

**2018**

# **Silvicultural Activities Report**

**including Annual Report on Clearcutting and Precommercial Activities**

Compiled from the 2018 Landowner Reports and other survey instruments.  
Data collected under the provisions of 12 MRS §8885

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## Report Highlights

### Harvesting and Land Use Change

- 342,462 acres were harvested in 2018, a 1% increase from 338,088 acres in 2017.
- 316,655 acres were partially harvested (partial and shelterwood totals) in 2018, a 2% increase from 311,555 acres in 2017.
- The number of harvests reported decreased from 4,354 to 4,810.

#### Clearcutting:

1. The total area clearcut increased 1% from 22,741 acres in 2017 to 23,033 acres in 2018. Clearcutting amounted to 6.7% of total harvested acres.
2. Landowners owning more than 100,000 acres in Maine created 89% of all clearcut acreage (20,560 acres).
3. Average clearcut size in 2018 was 27 acres. Landowners owning more than 100,000 acres had an average clearcut size of 36 acres. Landowners owning less than 100,000 acres had an average clearcut size of 14 acres. 51 clearcuts larger than 75 acres were created in 2018.
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 3,791 acres in 2017 to 2,774 acres in 2018.

### Precommercial Silvicultural Activities

#### Herbicide Use:

- Site preparation increased 3%, from 932 acres in 2017 to 960 acres in 2018.
- To release crop trees from competing vegetation increased 31%, from 11,769 acres in 2017 to 15,457 acres in 2018.

#### Timber Stand Improvement (TSI):

- Precommercial thinning of young stands with spacing saws increased 69%, from 8,791 acres in 2017 to 14,832 acres in 2018. 95% of the acreage was done by landowners owning more than 100,000 acres (14,126 acres).

#### Planting:

- Tree planting decreased 38%, from 7,430 acres in 2017 to 4,624 acres in 2018. 98% of the planting acreage was by landowners owning more than 100,000 acres (4,543 acres).

### Forester Involvement

- In 2018, licensed foresters supervised harvesting on 250,739 acres, compared to 259,841 acres in 2017. 73% of all harvest acres in 2018 had a licensed forester involved; a decrease from 2017 (76% involvement). Licensed Forester supervision occurred on 32% (743 out of 2,303 harvests) of the harvests on non-industrial family forests (<= 100 acres) in 2018. This is the same percentage as in 2017 (620 out of 1,968 harvests).

## 2018 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			
Ownership Type	Ownership Size							
<b>Forest Industry Woodlands</b>	1 to 100 acres	118	0	0	0	0	0	118
	101 to 1,000 acres	24	0	0	0	50	23	97
	1,001 to 100,000 acres	1,812	145	3,744	3,889	84	4	5,789
	100,000 + acres	13,590	12,002	16,384	28,386	6,614	0	48,590
	<b>SubTotal</b>	<b>15,544</b>	<b>12,147</b>	<b>20,128</b>	<b>32,275</b>	<b>6,748</b>	<b>27</b>	<b>54,594</b>
<b>Investor Timberlands</b>	1 to 100 acres	30	0	0	0	0	0	30
	101 to 1,000 acres	20	0	0	0	0	10	30
	1,001 to 100,000 acres	171	280	548	828	0	0	999
	100,000 + acres	15,335	5,879	24,848	30,727	6,516	0	52,578
	<b>SubTotal</b>	<b>15,556</b>	<b>6,159</b>	<b>25,396</b>	<b>31,555</b>	<b>6,516</b>	<b>10</b>	<b>53,637</b>
<b>Non-Industrial Land</b>	1 to 100 acres	40,898	3,244	4,278	7,522	779	1,172	50,371
	101 to 1,000 acres	49,265	5,728	7,583	13,311	448	909	63,933
	1,001 to 100,000 acres	23,018	3,721	9,176	12,897	1,049	405	37,369
	100,000 + acres	17,475	14,224	24,481	38,705	7,394	0	63,574
	<b>SubTotal</b>	<b>130,656</b>	<b>26,917</b>	<b>45,518</b>	<b>72,435</b>	<b>9,670</b>	<b>2,486</b>	<b>215,247</b>
<b>Other Woodlands (Govt, etc.)</b>	1 to 100 acres	174	5	40	45	0	14	233
	101 to 1,000 acres	1,280	405	0	405	40	85	1,810
	1,001 to 100,000 acres	2,714	653	220	873	23	87	3,697
	100,000 + acres	10,669	1,816	658	2,474	36	65	13,244
	<b>SubTotal</b>	<b>14,837</b>	<b>2,879</b>	<b>918</b>	<b>3,797</b>	<b>99</b>	<b>251</b>	<b>18,984</b>
<b>2018 Totals:</b>		<b>176,593</b>	<b>48,102</b>	<b>91,960</b>	<b>140,062</b>	<b>23,033</b>	<b>2,774</b>	<b>342,462</b>
<b>Percent of 2018 Harvest:</b>		<b>51.57%</b>	<b>14.05%</b>	<b>26.85%</b>	<b>40.90%</b>	<b>6.73%</b>	<b>0.81%</b>	<b>100.00%</b>
<b>2017 Totals:</b>		<b>167,543</b>	<b>54,531</b>	<b>89,481</b>	<b>144,012</b>	<b>22,741</b>	<b>3,791</b>	<b>338,088</b>
<b>Percent Change from 2017 to 2018:</b>		<b>5%</b>	<b>-12%</b>	<b>3%</b>	<b>-3%</b>	<b>1%</b>	<b>-27%</b>	<b>1%</b>

