## Leaves, Limbs, Needles and Boughs

## by Fred D. Opperman

This months selection is no doubt one of the most over looked evergreens when one goes to choose a planting for the golf course or his home yard. It is one of the noblest forest trees, very ornamental under cultivation and an excellent specimen. This tree is not suited for an underplanting or windbreak and makes one of the best short-needled Christmas trees because the needles do not easily fall off as is the case with "Abies" (fir) and "Picea" (Spruce).

"Pseudotsuga menziesii" (soo-do-soo ga men-ze ze-i) Douglasfir

Needles: Have a V-shaped arrangement between the 2 lateral sets, straight, 1 to 1½ long, thin, dark green above, with 2 white bands of stomata beneath, smelling of camphor when bruised.

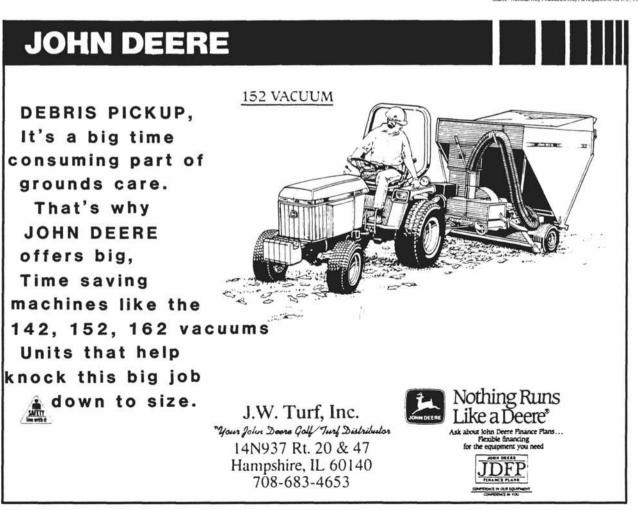
Stem: Yellowish green initially, becoming gray to brown, minutely pubescent or almost glabrous.

Cones: Three to 4" long, 1<sup>1</sup>/<sub>2</sub> to 2" wide, light brown in color.

Size: Under landscape conditions will grow 40 to 80' in height with a 12 to 20' spread; can grow to 200' and greater in natural habitat.

Culture: Transplants well, prefers neutral or slightly acid, well drained moist soils, fails on dry, poor soils, prefers sunny open conditions. Injured by high winds. Medium rate of growth, will grow 12 to 15' in a 10 year period.

Credit: "Manual of Woody Landscape Plants," by Michael A. Dirr



## State Rankings for 1990 / Golf Participation in the U.S.

Number of Golfers			Participation Rate (Percentage of residents who play golf)		
1			· ' 1	and the set of the set	0.00
2	New York		2	Wisconsin	
3	Illino:		3	Utah	
4	Texas		4	lowa	
5			5	Michigan	
	Ohio Michigan			North Dakota	
6			6		
7	Florida		7.		
8.			8		
9	Wisconsin		9.	South Dakota	
10.	Minnesota		10.	terre edeale	
11.	New Jersey			Ohio	
12			12	000000000000000000000000000000000000000	
	Indiana		13	Them monies	
14			14		
15.	Washington	479,000	15	Kansas	
16	Georgia	466,000	16	Indiana	
17.			17.	Nebraska	
18,	Missouri	433,000	18	Massachusetts	11.
19.	Colorado	407,000	19	Arizona	
20.	lowa		20.	Washington	
21.	Arizona		21.	Oregon	
22	Maryland	368,000	22	Montana	10.
23.	Kentucky	338,000	23.	Vermont	10
	Connecticut		24		
25	Tennessee		25		
26	Oregon		26		
	Kansas		27		
	South Carolina		28		
	Utah		29	North Carolina	
	Oklahoma		30		
	Louisiana		31		
	Alabama		32		
	Nebraska		33.	A A A A A A A A A A A A A A A A A A A	
	New Mexico			I GHED IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
	Idaho		10.00	Delaware	
	Nevada		36		
17.	Arkansas		37.		
38.	troot regents mention		38.		
9.				Oklahoma	
10.				Virginia	
11.				Georgia	
	South Dakota			New Hampshire	
13.				West Virginia	
14.	New Hampshire		44.	Tennessee	6.
15.	Rhode Island	78,000	45.	Arkansas	
6.	Wyoming		46.	Alabama	
17	Vermont	56,000	47.	Louisiana	5
18	Delaware			Mississippi	
	District of Columbia		49		

Source: National Golf Finandation Golf Participation in the U.S., 1990 Editor