



CONE CROP SURVEY 1984

The 1984 Cone Crop Survey is based on a summary of individual stand data collected by CDF foresters during June and July of 1984. The cone crop rating system is based on ocular estimates of cone quantities on dominant and co-dominant trees, 12 inches d.b.h. or greater. Five classes are used as follows:

Rating	Criteria
1 none	No cones on any seed trees.
2 very light	Few cones on less than one-fourth of the seed trees.
3 light	Few cones on more than one-fourth of the seed trees.
4 medium	Many cones on one-fourth to one-half of the seed trees.
5 heavy	Many cones on more than one-half of the seed trees.

Where individual stands were not systematically rated but general observations were available, they have been indicated in parentheses. They have not been included in determining the species or overall ratings.

The survey shows an overall rating of 2.9 (light) for this year's cone crop. However, density varied fairly widely both by species and by seed zone and elevation within a species. Sierra redwood received a species rating of medium (4). White fir and red fir received medium ratings for the northern Sierra, decreasing to the south. Jeffrey, ponderosa, and sugar pines have light crops overall, but are more abundant on a local basis. Douglas-fir ratings ranged from 1.1 to 5, indicating the need to assess stands individually. The Sierran Douglas-fir crop is generally very light to non-existent, as is the incense cedar crop. The coast redwood crop is very light throughout the north coast with the possible exception of zone 094.

NOTE: Parentheses indicate general observation only; individual stands were not systematically rated. These observations were not used in determining the species or overall rating.

<u>Species</u>	<u>Seed Zone</u>	<u>Average Rating By Zone</u>	<u>Number of Stands Rated</u>
<u>Abies concolor</u> (white fir)	094	(1)	0
	095	(1)	0
	301	(2)	0
	302	(2)	0
	303	(2)	0
	321	5	1
	340	(2)	0
	371	(4)	0
	521	3	1
	522	5	1
	523	4.1	13
	524	3.5	11
	525	4	1
	526	3	2
	531	3.5	18
	533	2	2
	534	2	4
	570	3	1
771	<u>3.6</u>	<u>9</u>	
	3.5	species rating	64 stands
<u>Abies magnifica</u> (red fir)	371	(4)	0
	522	4	1
	523	4	2
	524	4	1
	525	1	1
	531	2	2
	732	<u>2</u>	<u>2</u>
		2.8	species rating
<u>Libocedrus decurrens</u> (Incense cedar)	093	(2)	0
	301	(2)	0
	371	(1)	0
	521	2	1
	522	2	1
	523	1	6
	524	1.5	4
	531	3	3

NOTE: Parentheses indicate general observation only; individual stands were not systematically rated. These observations were not used in determining the species or overall rating.

<u>Species</u>	<u>Seed Zone</u>	<u>Average Rating By Zone</u>	<u>Number of Stands Rated</u>
<u>Libocedrus decurrens</u> (cont'd)			
(Incense cedar)	533	2	3
	534	1.8	4
	570	<u>2</u>	<u>1</u>
		1.7	23
		species rating	stands
<u>Pinus jeffreyi</u>			
(Jeffrey pine)	523	2.4	8
	524	4.5	2
	526	2	1
	533	2.5	2
	570	2	1
	732	<u>2.8</u>	<u>5</u>
		2.7	19
		species rating	stands
<u>Pinus lambertiana</u>			
(sugar pine)	095	3	1
	301	(2)	0
	303	(2)	0
	321	5	2
	371	(4)	0
	380	3	4
	522	4	1
	523	2.2	6
	524	2.4	8
	525	3.5	2
	526	2	2
	531	2.4	16
	533	2.7	3
	534	<u>3.8</u>	<u>4</u>
		3.1	49
		species rating	stands
<u>Pinus monticola</u>			
(western white pine)	524	<u>3</u>	<u>1</u>
		3	1
		species rating	stand
<u>Pinus muricata</u>			
(Bishop pine)	092	(4)	0

NOTE: Parentheses indicate general observation only; individual stands were not systematically rated. These observations were not used in determining the species or overall rating.

<u>Species</u>	<u>Seed Zone</u>	<u>Average Rating By Zone</u>	<u>Number of Stands Rated</u>
<u>Pinus ponderosa</u> (ponderosa pine)	094	(1)	0
	301	(2)	0
	302	(2)	0
	303	(2)	0
	321	4	1
	340	(2)	0
	351	2	3
	352	(2)	0
	360	(2)	0
	371	(2)	0
	380	3.2	5
	521	4	4
	522	3	1
	523	2.3	7
	524	1.9	7
	525	3	2
	526	2	3
	531	2.3	15
	533	2.7	3
	534	2.5	8
	732	2	2
	741	(4)	0
		3.1 species rating	61 stands
<u>Pinus radiata x Pinus attenuata</u> (Monterey x Knobcone cross)	092	(3)	0
	093	(3)	0
	302	(4)	0
	303	(4)	0
<u>Pseudotsuga menziesii</u> (Douglas-fir)	091	(2)	0
	092	(2)	0
	093	(2)	0
	094	4	1
	095	(4)	0
	096	(4)	0
	301	(2)	0
	302	(2)	0
	303	(2)	0
	321	5	1

NOTE: Parentheses indicate general observation only; individual stands were not systematically rated. These observations were not used in determining the species or overall rating.

<u>Species</u>	<u>Seed Zone</u>	<u>Average Rating By Zone</u>	<u>Number of Stands Rated</u>
<u>Pseudotsuga menziesii</u> (cont'd)			
(Douglas-fir)	340	(2)	0
	351	2	4
	352	(3)	0
	360	(1)	0
	371	(2)	0
	372	(4)	0
	380	3	3
	390	(3)	0
	521	2	2
	522	(1)	0
	523	1.1	8
	524	1.9	5
	525	4	2
	526	1.5	2
	531	1.7	3
	741	<u>(4)</u>	<u>0</u>
		2.6 species rating	31 stands
<u>Sequoia sempervirens</u>			
(coast redwood)	091	(2)	0
	092	(2)	0
	093	(2)	0
	094	(2)	0
	095	(2)	0
	096	(2)	0
<u>Sequoiadendron giganteum</u>			
(sierra redwood)	534	<u>4</u>	<u>4</u>
		4 species rating	4 stands

OVERALL RATING: 2.9 (light)