

2010

Silvicultural Activities Report

including Annual Report on Clearcutting and Precommercial Activities

Compiled from the 2010 Landowner Reports and other survey instruments.
Data collected under the provisions of Title 12 MRSA §8885 and §8878-A

Published:
December 22, 2011



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Printed under appropriation 010-04A-5400-51

Report Highlights

Harvesting and Land Use Changes

- 442,707 acres were harvested in 2010, a 12% increase from 395,913 acres in 2009.
- 420,309 acres were "partially harvested" (partial and shelterwood totals) in 2010, a 12% increase from 376,765 acres in 2009.
- The number of harvests reported increased from 4,864 to 5,650.

Clearcutting:

1. The total area clearcut increased, from 14,877 acres in 2009 to 19,292 acres in 2010. Clearcutting amounts to just over 4% of total harvested acres.
2. Landowners owning more than 100,000 acres in Maine created 92% of all clearcuts (17,732 acres).
3. Average clearcut size in 2010 was 19 acres. Landowners owning more than 100,000 acres had an average clearcut size of 20 acres. Landowners owning less than 100,000 acres had an average clearcut size of 11 acres. One clearcut larger than 75 acres was created in 2010.
4. The primary silvicultural reason for clearcutting reported by large landowners was 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 land use decreased 27% from 4,271 acres in 2009 to 3,106 acres in 2010.

Precommercial Silvicultural Activities

Herbicide Use:

- For site preparation increased 909%, from 22 acres in 2009 to 222 acres in 2010.
- To release crop trees from competing vegetation decreased 27%, from 10,892 acres in 2009 to 7,963 acres in 2010.

Timber Stand Improvement (TSI):

- Precommercial thinning of young stands with spacing saws increased 51%, from 4,080 acres in 2009 to 6,175 acres in 2010.
95% of this activity was done by landowners owning more than 100,000 acres (5,868 acres).

Planting:

- Tree planting decreased 28%, from 2,852 acres in 2009 to 2,067 acres in 2010.
98% of the planting was by landowners owning more than 100,000 acres (2,020 acres).

Forester Involvement

- In 2010, licensed foresters supervised harvesting on 304,169 acres, compared to 270,015 acres in 2009.
69% of all harvest acres in 2010 had a licensed forester involved; a slight increase from 2009 (68%).
Licensed Forester supervision occurred on 25% (594 out of 2,338 harvests) of the harvests on family forests (<= 100 acres) in 2010. This is a slight increase from 24% in 2009 (563 out of 2,315 harvests).

2010 Harvesting and Land Use Changes

Commercial Harvest Information by Landowner Size and Type		Acres						
		Partial Harvests	Shelterwood			Clearcut	Land Use Change	Total Harvest
OwnershipType	Ownership Size		Initial or Intermediate Entry	Final Entry	Total Shelterwood			
Forest Industry Woodlands	1 to 100 acres	0	0	0	0	0	0	0
	101 to 1,000 acres	40	0	0	0	0	0	40
	1,001 to 100,000 acres	1,509	375	76	451	0	0	1,960
	100,000 + acres	14,761	14,962	23,978	38,940	2,980	0	56,681
	SubTotal	16,310	15,337	24,054	39,391	2,980	0	58,681
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	491	772	903	1,675	26	0	2,192
	100,000 + acres	25,042	25,409	33,846	59,255	9,343	0	93,640
	SubTotal	25,533	26,181	34,749	60,930	9,369	0	95,832
Non-Industrial Land	1 to 100 acres	36,334	2,667	2,840	5,507	491	1,182	43,514
	101 to 1,000 acres	71,372	4,633	6,266	10,899	754	1,115	84,140
	1,001 to 100,000 acres	43,858	4,234	9,907	14,141	284	274	58,557
	100,000 + acres	37,507	22,971	19,325	42,296	5,401	374	85,578
	SubTotal	189,071	34,505	38,338	72,843	6,930	2,945	271,789
Other Woodlands (Govt, etc.)	1 to 100 acres	112	0	10	10	0	4	126
	101 to 1,000 acres	1,770	169	184	353	0	68	2,191
	1,001 to 100,000 acres	848	467	494	961	5	89	1,903
	100,000 + acres	11,244	377	556	933	8	0	12,185
	SubTotal	13,974	1,013	1,244	2,257	13	161	16,405
2010 Totals:		244,888	77,036	98,385	175,421	19,292	3,106	442,707
Percent of 2010 Harvest:		55.32%	17.40%	22.22%	39.62%	4.36%	0.70%	100.00%
2009 Totals:		194,756	86,773	95,236	182,009	14,877	4,271	395,913
Percent Change from 2009 to 2010:		26%	-11%	3%	-4%	30%	-27%	12%

