USDA Forest Service, US Department of Agriculture
Northern Research Station

Connecticut's Forest Resources, 2010

Research Note NRS-107

This publication provides an overview of forest resource attributes for Connecticut based on an annual inventory conducted by the Forest Inventory and Analysis (FIA) program at the Northern Research Station of the U.S. Forest Service. These estimates, along with web-posted core tables, will be updated annually. For more information please refer to page 4 of this report.

Table 1. – Annual estimates, uncertainty, and change

	Estimate 2010	Sampling error (%)	Change since 2005 (%)
Forest Land Estimates			
Area (1,000 acres)	1,687	2.7	-6.0
Number of live trees 1-inch diameter or larger (million trees)	769	5.0	-16.0
Dry biomass of live trees 1-inch diameter or larger (1,000 tons)	121,354	3.4	-0.9
Net volume in live trees (1,000,000 ft^3)	4,172	3.6	-0.1
Annual net growth of live trees (1,000 ft^3/year)	95,043	9.3	NA
Annual mortality of live trees (1,000 ft^3/year)	30,221	19.7	NA
Annual harvest removals of live trees (1,000 ft^3/year)	17,517	43.4	NA
Annual other removals of live trees (1,000 ft^3/year)	5,956	63.3	NA
Timberland Estimates			
Area (1,000 acres)	1,671	2.8	-4.3
Number of live trees 1-inch diameter or larger (million trees)	762	5.0	-15.6
Dry biomass of live trees 1-inch diameter or larger (1,000 tons)	121,169	3.4	0.9
Net volume in live trees (1,000,000 ft^3)	4,169	3.6	2.0
Net volume of growing-stock trees (1,000,000 ft^3)	3,845	3.8	0.3
Annual net growth of growing-stock trees (1,000 ft^3/year)	93,443	11.1	NA
Annual mortality of growing-stock trees (1,000 ft^3/year)	20,892	22.8	NA
Annual harvest removals of growing-stock trees (1,000 ft^3/year)	13,879	45.5	NA
Annual other removals of growing-stock trees (1,000 ft^3/year)	3,295	80.7	NA

Note: When available, sampling errors/bars provided in figures and tables represent 68 percent confidence intervals.

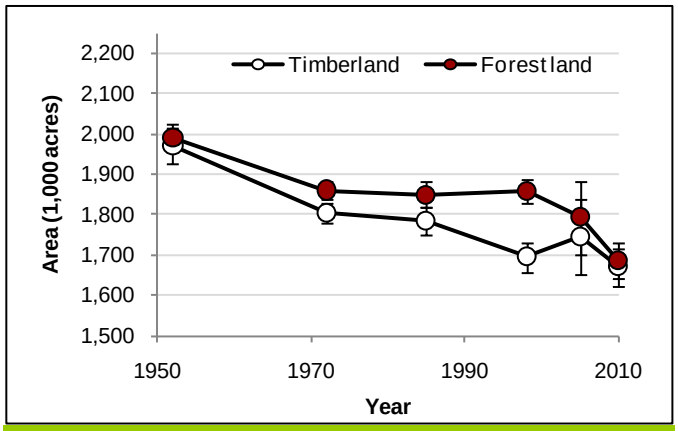

Figure 1. – Area of timberland and forest land by year.

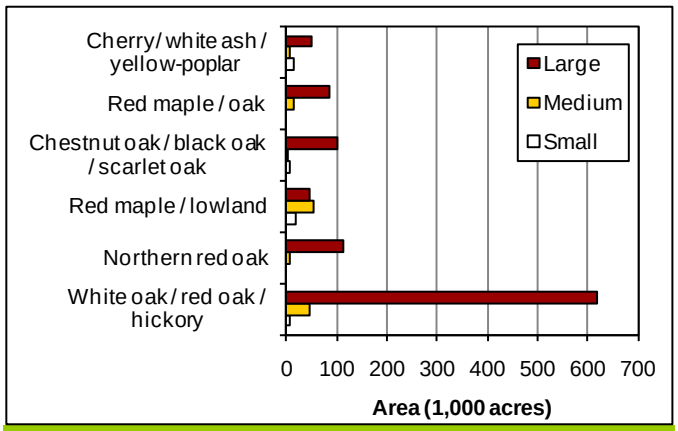

Figure 2. – Area of forest land by top six forest types and stand-size class*, 2006-2010.

