

1999 Silvicultural Activities Report

including Annual Report on Clearcutting

Compiled from the 1999 Landowner Reports and other survey instruments.
Data collected under the provisions of Title 12 MRSA §8885 and §8878-A

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Report Highlights

Timber Harvesting:

- The total area harvested did not change significantly (<5% change), from 544,719 acres in 1998 to 536,219 acres in 1999.
- The total area partially harvested did not change significantly (<5% change), from 513,745 acres in 1998 to 512,098 acres in 1999.

Clearcutting:

- The total area clearcut decreased by 39%, from 30,974 acres in 1998 to 18,754 acres in 1999.

The total area clearcut in 1999 is the lowest since data collection began in 1982.

Clearcutting made up 3.5% of the total harvesting acres in 1999 (including acres that changed land use).

Eleven of the nineteen landowners owning more than 100,000+ acres in Maine created 83% of the clearcuts (15,546 acres). 99% of these clearcuts were smaller than 75 acres. The highest rate of clearcutting for an individual landowner was 0.6% of total statewide ownership.

The dominant silvicultural reason for clearcutting, reported by the large landowners, was for the removal of poor quality, intolerant, under stocked, short lived or mature overstories where the retention of the residual overstory trees is not justified for further increase in value, as a source of seed, or for protection of the new stand.

Land Use Changes:

- Harvesting to convert land from forest management to some other primary land use increased 9%, from 4,913 to 5,367 acres.

Herbicide Use:

- For site preparation decreased 37%, from 3,941 acres to 2,469 acres.
- To release crop trees from competing vegetation decreased 13%, from 33,205 acres to 28,906 acres.

Timber Stand Improvement (TSI):

- Thinning stands with saws decreased 24%, from 23,052 acres to 17,485 acres. 84% of this activity was done by landowners owning more than 100,00+ acres.

Planting:

- Tree planting decreased 6%, from 13,625 acres to 12,859 acres. 90% of the planting was by landowners owning more than 100,00+ acres.

Professional Assistance:

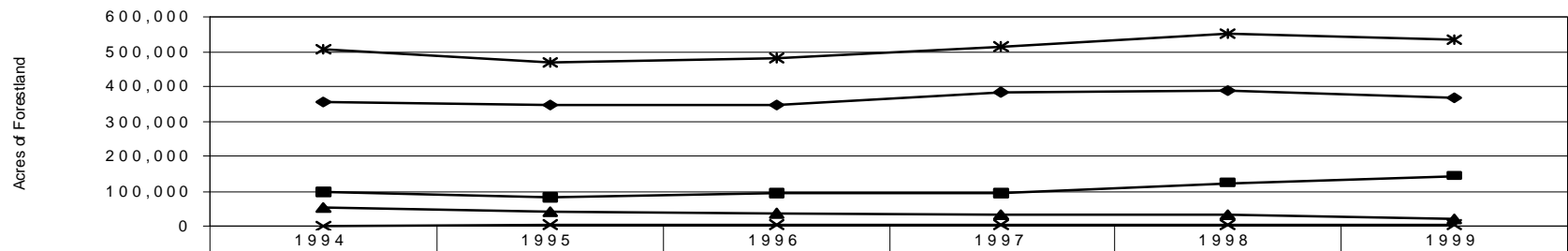
- The harvest acres supervised by licensed foresters did not change significantly (<5% change), from 384,643 acres to 368,284 acres. 69% of all harvest acres in 1999 had a licensed professional forester involved.

Note: Due to changes in the industry, the current definition of ownership type may be misleading. For example, the lines between large private and large forest industry are often blurred. This will be addressed in next year's report.

1999 Harvesting and Land Use Changes

Commercial Harvest Information by Landowner Size and Type		Acres				
		Selection	Shelterwood	Clearcut	Land Use Change	Total Harvest
Private woodlands	1 to 100 acres	67,360	7,569	497	2,432	77,858
	101 to 1,000 acres	81,464	13,903	609	1,692	97,668
	1,001 to 100,000 acres	71,351	6,406	571	754	79,082
	100,000 + acres	82,726	43,359	3,818	0	129,903
	SubTotal	302,901	71,237	5,494	4,878	384,510
Forest Industry woodlands	101 to 1,000 acres	1,608	149	0	0	1,757
	1,001 to 100,000 acres	8,704	1,835	1,402	45	11,986
	100,000 + acres	43,486	68,527	11,723	66	123,802
	SubTotal	53,798	70,511	13,125	111	137,545
Other woodlands (Govt, etc.)	1 to 100 acres	474	60	0	14	548
	101 to 1,000 acres	1,613	155	18	26	1,812
	1,001 to 100,000 acres	2,791	799	113	338	4,041
	100,000 + acres	6,778	2,095	5	0	8,878
	SubTotal	11,656	3,109	136	378	15,279
1999 Totals:		368,355	144,857	18,754	5,367	537,333
Percent of 1999 Harvest:		68.55%	26.96%	3.49%	1.00%	100.00%
1998 Totals:		389,509	124,236	30,974	4,913	544,719
Percent Change from 1998 to 1999		-5%	17%	-39%	9%	-1%

Harvesting Trends 1994-1999



◆ Selection	353,176	345,423	345,880	385,026	389,509	367,241
■ Shelterwood	97,654	82,914	93,905	94,374	124,236	144,857
▲ Clearcut	53,762	39,295	37,509	31,024	30,974	18,754
✕ Land Use Change	1,944	2,967	3,058	3,567	4,913	5,367
✱ Total Harvest	506,536	470,599	480,352	513,991	549,632	536,219