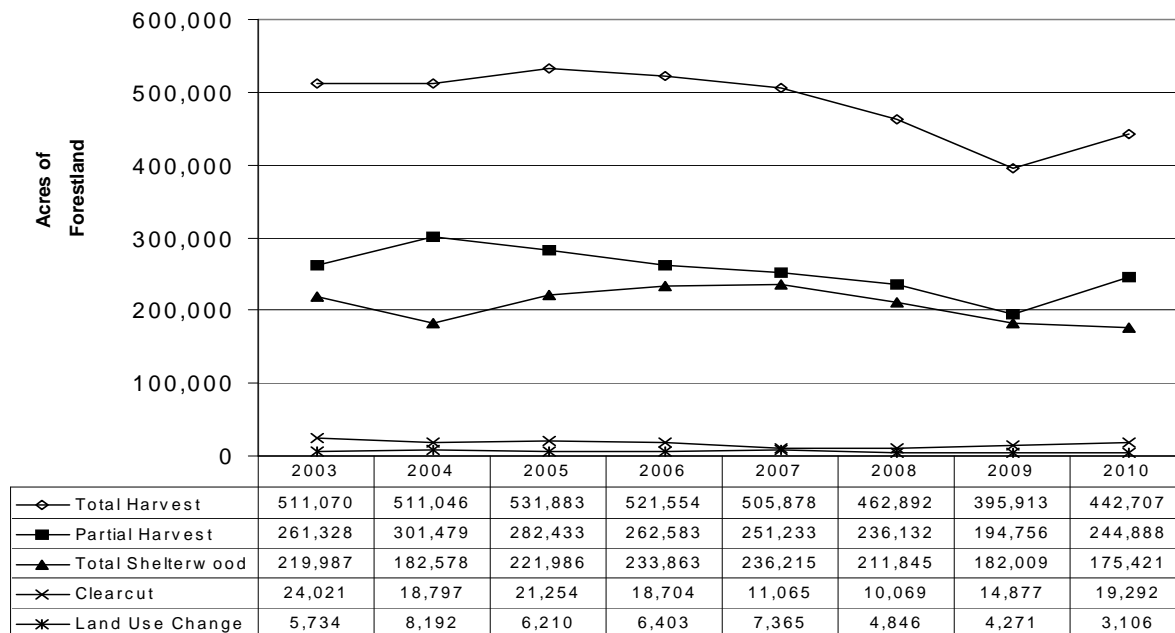
2010 Precommercial Activities and Professional Assistance

