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# 2009 Silvicultural Activities Report

Maine Forest Service  
*Forest Policy and Management Division*

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# 2009 Silvicultural Activities Report

## including Annual Report on Clearcutting and Precommercial Activities

Compiled from the 2009 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

- 394,100 acres were harvested in 2009, a 15% decrease from 463,200 acres in 2008.
- 374,963 acres were "partially harvested" (partial and shelterwood totals) in 2009, a 16% decrease from 448,277 acres in 2008.
- The number of harvests reported decreased from 5,340 to 4,853.

#### Clearcutting:

1. The total area clearcut increased, from 10,075 acres in 2008 to 14,866 acres in 2009. Clearcutting amounts to less than 4% of total harvested acres.
2. Landowners owning more than 100,000 acres in Maine created 93% of all clearcuts (13,765 acres).
3. Average clearcut size in 2009 was 23 acres. 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. Three clearcuts larger than 75 acres were created in 2009.
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 -12% from 4,848 acres in 2008 to 4,271 acres in 2009.

### Precommercial Silvicultural Activities

#### Herbicide Use:

- For site preparation decreased -95%, from 452 acres in 2008 to 22 acres in 2009.
- To release crop trees from competing vegetation increased 25%, from 8,747 acres in 2008 to 10,892 acres in 2009.

#### Timber Stand Improvement (TSI):

- Precommercial thinning of young stands with spacing saws decreased -57%, from 8,947 acres in 2008 to 3,886 acres in 2009.  
89% of this activity was done by landowners owning more than 100,000 acres (3,444 acres).

#### Planting:

- Tree planting decreased -27%, from 3,889 acres in 2008 to 2,852 acres in 2009.  
91% of the planting was by landowners owning more than 100,000 acres (2,599 acres).

### Forester Involvement

- In 2009, licensed foresters supervised harvesting on 273,038 acres, compared to 299,809 acres in 2008.  
69% of all harvest acres in 2009 had a licensed forester involved; a slight increase from 2008 (65%).  
Licensed Forester supervision occurred on 24% (563 out of 2,315 harvests) of the harvests on family forests (<= 100 acres) in 2009. This is a slight increase from 22% in 2008 (557 out of 2,581 harvests).

## 2009 Harvesting and Land Use Changes

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			
<b>Forest Industry Woodlands</b>	1 to 100 acres	24	0	0	0	0	10	34
	101 to 1,000 acres	479	0	0	0	0	0	479
	1,001 to 100,000 acres	6,667	2,018	412	2,430	157	402	9,656
	100,000 + acres	9,838	23,247	24,983	48,230	2,824	0	60,892
	<b>SubTotal</b>	<b>17,008</b>	<b>25,265</b>	<b>25,395</b>	<b>50,660</b>	<b>2,981</b>	<b>412</b>	<b>71,061</b>
<b>Investor Timberlands</b>	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	1,316	922	1,991	2,913	0	0	4,229
	100,000 + acres	29,568	27,094	39,551	66,645	5,163	152	101,528
	<b>SubTotal</b>	<b>30,884</b>	<b>28,016</b>	<b>41,542</b>	<b>69,558</b>	<b>5,163</b>	<b>152</b>	<b>105,757</b>
<b>Non-Industrial Land</b>	1 to 100 acres	37,446	1,811	3,632	5,443	411	1,636	44,936
	101 to 1,000 acres	51,888	4,679	3,152	7,831	317	1,023	61,059
	1,001 to 100,000 acres	26,479	4,990	11,027	16,017	188	709	43,393
	100,000 + acres	13,435	20,852	9,142	29,994	5,778	47	49,254
	<b>SubTotal</b>	<b>129,248</b>	<b>32,332</b>	<b>26,953</b>	<b>59,285</b>	<b>6,694</b>	<b>3,415</b>	<b>198,642</b>
<b>Other Woodlands (Govt, etc.)</b>	1 to 100 acres	282	29	0	29	8	23	342
	101 to 1,000 acres	723	0	180	180	20	177	1,100
	1,001 to 100,000 acres	1,716	340	633	973	0	79	2,768
	100,000 + acres	13,854	478	85	563	0	13	14,430
	<b>SubTotal</b>	<b>16,575</b>	<b>847</b>	<b>898</b>	<b>1,745</b>	<b>28</b>	<b>292</b>	<b>18,640</b>
<b>2009 Totals:</b>		<b>193,715</b>	<b>86,460</b>	<b>94,788</b>	<b>181,248</b>	<b>14,866</b>	<b>4,271</b>	<b>394,100</b>
<b>Percent of 2009 Harvest:</b>		<b>49.15%</b>	<b>21.94%</b>	<b>24.05%</b>	<b>45.99%</b>	<b>3.77%</b>	<b>1.08%</b>	<b>100.00%</b>
<b>2008 Totals:</b>		<b>236,432</b>	<b>93,628</b>	<b>118,217</b>	<b>211,845</b>	<b>10,075</b>	<b>4,848</b>	<b>463,200</b>
<b>Percent Change from 2008 to 2009:</b>		<b>-18%</b>	<b>-8%</b>	<b>-20%</b>	<b>-14%</b>	<b>48%</b>	<b>-12%</b>	<b>-15%</b>