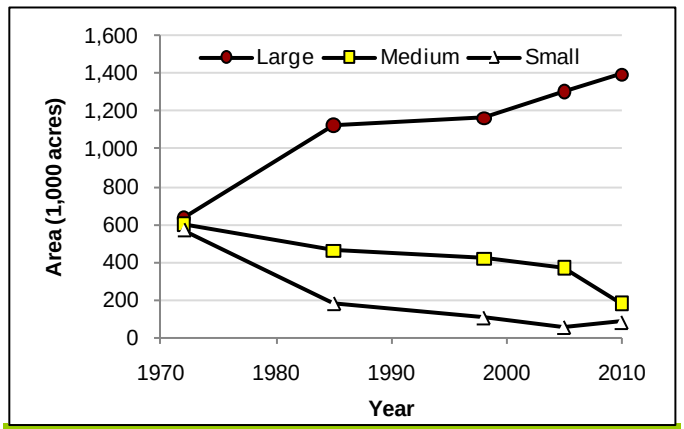

Figure 3. – Area of timberland by stand-size class* and year.

* Small: dominated by trees less than 5.0 inches d.b.h.; Medium: 5.0 to 8.9 inches d.b.h. for softwoods and 5.0 to 10.9 inches d.b.h. for hardwoods; Large:≥ 9.0 inches for softwoods and 11.0 d.b.h. for hardwoods.

Table 2. – Top 10 tree species by statewide volume estimates, 2006-2010

Rank	Species	Volume of live trees on forest land (1,000,000 ft^3)	Sampling error (%)	Change since 2005 (%)	Volume of sawtimber trees on timberland (1,000,000 bdft)	Sampling error (%)	Change since 2005 (%)
1	Red maple	874	8.4	1.5	2,297	11.1	19.9
2	Northern red oak	583	10.2	4.4	2,317	10.9	14.2
3	Black oak	343	12.6	0.1	1,424	13.9	7.5
4	Sweet birch	298	9.8	-4.8	678	14.6	-6.4
5	Eastern white pine	272	20.2	-7.0	1,134	23.5	-4.9
6	White oak	268	10.7	-11.6	997	12.3	-5.8
7	Eastern hemlock	211	17.6	-1.7	569	20.2	-10.0
8	White ash	198	16.1	-10.5	734	19.7	-13.1
9	Sugar maple	185	16.5	5.6	547	21.5	-12.0
10	Scarlet oak	154	16.2	27.7	543	16.8	52.8
	Other softwoods	30	36.0	-12.2	81	53.1	85.6
	Other hardwoods	758	8.3	2.3	2,462	11.8	26.6
	All Species	**4,172**	**3.6**	**-0.1**	**13,783**	**4.6**	**8.7**