OwnershipTypeOwnership Size		Precommercial Activities by Landowner Size and Type					Number of Reported Harvests	Licensed Forester Involvement by Landowner Size and Type	
		Acres						Number of Harvests	Total Acres
		Herbicide Use		TSI	Tree Planting				
		Site Prep	Release						
Forest Industry Woodlands	1 to 100 acres	0	0	0	0		0	0	0
	101 to 1,000 acres	0	0	0	0		2	0	0
	1,001 to 100,000 acres	0	0	0	0		26	23	1,655
	100,000 + acres	0	5,952	3,598	1,706		123	140	40,926
	Subtotal	0	5,952	3,598	1,706		151	163	42,581
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		7	6	1,792
	100,000 + acres	0	1,355	2,270	314		226	213	85,818
	Subtotal	0	1,355	2,270	314		233	219	87,610
Non-Industrial Land	1 to 100 acres	0	35	90	35		2,327	589	13,510
	101 to 1,000 acres	0	139	212	12		2,072	641	29,066
	1,001 to 100,000 acres	0	0	0	0		466	263	36,464
	100,000 + acres	217	462	0	0		262	232	80,135
	Subtotal	217	636	302	47		5,127	1,725	159,175
Other Woodlands (Govt, etc.)	1 to 100 acres	0	0	0	0		11	5	76
	101 to 1,000 acres	5	20	5	0		46	29	1,317
	1,001 to 100,000 acres	0	0	0	0		22	17	1,814
	100,000 + acres	0	0	0	0		60	57	11,596
	Subtotal	5	20	5	0		139	108	14,803
2010 Totals:		222	7,963	6,175	2,067		5,650	2,215	304,169
2009 Totals:		22	10,892	4,080	2,852		4,864	1,966	270,015
Change from 2009 to 2010:		909%	-27%	51%	-28%		16%	13%	13%

Definitions:

Ownership Type	Forest Industry Land: Woodlands owned by a forest products industry; usually most of the wood harvested is used by that industry.
	Investor Timberlands Woodlands owned by organizations, including Timberland Investment Management Organizations (TIMOs) and Real Estate Investment Trusts (REITs) that hold timberland 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	Partial Harvest: 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 larger 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 Service Rules Chapter 20 for additional information. It can be found on the Maine Forest Service website at http://www.state.me.us/doc/mfs/rules_regs/index.htm
	Change of Land Use: Harvest conducted to convert forestland to another land use such as house lots, farm pastures, etc.

Harvesting Trends in Maine 2003-2010



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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)						<u>Acres</u>				
	<u>Acres</u>		#	Acres	1	2	3	4	Sub Total	Avg. Size	TSI	Planted	Clearcut		
	TSI	Planted											Sub Total	Avg. Size	
Androscoggin	0	0	0	0	0	0	0	0	0	0	15	0	5	5	5
Aroostook	2,935	1,741	0	0	2,435	0	703	0	3,138	29	12	0	396	12	3,534
Cumberland	0	0	0	0	0	0	0	0	0	0	5	0	15	8	15
Franklin	0	0	0	0	1,714	0	386	0	2,100	24	20	0	22	8	2,122
Hancock	0	0	0	0	6	0	0	0	6	6	21	0	83	14	89
Kennebec	0	0	0	0	13	0	0	0	13	13	18	4	9	4	22
Knox	0	0	0	0	0	0	0	0	0	0	0	0	52	9	52
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	8	4	8
Oxford	429	0	1	130	2,443	0	1,895	0	4,338	16	10	1	73	7	4,411
Penobscot	289	191	0	0	302	0	0	0	302	34	178	10	148	11	450
Piscataquis	1,933	88	0	0	389	0	296	168	853	21	3	20	190	13	1,043
Sagadahoc	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5
Somerset	282	0	0	0	6,276	0	258	231	6,765	18	5	7	204	10	6,969
Waldo	0	0	0	0	0	0	0	0	0	0	0	5	86	17	86
Washington	0	0	0	0	195	0	0	22	217	13	15	0	110	10	327
York	0	0	0	0	0	0	0	0	0	0	5	0	154	14	154
State Total:	5,868	2,020	1	130	13,773	0	3,538	421	17,732	20	307	47	1,560	11	19,292

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

2010 Clearcut as
percent of statewide
ownership

of Landowners

Clearcut Acres

0% - 0.001%

2

135

0.001%-0.25%

14

12,448

0.26%-0.75%

1

5,149

0.76%-1.00%

0

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