## 2009 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 Site Prep	Release	TSI	Tree Planting			
<b>Forest Industry Woodlands</b>	1 to 100 acres	0	0	0	0	3	2	20
	101 to 1,000 acres	0	0	0	0	6	4	399
	1,001 to 100,000 acres	0	0	0	137	61	40	5,765
	100,000 + acres	0	6,431	3,174	1,936	173	161	39,436
	<b>Subtotal</b>	<b>0</b>	<b>6,431</b>	<b>3,174</b>	<b>2,073</b>	<b>243</b>	<b>207</b>	<b>45,620</b>
<b>Investor Timberlands</b>	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	12	11	4,204
	100,000 + acres	0	3,564	0	608	213	199	91,614
	<b>Subtotal</b>	<b>0</b>	<b>3,564</b>	<b>0</b>	<b>608</b>	<b>225</b>	<b>210</b>	<b>95,818</b>
<b>Non-Industrial Land</b>	1 to 100 acres	15	10	162	13	2,298	553	12,852
	101 to 1,000 acres	7	0	262	52	1,408	504	24,605
	1,001 to 100,000 acres	0	0	15	25	354	224	32,047
	100,000 + acres	0	887	270	55	176	164	44,588
	<b>Subtotal</b>	<b>22</b>	<b>897</b>	<b>709</b>	<b>145</b>	<b>4,236</b>	<b>1,445</b>	<b>114,092</b>
<b>Other Woodlands (Govt, etc.)</b>	1 to 100 acres	0	0	0	0	14	8	305
	101 to 1,000 acres	0	0	0	24	32	22	879
	1,001 to 100,000 acres	0	0	3	2	42	35	2,408
	100,000 + acres	0	0	0	0	61	57	13,916
	<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>26</b>	<b>149</b>	<b>122</b>	<b>17,508</b>
<b>2009 Totals:</b>		<b>22</b>	<b>10,892</b>	<b>3,886</b>	<b>2,852</b>	<b>4,853</b>	<b>1,984</b>	<b>273,038</b>
<b>2008 Totals:</b>		<b>452</b>	<b>8,747</b>	<b>8,947</b>	<b>3,889</b>	<b>5,340</b>	<b>1,957</b>	<b>299,809</b>
<b>Change from 2008 to 2009:</b>		<b>-95%</b>	<b>25%</b>	<b>-57%</b>	<b>-27%</b>	<b>-9%</b>	<b>1%</b>	<b>-9%</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.