## 2018 Precommercial Activities and Professional Assistance

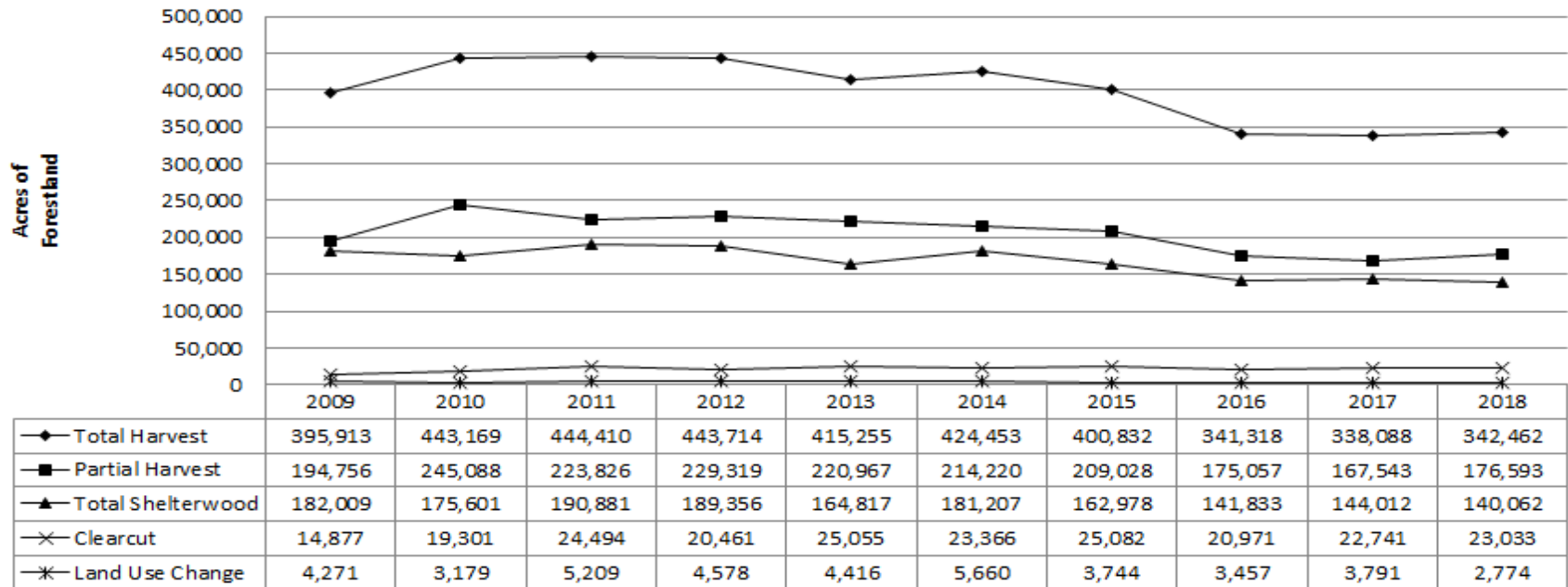
Ownership Type	Ownership Size	Precommercial Activities by Landowner Size and Type				Number of Reported Harvests	Licensed Forester Involvement by Landowner Size and Type	
		Acres					Number of Harvests	Total Acres
		Herbicide Use		TSI	Tree Planting			
Site Prep	Release							
<b>Forest Industry Woodlands</b>	1 to 100 acres	0	0	0	0	7	0	0
	101 to 1,000 acres	0	0	0	0	5	2	72
	1,001 to 100,000 acres	0	0	0	0	34	13	610
	100,000 + acres	0	11,342	11,501	2,860	117	111	46,045
	<b>Subtotal</b>	<b>0</b>	<b>11,342</b>	<b>11,501</b>	<b>2,860</b>	<b>163</b>	<b>126</b>	<b>46,727</b>
<b>Investor Timberlands</b>	1 to 100 acres	0	0	0	0	1	0	0
	101 to 1,000 acres	0	0	0	0	1	1	30
	1,001 to 100,000 acres	0	0	0	0	7	7	999
	100,000 + acres	0	326	73	45	149	138	48,041
	<b>Subtotal</b>	<b>0</b>	<b>326</b>	<b>73</b>	<b>45</b>	<b>158</b>	<b>146</b>	<b>49,070</b>
<b>Non-Industrial Land</b>	1 to 100 acres	28	30	232	36	2,303	743	19,425
	101 to 1,000 acres	176	0	343	45	1,425	609	31,840
	1,001 to 100,000 acres	0	9	93	0	356	232	27,180
	100,000 + acres	734	3,593	2,198	1,638	257	244	60,583
	<b>Subtotal</b>	<b>938</b>	<b>3,632</b>	<b>2,866</b>	<b>1,719</b>	<b>4,341</b>	<b>1,828</b>	<b>139,028</b>
<b>Other Woodlands (Govt, etc.)</b>	1 to 100 acres	0	0	0	0	14	6	94
	101 to 1,000 acres	0	0	38	0	35	29	1,575
	1,001 to 100,000 acres	22	22	0	0	41	30	3,326
	100,000 + acres	0	135	354	0	58	51	10,919
	<b>Subtotal</b>	<b>22</b>	<b>157</b>	<b>392</b>	<b>0</b>	<b>148</b>	<b>116</b>	<b>15,914</b>
<b>2018 Totals:</b>		<b>960</b>	<b>15,457</b>	<b>14,832</b>	<b>4,624</b>	<b>4,810</b>	<b>2,216</b>	<b>250,739</b>
<b>2017 Totals:</b>		<b>932</b>	<b>11,769</b>	<b>8,791</b>	<b>7,430</b>	<b>4,354</b>	<b>1,996</b>	<b>259,841</b>
<b>Change from 2017 to 2018:</b>		<b>3%</b>	<b>31%</b>	<b>69%</b>	<b>-38%</b>	<b>10%</b>	<b>11%</b>	<b>-4%</b>

