

MAINE STATE LEGISLATURE

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2020 Silvicultural Activities Report

including Annual Report on Clearcutting and Precommercial Activities

Compiled from 2020 Landowner Reports and other survey instruments.
Data collected under the provisions of 12 MRS §8885

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Department of Agriculture, Conservation and Forestry

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Report Highlights

Harvesting and Land Use Changes

- 348,706 acres were harvested in 2020, an increase of 8% from 322,399 acres in 2019.
- 318,085 acres were partially harvested (partial and shelterwood totals) in 2020, a 7% increase from 298,105 acres in 2019.
- The number of harvests reported decreased from 4,577 to 4,281.

Clearcutting:

1. The total area clearcut increased 28% from 21,449 acres in 2019 to 27,434 acres in 2020. Clearcutting amounted to 7.9% of total harvested acres.
2. Landowners owning more than 100,000 acres in Maine created 94% of all clearcut acreage (25,822 acres).
3. Average clearcut size in 2020 was 28 acres. Landowners owning more than 100,000 acres had an average clearcut size of 29 acres. Landowners owning less than 100,000 acres had an average clearcut size of 16 acres. 61 clearcuts larger than 75 acres were created in 2020.
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 increased 12% from 2,845 acres in 2019 to 3,187 acres in 2020.

Precommercial Silvicultural Activities

Herbicide Use:

- Site preparation decreased 30%, from 4,750 acres in 2019 to 3,312 acres in 2020.
- To release crop trees from competing vegetation increased 59%, from 10,127 acres in 2019 to 16,137 acres in 2020.

Timber Stand Improvement (TSI):

- Precommercial thinning of young stands with spacing saws decreased 6%, from 9,003 acres in 2019 to 8,462 acres in 2020.
96% of the acreage was done by landowners owning more than 100,000 acres (8,140 acres).

Planting:

- Tree planting increased 5%, from 5,593 acres in 2019 to 5,895 acres in 2020.
96% of the planting acreage was by landowners owning more than 100,000 acres (5,635 acres).

Forester Involvement

- In 2020, licensed foresters supervised harvesting on 262,397 acres, compared to 223,728 acres in 2019.
75% of all harvest acres in 2020 had a licensed forester involved; an increase from 2019 (69% involvement).
Licensed Forester supervision occurred on 31% (632 out of 2,037 harvests) of the harvests on family woodlands (<= 100 acres) in 2020; compared to 30% in 2019 (672 out of 2,248 harvests).

2020 Harvesting Activities

Commercial Harvest Information by Landowner Size and Type		Acres						
		Partial Harvests	Shelterwood			Clearcut	Land Use Change	Total Harvest
			Initial or Intermediate Entry	Final Entry	Total Shelterwood			
OwnershipType	Ownership Size							
Forest Industry Woodlands	1 to 100 acres	150	10	12	22	9	46	227
	101 to 1,000 acres	38	0	0	0	5	0	43
	1,001 to 100,000 acres	5,693	636	1,649	2,285	169	12	8,159
	100,000 + acres	10,112	10,228	17,535	27,763	10,288	0	48,163
	SubTotal	15,993	10,874	19,196	30,070	10,471	58	56,592
Investor Timberlands	1 to 100 acres	0	0	0	0	0	0	0
	101 to 1,000 acres	35	0	0	0	0	0	35
	1,001 to 100,000 acres	153	0	0	0	0	4	157
	100,000 + acres	15,775	7,046	20,901	27,947	4,768	0	48,490
	SubTotal	15,963	7,046	20,901	27,947	4,768	4	48,682
Non-Industrial Land	1 to 100 acres	35,977	1,828	3,326	5,154	631	1,794	43,556
	101 to 1,000 acres	44,003	4,065	4,070	8,135	355	889	53,382
	1,001 to 100,000 acres	28,193	5,712	8,041	13,753	330	82	42,358
	100,000 + acres	14,064	12,168	54,879	67,047	10,740	95	91,946
	SubTotal	122,237	23,773	70,316	94,089	12,056	2,860	231,242
Other Woodlands (Govt, etc.)	1 to 100 acres	337	0	0	0	19	62	418
	101 to 1,000 acres	1,077	145	30	175	36	52	1,340
	1,001 to 100,000 acres	1,214	754	465	1,219	58	93	2,584
	100,000 + acres	5,619	1,331	814	2,145	26	58	7,848
	SubTotal	8,247	2,230	1,309	3,539	139	265	12,190
2020 Totals:		162,440	43,923	111,722	155,645	27,434	3,187	348,706
Percent of 2020 Harvest:		46.58%	12.60%	32.04%	44.64%	7.87%	0.91%	100.00%
2019 Totals:		171,091	43,153	83,861	127,014	21,449	2,845	322,399
Percent Change from 2019 to 2020:		-5%	2%	33%	23%	28%	12%	8%