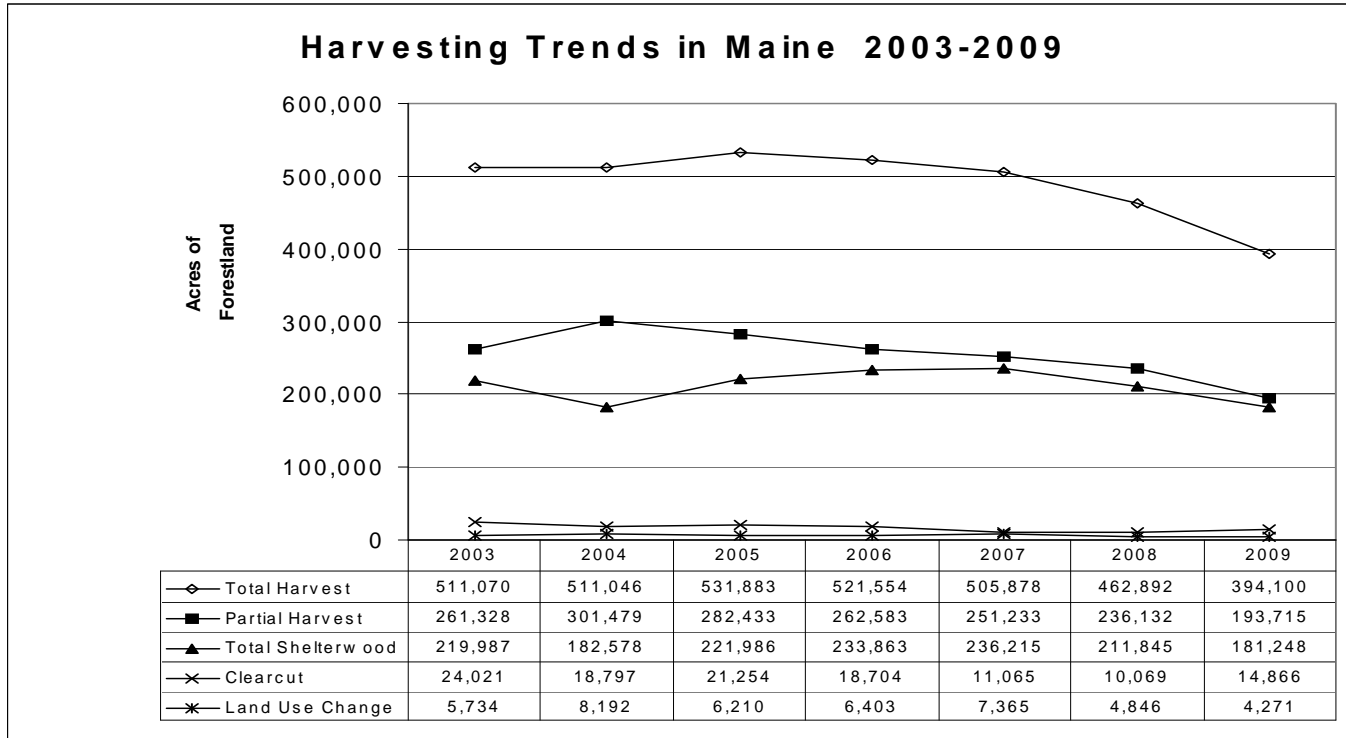
**Types of Harvests**

**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 [http://www.state.me.us/doc/mfs/rules\\_regs/index.htm](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.



# 2009 Annual Report on Clearcutting and Precommercial Activities

Compiled from the 2009 Landowner Reports and other 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)						Acres					
	Acres		#	Acres	Acres						TSI	Planted	Clearcut			Acres
	TSI	Planted			1	2	3	4	Sub Total	Avg. Size			Sub Total	Avg. Size		
Androscoggin	0	0	0	0	0	0	0	0	0	0	8	0	30	10	30	
Aroostook	1,447	2,159	0	0	2,683	0	86	11	2,780	32	59	0	116	23	2,896	
Cumberland	0	0	0	0	0	0	0	0	0	0	0	5	19	10	19	
Franklin	0	0	0	0	1,383	0	200	0	1,583	21	6	0	159	11	1,742	
Hancock	0	60	0	0	13	0	0	0	13	13	28	0	59	15	72	
Kennebec	0	0	0	0	0	0	0	0	0	0	127	26	86	14	86	
Knox	0	0	0	0	0	0	0	0	0	0	0	0	36	9	36	
Lincoln	0	0	0	0	0	0	0	0	0	0	60	0	10	5	10	
Oxford	556	30	0	0	436	0	512	0	948	17	35	15	36	7	984	
Penobscot	100	333	1	112	415	0	0	0	415	38	18	4	69	9	484	
Piscataquis	967	0	0	0	548	658	167	85	1,458	29	4	36	136	12	1,594	
Sagadahoc	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	
Somerset	104	17	0	0	5,099	0	99	454	5,652	23	42	137	131	13	5,783	
Waldo	0	0	0	0	0	0	0	0	0	0	10	0	129	14	129	
Washington	270	0	2	242	97	91	571	157	916	21	0	1	62	12	978	
York	0	0	0	0	0	0	0	0	0	0	10	29	23	12	23	
<b>State Total:</b>	<b>3,444</b>	<b>2,599</b>	<b>3</b>	<b>354</b>	<b>10,674</b>	<b>749</b>	<b>1,635</b>	<b>707</b>	<b>13,765</b>	<b>24</b>	<b>442</b>	<b>253</b>	<b>1,101</b>	<b>12</b>	<b>14,866</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.

**Frequency Distribution of Clearcutting**

**for Large Landowners who own more than 100,000 acres**

**2008 Clearcut as percent of statewide ownership**

<u>ownership</u>	<u># of Landowners</u>	<u>Clearcut Acres</u>
<b>0% - 0.001%</b>	<b>6</b>	<b>3,648</b>
<b>0.001%-0.25%</b>	<b>9</b>	<b>3,719</b>
<b>0.26%-0.75%</b>	<b>2</b>	<b>6,398</b>
<b>0.76%-1.00%</b>	<b>0</b>	<b>0</b>