1999 Precommercial Activities and Professional Assistance

OwnershipType*	Ownership Size	Precommercial Activities by Landowner Size and Type				Licensed Professional Forester Use by Landowner Size and Type		
		Acres				Landowner Reports Received	Forester Involved	
		Herbicide Use		TSI	Tree Planting		Number of Harvests	Total Acres
Site Prep	Release							
Private woodlands	1 to 100 acres	2	0	1,124	85	3,581	730	19,154
	101 to 1,000 acres	1	13	1,016	1,132	2,162	681	36,883
	1,001 to 100,000 acres	0	326	319	15	426	272	55,592
	100,000 + acres	0	9,275	2,404	2,957	246	218	115,923
	Subtotal	3	9,614	4,863	4,189	6,415	1,901	227,552
Forest Industry woodlands	101 to 1,000 acres	0	0	0	0	17	10	759
	1,001 to 100,000 acres	320	386	200	75	74	51	8,876
	100,000 + acres	2,146	18,906	12,362	8,595	301	285	117,934
	Subtotal	2,466	19,292	12,562	8,670	392	346	127,569
Other woodlands (Govt, etc.)	1 to 100 acres	0	0	1	0	26	11	299
	101 to 1,000 acres	0	0	60	0	25	17	1,663
	1,001 to 100,000 acres	0	0	0	0	54	32	3,427
	100,000 + acres	0	0	0	0	42	39	7,893
	Subtotal	0	0	61	0	147	99	13,282
1999 Totals:		2,469	28,906	17,486	12,859	6,954	2,346	368,403
1998 Totals:		3,941	33,205	23,052	13,625	7,191	2,680	384,643
Change from 1998 to 1999:		-37%	-13%	-24%	-6%	-3%	-12%	-4%

Definitions:

Ownership Type	Private:	Woodlands privately owned but NOT by a forest industry. These include private individuals and other non-forest product industries.
	Forest Industry:	Woodlands owned by a forest products industry; usually most of the wood harvested is used by that industry.
	Other:	Woodlands owned by a governmental entity -- local, state, federal, or tribal governments.
Types of Harvests	Selection:	Harvest method where trees are removed individually or in small (<5 acre) patches.
	Shelterwood:	Harvest method of mature trees from a forest site in two or more stages. The first stage removes only a portion of the trees to allow establishment of regeneration before the remaining trees are removed in subsequent harvest.
	Clearcut:	Harvest method on a site greater than 5 acres that results in a residual basal area of acceptable growing stock trees >4.5" DBH of less than 30 square feet per acre, unless after harvesting the site has a well-distributed stand of acceptable growing stock 3 feet tall for softwood and 5 feet for hardwoods (Overstory Removal). Refer to the latest copy of the Maine Forest Practices Act, Maine Forest Service Rules Chapter 20 for additional information.
	Change of Land Use:	the land use after harvest does not include growing forest products.
CLP:		Certified Logging Professional. A logger who has completed Certified Logging Professional training program.

1999 Annual Report on Clearcutting

Compiled from the 1999 Landowner Reports and survey instruments. Data collected under the provisions of the Forest Resources Assessment Program, 12 MRSA § 8878-A

County	Large Landowners (own >100,000 acres)									All Other Landowners			All Landowners
	Precommercial Activities		Clearcuts > 75 acres in size		Purpose for Clearcut (see explanation below)					TSI	Acres		County Total
	Acres	Acres	#	Acres	1	2	3	4	Sub Total		Acres	Acres	Acres
TSI	Planted									TSI	Planted	Clearcut	Clearcut
Androscoggin	0	0	0	0	0	0	0	0	0	3	25	157	157
Aroostook	6,679	3,478	0	0	2,803	0	802	0	3,605	287	18	431	4,036
Cumberland	0	0	0	0	0	0	0	0	0	55	18	114	114
Franklin	181	168	0	0	1,997	0	79	0	2,076	188	11	24	2,100
Hancock	1,026	1,393	0	0	460	0	68	0	528	215	23	34	562
Kennebec	0	0	0	0	0	0	0	0	0	80	232	133	133
Knox	0	0	0	0	0	0	0	0	0	11	4	51	51
Lincoln	0	0	0	0	0	0	0	0	0	36	2	66	66
Oxford	0	73	1	99	1,454	0	404	0	1,858	517	166	223	2,081
Penobscot	1,388	1,464	0	0	947	174	321	0	1,442	387	52	94	1,536
Piscataquis	3,174	1,200	1	81	1,386	0	521	0	1,907	229	42	68	1,975
Sagadahoc	0	0	0	0	0	0	0	0	0	3	1	13	13
Somerset	1,595	2,162	1	82	1,750	0	1,852	0	3,602	140	516	1,248	4,850
Waldo	0	0	0	0	0	0	0	0	0	318	47	329	329
Washington	723	1,612	0	0	295	0	198	35	528	122	7	139	667
York	0	0	0	0	0	0	0	0	0	128	146	87	87
State Total:	14,766	11,550	3	262	11,092	174	4,245	35	15,546	2,719	1,307	3,209	18,755

Purposes for creating clearcut:

1. Removal of poor quality, intolerant, under stocked, short lived or mature overstories where the retention of the residual overstory trees is not justified for further increase in value, as a source of seed, or for protection of the new stand.
2. Ecologically appropriate improvement or creation of wildlife habitat.
3. Removal of stands that, if partially harvested according to accepted silvicultural practice, are at high risk for windthrow due to factors such as soils, rooting depth, crown ratio or stem quality.
4. Harvesting of an existing plantation or other forest stand established by or previously treated with precommercial silvicultural activities.

Frequency Distribution of Clearcutting

for Large Landowners who own more than 100,000 acres

<u>1999 Clearcut as percent of statewide</u>	<u># of Landowners</u>	<u>Clearcut Acres</u>
0%	9	0
0.001%-0.25%	6	4,373
0.26%-0.75%	5	11,173
0.76%-1.00%	0	0