2020 Precommercial Activities and Professional Assistance

OwnershipTypeOwnership Size		Precommercial Activities by Landowner Size and Type					Number of Reported Harvests	Licensed Forester Involvement	
		Acres						by Landowner Size and Type	
		Herbicide Use		TSI	Tree Planting			Number of Harvests	Total Acres
		Site Prep	Release						
Forest Industry Woodlands	1 to 100 acres	0	0	0	0		7	2	84
	101 to 1,000 acres	0	0	0	0		3	1	18
	1,001 to 100,000 acres	0	0	0	0		22	12	4,829
	100,000 + acres	2,423	13,607	5,526	3,560		126	124	47,466
	Subtotal	2,423	13,607	5,526	3,560		158	139	52,397
Investor Timberlands	1 to 100 acres	0	0	0	0		0	0	0
	101 to 1,000 acres	0	0	0	0		1	1	35
	1,001 to 100,000 acres	0	0	0	0		4	3	153
	100,000 + acres	0	215	222	481		152	150	47,910
	Subtotal	0	215	222	481		157	154	48,098
Non-Industrial Land	1 to 100 acres	13	0	103	144		2,037	632	17,813
	101 to 1,000 acres	117	4	193	20		1,240	486	26,191
	1,001 to 100,000 acres	0	0	16	96		292	195	22,266
	100,000 + acres	758	2,302	2,392	1,594		267	215	84,120
	Subtotal	888	2,306	2,704	1,854		3,836	1,528	150,390
Other Woodlands (Govt, etc.)	1 to 100 acres	0	0	0	0		16	6	305
	101 to 1,000 acres	0	0	0	0		30	24	1,195
	1,001 to 100,000 acres	0	8	10	0		39	29	2,407
	100,000 + acres	1	1	0	0		45	41	7,605
	Subtotal	1	9	10	0		130	100	11,512
2020 Totals:		3,312	16,137	8,462	5,895		4,281	1,921	262,397
2019 Totals:		4,750	10,127	9,003	5,593		4,577	1,988	223,728
Change from 2019 to 2020:		-30%	59%	-6%	5%		-6%	-3%	17%

