

2002

Silvicultural Activities Report

including Annual Report on Clearcutting and Precommercial Activities

Compiled from the 2002 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

Harvesting and Land Use Changes

- The total area harvested in 2002 was 562,424 acres, a slight decrease from 565,312 acres in 2001.
- The total area partially harvested in 2002 was 538,909 acres, a slight decrease from 546,386 acres in 2001.

Clearcutting:

1. The total area clearcut increased, from 14,391 acres in 2001 to 18,388 acres in 2002.
Clearcutting amounts to less than 5% of total harvested acres.
2. Landowners owning more than 100,000 acres in Maine created 92% of all clearcuts (16,888 acres). The highest rate of clearcutting for an individual landowner, in this ownership size, was 0.8% of its total statewide ownership.
3. The average size clearcut in 2002 was 22 acres statewide. Landowners owning more than 100,000 acres had an average clearcut size of 24 acres. Landowners owning less than 100,000 acres had an average clearcut size of 12 acres. There was one clearcut created in 2002 that was over 75 acres in size.
4. The primary silvicultural reason for clearcutting reported by large landowners was for areas 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 11% from 4,535 acres in 2001 to 5,126 acres in 2002.
- Due to a change in state law that exempts small harvests (<5 acres) from reporting requirements, acres of land use change reported here most likely underestimate the actual number.

Precommercial Silvicultural Activities

Herbicide Use:

- For site preparation increased 298%, from 421 acres in 2001 to 1,674 acres in 2002.
This is a normal periodic increase of intensive management by large landowners for the purpose of establishing new forest stands.
- To release crop trees from competing vegetation increased 38%, from 11,370 acres in 2001 to 16,732 acres in 2002.

Timber Stand Improvement (TSI):

- Precommercial Thinning of young stands with spacing saws decreased 21%, from 21,862 acres in 2001 to 19,071 acres in 2002.
92% of this activity was done by landowners owning more than 100,000 acres.

Planting:

- Tree planting decreased 37%, from 10,885 acres in 2001 to 7,926 acres in 2002.
97% of the planting was by landowners owning more than 100,000 acres. The predominant species planted were spruces.

Professional Assistance

- The harvest acres supervised by licensed foresters remained consistent.
76% of all harvest acres in 2002 had a licensed forester involved, compared to 74% of all harvests in 2001.
- Licensed Forester supervision on small woodlots (<= 100 acres) declined from 33% in 2001 to 24% in 2002.

2002 Harvesting and Land Use Changes

Commercial Harvest Information by Landowner Size and Type		Acres						
		Selection	Shelterwood			Clearcut	Land Use Change	Total Harvest
			Initial or Intermediate Entry	Final Entry	Sub-Total Shelterwood			
Forest Industry Land	1 to 100 acres	77	0	0	0	0	0	77
	101 to 1,000 acres	150	0	0	0	0	0	150
	1,001 to 100,000 acres	5,140	876	0	876	32	2	6,050
	100,000 + acres	58,430	48,730	35,661	84,391	13,580	177	156,578
	SubTotal	63,797	49,606	35,661	85,267	13,612	179	162,855
Institutional Investor Timberlands	1 to 100 acres	0	0	0	0	0	0	0
	101 to 1,000 acres	0	0	0	0	0	0	0
	1,001 to 100,000 acres	517	1,220	229	1,449	0	0	1,966
	100,000 + acres	17,373	23,810	11,297	35,107	538	0	53,018
	SubTotal	17,890	25,030	11,526	36,556	538	0	54,984
Non-Industrial Land	1 to 100 acres	51,399	1,048	894	1,942	278	2,353	55,972
	101 to 1,000 acres	66,257	1,621	2,840	4,461	258	1,377	72,353
	1,001 to 100,000 acres	106,579	11,950	18,189	30,139	964	1,004	138,686
	100,000 + acres	19,558	32,720	9,429	42,149	2,673	0	64,380
	SubTotal	243,793	47,339	31,352	78,691	4,173	4,734	331,391
Other woodlands (Govt, etc.)	1 to 100 acres	226	60	0	60	0	67	353
	101 to 1,000 acres	1,351	150	25	175	0	81	1,607
	1,001 to 100,000 acres	2,710	372	131	503	66	50	3,329
	100,000 + acres	6,539	929	422	1,351	0	15	7,905
	SubTotal	10,826	1,511	578	2,089	66	213	13,194
2002 Totals:		336,306	123,486	79,117	202,603	18,389	5,126	562,424
Percent of 2002 Harvest:		59.80%	21.96%	14.07%	36.02%	3.27%	0.91%	100.00%
2001 Totals:		349,594	120,863	75,929	196,792	14,391	4,535	565,312
Percent Change from 2001 to 2002:		-4%	2%	4%	3%	28%	13%	-1%