<b>342,462</b>	<i>Statewide Total Harvest acres from previous page</i>
<b>338,088</b>	

**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 [https://www.maine.gov/dacf/mfs/rules\\_and\\_regulations.html](https://www.maine.gov/dacf/mfs/rules_and_regulations.html)
  - Change of Land Use:** Harvest conducted to convert forestland to another land use such as house lots, farm pastures, etc.

**Harvesting Trends in Maine 2009-2018**



# 2018 Annual Report on Clearcutting and Precommercial Activities

Compiled from the 2018 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)						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	0	0	0	100	25	100
Aroostook	10,324	2,860	15	1,791	3,892	7	632	870	5,401	29	220	47	469	14	5,870	
Cumberland	0	0	0	0	0	0	0	0	0	0	7	0	22	7	22	
Franklin	1,130	0	10	1,521	1,683	134	750	6	2,573	48	64	4	113	16	2,686	
Hancock	0	0	0	0	48	0	0	0	48	16	46	1	42	8	90	
Kennebec	0	0	0	0	0	0	0	0	0	0	34	0	66	9	66	
Knox	0	0	0	0	0	0	0	0	0	0	35	0	28	14	28	
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	
Oxford	310	0	11	1,792	1,980	0	862	0	2,842	32	65	3	173	17	3,015	
Penobscot	156	45	1	175	584	0	182	39	805	35	129	26	171	17	976	
Piscataquis	877	849	5	553	1,243	52	872	624	2,791	26	60	0	169	15	2,960	
Sagadahoc	0	0	0	0	0	29	0	0	29	10	0	0	0	0	29	
Somerset	929	789	7	671	4,334	0	30	1,039	5,403	27	46	0	779	29	6,182	
Waldo	0	0	0	0	0	0	0	0	0	0	0	0	116	11	116	
Washington	400	0	2	282	478	0	125	65	668	23	0	0	96	24	764	
York	0	0	0	0	0	0	0	0	0	0	0	0	124	10	124	
<b>State Total:</b>	<b>14,126</b>	<b>4,543</b>	<b>51</b>	<b>6,785</b>	<b>14,242</b>	<b>222</b>	<b>3,453</b>	<b>2,643</b>	<b>20,560</b>	<b>36</b>	<b>706</b>	<b>81</b>	<b>2,473</b>	<b>14</b>	<b>23,033</b>	

**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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