Tang variant 2	
		Loamy, mixed, mesic, shallow	Chawanakee	
		Loamy-skeletal, mixed, mesic	Neuns Sheetiron taxadjunct	
		Loamy-skeletal, micaceous, mesic	Sheetiron	
	Dystric Lithic Xerochrepts	Loamy, mixed, mesic	Maymen	
	Lithic Xerochrepts	Loamy-skeletal, mixed, mesic	Goulding	
	Typic Xerochrepts	Coarse-loamy, mixed, mesic	Barron	
		Sandy, mixed, mesic	Siskiyou	
	Mollisols	Lithic Argixerolls	Clayey-skeletal, serpentinitic, thermic	Henneke
Pachic Argixerolls		Fine-loamy, mixed, mesic	Miramar variant	
Typic Argixerolls		Fine-loamy, mixed, mesic	Los Gatos	
Ultic Argixerolls		Fine, mixed, mesic	Musser	
Pachic-Ultic Haploxerolls		Fine-loamy, mixed, mesic	Tatu	
Ultic Haploxerolls		Fine-loamy, mixed, mesic	Laughlin	