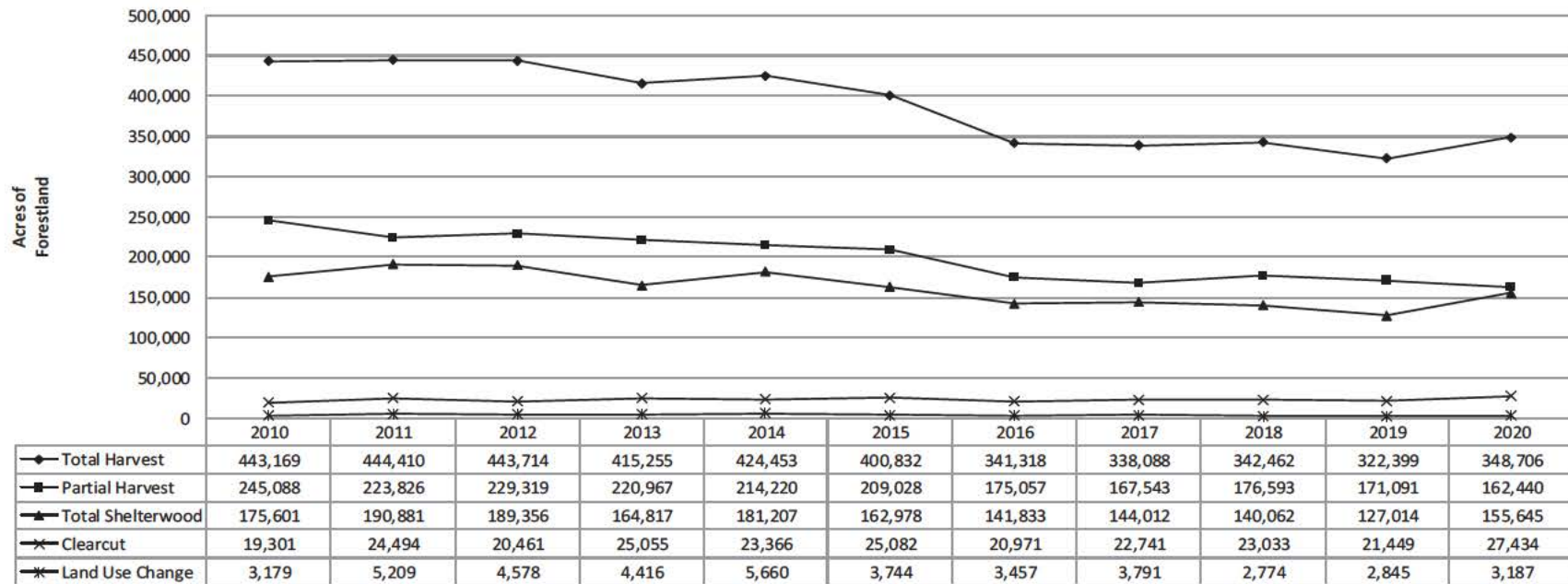
348,706 *Statewide Total Harvest
acres from previous page*

322,399

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 2010-2020



2020 Annual Report on Clearcutting and Precommercial Activities

Compiled from the 2020 Landowner Reports and other survey instruments. Data collected under the provisions of the Forest Resources Assessment Program, 12 MRS § 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)						<u>Acres</u>				
	<u>Acres</u>		#	Acres	1	2	3	4	Sub Total	Avg. Size	TSI	Planted	Clearcut		<u>Acres</u> Clearcut
	TSI	Planted											Sub Total	Avg. Size	
Androscoggin	0	0	0	0	0	0	0	0	0	0	0	0	98	98	98
Aroostook	4,782	3,126	25	2,908	8,885	0	829	0	9,714	25	60	146	358	16	10,072
Cumberland	0	0	0	0	0	0	0	0	0	0	14	6	32	32	32
Franklin	0	69	8	1,102	2,382	0	189	7	2,578	34	11	1	231	19	2,809
Hancock	0	0	0	0	0	0	0	0	0	0	1	50	98	12	98
Kennebec	0	0	0	0	0	0	0	0	0	0	12	0	11	6	11
Knox	0	0	0	0	0	0	0	0	0	0	0	1	60	30	60
Lincoln	0	0	0	0	0	0	0	0	0	0	0	7	41	14	41
Oxford	0	135	15	2,568	1,961	0	540	0	2,501	76	51	1	168	24	2,669
Penobscot	236	291	0	0	182	0	104	168	454	16	21	29	176	13	630
Piscataquis	1,470	391	6	875	2,547	0	695	515	3,757	31	23	1	64	8	3,821
Sagadahoc	0	0	0	0	0	0	0	0	0	0	0	0	41	14	41
Somerset	380	1,172	7	934	2,780	114	85	3,376	6,355	30	86	18	169	14	6,524
Waldo	0	0	0	0	0	0	0	0	0	0	22	0	35	12	35
Washington	1,272	451	0	0	434	0	29	0	463	19	16	0	10	5	473
York	0	0	0	0	0	0	0	0	0	0	5	0	20	10	20
State Total:	8,140	5,635	61	8,387	19,171	114	2,471	4,066	25,822	29	322	260	1,612	16	27,434

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.

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