The 2001 totals in this report may not match those published in the September 26, 2002 report due to receipt of additional data or corrections.

2002 Precommercial Activities and Professional Assistance

Ownership Type	Ownership Size	Precommercial Activities by Landowner Size and Type				Number of Reported Harvests	Licensed Professional Forester Use by Landowner Size and Type	
		Acres					Number of Harvests	Total Acres
		Herbicide Use		TSI	Tree Planting			
Site Prep	Release							
Forest Industry Land	1 to 100 acres	0	0	0	0	3	0	0
	101 to 1,000 acres	0	0	0	0	3	0	0
	1,001 to 100,000 acres	82	0	0	37	18	18	6,020
	100,000 + acres	1,067	11,397	15,877	7,143	323	306	144,890
	Subtotal	1,149	11,397	15,877	7,180	347	324	150,910
Institutional Investor Timberlands	1 to 100 acres	0	0	0	0	0	0	0
	101 to 1,000 acres	0	0	0	0	0	0	0
	1,001 to 100,000 acres	0	0	0	0	18	17	1,713
	100,000 + acres	0	0	0	0	51	48	51,122
	Subtotal	0	0	0	0	69	65	52,835
Non-Industrial Land	1 to 100 acres	6	5	344	50	2,418	516	13,539
	101 to 1,000 acres	10	8	329	53	1,513	503	28,208
	1,001 to 100,000 acres	230	647	641	76	470	313	112,662
	100,000 + acres	279	4,645	1,867	555	173	157	55,935
	Subtotal	525	5,305	3,181	734	4,574	1,489	210,344
Other woodlands (Govt, etc.)	1 to 100 acres	0	0	2	2	18	8	142
	101 to 1,000 acres	0	30	11	9	35	26	1,449
	1,001 to 100,000 acres	0	0	0	1	46	34	2,998
	100,000 + acres	0	0	0	0	32	32	7,905
	Subtotal	0	30	13	12	131	100	12,494
2002 Totals:		1,674	16,732	19,071	7,926	5,121	1,978	426,583
2001 Totals:		421	11,370	21,862	10,885	5,591	2,504	419,384
Change from 2001 to 2002:		298%	47%	-13%	-27%	-8%	-21%	2%

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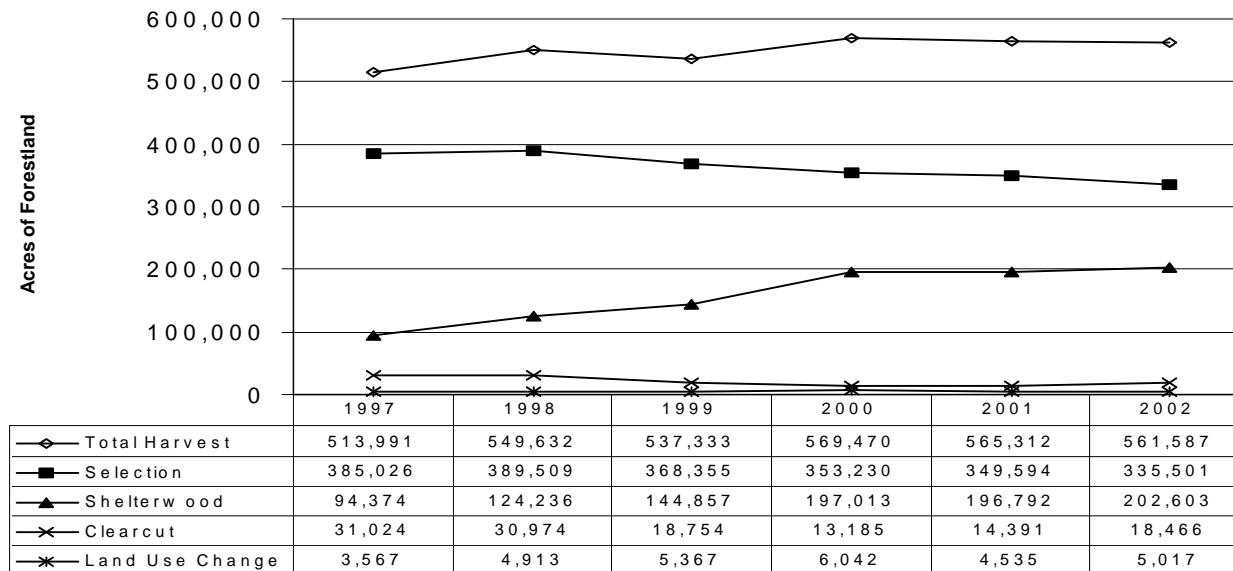
Definitions:

