

BREAKTIME

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Cooperative Extension

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1864: FIRST RECORDED EXAMPLE OF "SUMMER LIMB DROP"?

Thanks to Bob Hansen of Southland Tree Service, Inc., Santa Monica, who sent us an excerpt from EL DORADO; Adventures in the Path of Empire by Bayard Taylor, G.B. Putnam, 1864.

Quote: "There is one peculiarity about California oaks which I do not remember to have seen noticed. In the dry heat of the long summer seasons, their fibre becomes brittle, and frequently at noon-day, when not a breath of air is stirring, one of their stout arms parts from the trunk without the slightest warning sound and drops bodily to the earth. More than one instance is related, in which persons have been killed by their fall. For this reason the native Californians generally camp outside of the range of the limbs."

REPORT COUNT

1998 turned out be a slightly above average year for reports received with a total of 214. Do you remember the storm in December 1995? That year 449 reports came in. December is always the big month, followed by January. September is the low month. Only 87 of all failures reported to date happened in September.

FROM THE DATABASE

There have been **2435** reports received to date. The top five most commonly reported species are in the same order as last reported.

1. *Pinus radiata* (336) 13.8%
2. *Cupressus macrocarpa* (309) 12.7%
3. *Quercus agrifolia* (218) 9.0%
4. *Eucalyptus globulus* (129) 5.3%
5. *Quercus lobata* (113) 4.7%

There are now 82 genera in the data base. Thirty five genera are only represented by one or two reports.

The following chart lists the number of reports received to date of common species, broken down into percentages of trunk, branch or root failures for the species.

	number of reports	% TRUNK	% BRANCH	% ROOT
ALL REPORTS	2435	28%	36%	36%
<i>Quercus agrifolia</i>	217	29%	27%	44%
<i>Quercus lobata</i>	113	27%	33%	39%
<i>Quercus kelloggii</i>	49	47%	29%	24%
<i>Eucalyptus globulus</i>	129	12%	33%	56%
<i>Eucalyptus sideroxylon</i>	54	36%	63%	2%
<i>Eucalyptus camaldulensis</i>	34	15%	73%	12%
<i>Pinus radiata</i>	335	25%	44%	31%
<i>Pinus pinea</i>	68	29%	31%	40%
<i>Pinus halepensis</i>	42	55%	24%	21%
<i>Cupressus macrocarpa</i>	309	16%	51%	33%
<i>Sequoia sempervirens</i>	38	45%	21%	34%
<i>Fraxinus 'Modesto'</i>	33	24%	39%	36%
<i>Acacia melanoxylon</i>	46	39%	15%	46%

Comparisons between ALL SPECIES and QUERCUS LOBATA

	ALL SPECIES	Quercus lobata
NUMBER OF REPORTS	2435	113
MEAN AGE	63	167
MEAN DBH	30"	46"
MEAN HEIGHT	56'	61'
MEAN CROWN SPREAD	38'	60'
LOCATION OF FAILURE		
trunk	28%	27%
branch	36%	33%
root	36%	39%
STRUCTURAL DEFECTS		
failed portion dead	9%	17%
multiple trunks/ codominant stems	14%	4%
dense crown	10%	5%
heavy lateral limbs	19%	22%
uneven-onesided	4%	7%
uneven-top heavy	2%	4%
multiple branches	4%	4%
embedded bark	5%	5%
crook/sweep	2%	2%
leaning trunk	6%	8%
cracks/splits	3%	4%
none	11%	10%
MONTH OF FAILURE		
January-March	38%	27%
April-June	14%	18%
July-September	13%	23%
October-December	35%	32%

	ALL SPECIES	Quercus lobata
SITE CATEGORY		
residential	27%	42%
street	12%	6%
park	41%	25%
school	7%	7%
highway	3%	3%
parking lot	3%	5%
SITE USE		
undeveloped	8%	8%
low use	185	20%
medium use	27%	21%
high use	46%	52%
DECAY		
root rot	18%	32%
heart rot	15%	26%
sap rot	3%	1%
heart and sap rot	9%	17%
no decay	55%	24%
DECAY EXTENT		
25% or less	13%	16%
26-50%	13%	23%
51-75%	10%	16%
76-100%	8%	20%
none	55%	24%
WIND SPEED		
less than 5mph	23%	53%
5-25mph	29%	23%
over 25mph	48%	24%
PRECIPITATION		
no precipitation	41%	56%
some precipitation	49%	44%

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Thanks for submitting reports. Keep them coming!

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