- Ownership Type**
- Forest Industry Land:** Woodlands owned by a forest products industry; usually most of the wood harvested is used by that industry.
 - Institutional Investor Timberlands:** Woodlands owned by organizations that hold assets as fiduciaries for the benefit of others.
 - Non-Industrial Land:** Woodlands privately owned but NOT by a forest industry. These include private individuals and other non-forest product industries.
 - Other woodlands:** Woodlands owned by other entities not listed above -- including local, state, federal, or tribal governments.

- Types of Harvests**
- Selection:** Harvest where trees are removed individually or in small (<5 acre) patches.
 - Shelterwood:** Harvest 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 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: Harvest conducted to convert forestland to another land use such as house lots, farm pastures, etc.

Harvesting Trends in Maine 1997-2002



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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)						Acres				Acres
	Acres		#	Acres	Acres						TSI	Planted	Clearcut		
	TSI	Planted			1	2	3	4	Sub Total	Avg. Size			Sub Total	Avg. Size	Clearcut
Androscoggin	0	0	0	0	0	0	0	0	0	0	70	10	11	4	11
Aroostook	6,906	3,381	0	0	5,205	0	1,543	0	6,748	20	128	56	51	10	6,799
Cumberland	0	0	0	0	0	0	0	0	0	0	40	0	6	6	6
Franklin	311	379	0	0	1,663	0	221	0	1,884	31	23	6	186	13	2,070
Hancock	499	514	0	0	215	0	47	0	262	44	45	8	126	32	388
Kennebec	0	0	0	0	0	0	0	0	0	0	0	0	78	26	78
Knox	0	0	0	0	0	0	0	0	0	0	0	1	31	5	31
Lincoln	0	0	0	0	0	0	0	0	0	0	1	0	18	6	18
Oxford	808	625	0	0	2,926	0	76	0	3,002	29	36	51	20	7	3,022
Penobscot	4,789	1,198	0	0	988	0	16	0	1,004	26	716	32	247	15	1,251
Piscataquis	1,946	494	0	0	1,045	0	481	0	1,526	22	43	20	2	2	1,528
Sagadahoc	0	0	0	0	0	0	0	0	0	0	18	1	0	0	0
Somerset	1,678	853	0	0	716	0	1,585	25	2,326	18	4	1	573	21	2,899
Waldo	0	0	0	0	0	0	0	0	0	0	112	38	103	11	103
Washington	789	254	0	0	136	0	0	0	136	45	84	0	124	8	260
York	0	0	0	0	0	0	0	0	0	0	25	5	22	7	22
State Total:	17,726	7,698	0	0	12,894	0	3,969	25	16,888	24	1,345	229	1,598	12	18,486

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

2002 Clearcut as
percent of statewide
ownership

of Landowners

Clearcut Acres

0% - 0.001%	16	321
0.001%-0.25%	7	3,508
0.26%-0.75%	3	8,988
0.76%-1.00%	1	4,071