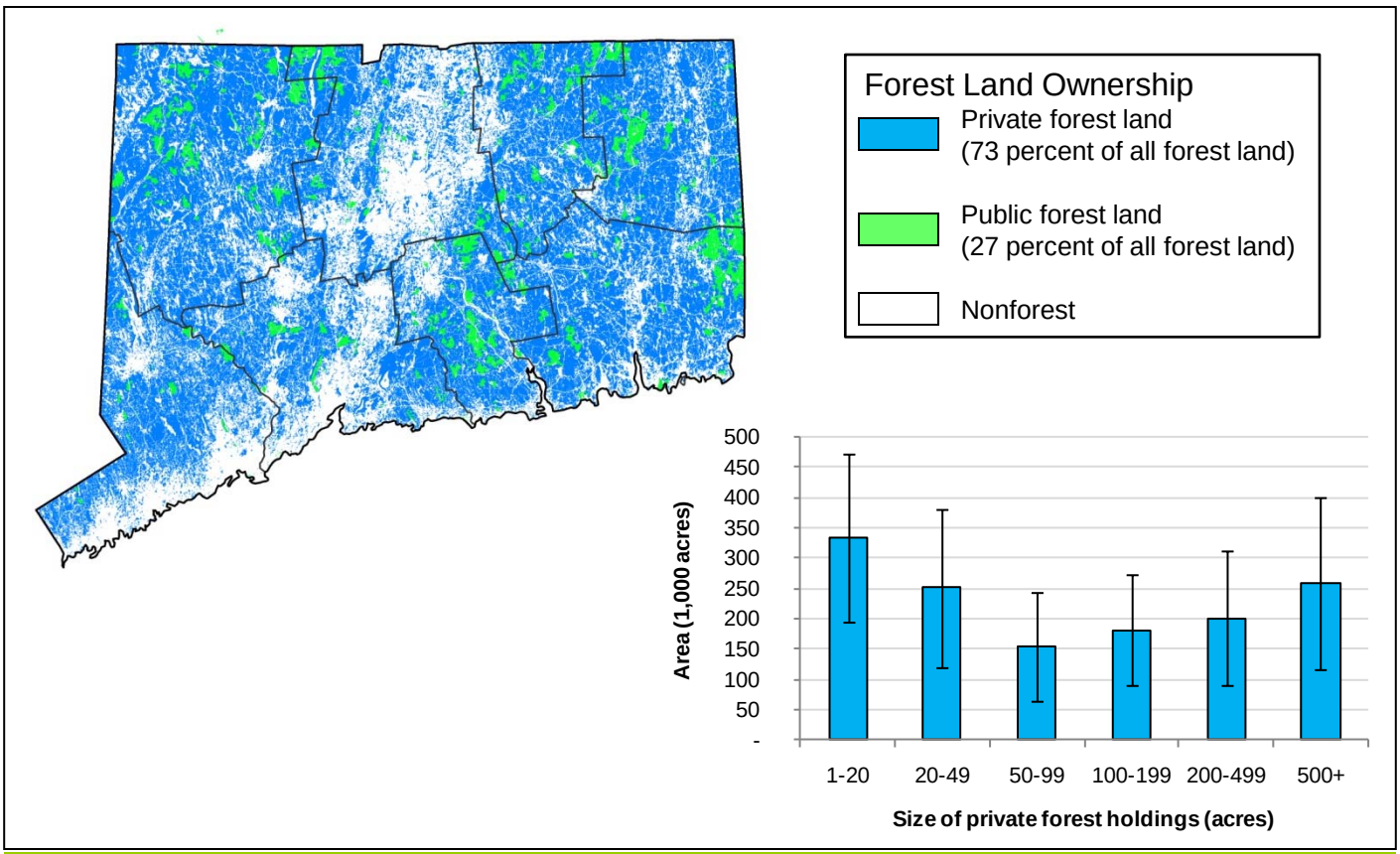

Figure 4. – Area of forest land by major owner group and size of private forest landholding (2002-2006).

Invasive Plants

Invasive plants are spreading throughout North America with the help of humans, animals, and other vectors such as wind and water. These species are threatening forests by displacing native flora, altering nutrient composition, and changing aesthetics. In addition, these plants have economic implications, nationally costing billions of dollars annually through reduced timber yield and the costs of inspection and eradication.

The forests of Connecticut are likewise threatened by invasive plants. Beginning in 2007, the U.S. Forest Service, Forest Inventory and Analysis program began monitoring a subset of its forest inventory plots for the presence of invasive plants (Table 5). The most commonly observed invasive plants across Southern New England were multiflora rose, Japanese barberry, and oriental bittersweet (Fig. 5). Invasive plants are wide-spread across the region (Fig. 6). Not only are these invasive plants harmful to the forest community, they can also be recreational hazards (e.g., multiflora rose and Japanese barberry can form dense thickets of abundant thorns). Future remeasurement of Forest Inventory and Analysis vegetation plots will help us understand the characteristics that facilitate the spread of invasive plants.

Table 5. – Invasive plant species found on Forest Inventory and Analysis invasives monitoring plots in Southern New England, 2007-2009.

Common name (Scientific name)
Autumn olive *(Elaeagnus umbellata)*
Black locust *(Robinia pseudoacacia)*
Canada thistle *(Cirsium arvense)*
Common barberry *(Berberis vulgaris)*
Common buckthorn *(Rhamnus cathartica)*
European privet *(Ligustrum vulgare)*
Garlic mustard *(Alliaria petiolata)*
Glossy buckthorn *(Frangula alnus)*
Japanese barberry *(Berberis thunbergii)*
Japanese honeysuckle (*Lonicera japonica)*
Japanese knotweed *(Polygonum cuspidatum)*
Louise's swallow-wort *(Cynanchum louiseae)*
Morrow's honeysuckle *(Lonicera morrowii)*
Multiflora rose *(Rosa multiflora)*
Nepalese browntop *(Microstegium vimineum)*
Norway maple *(Acer platanoide)*
Oriental bittersweet *(Celastrus orbiculatus)*
Russian olive *(Elaeagnus angustifolia*)
Showy fly honeysuckle *(Lonicera xbella)*

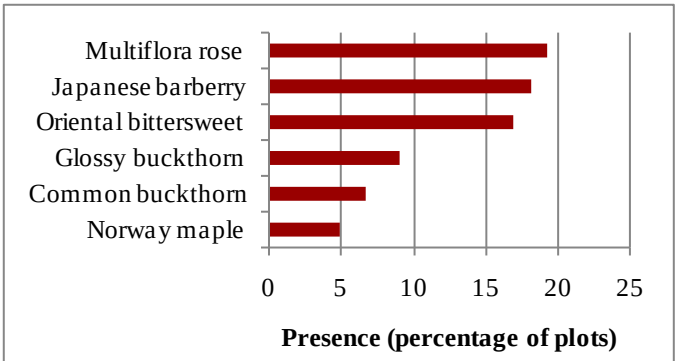

Figure 5. – Presence of the six most common invasive plant species found on invasives monitoring plots, Southern New England, 2007-2009.

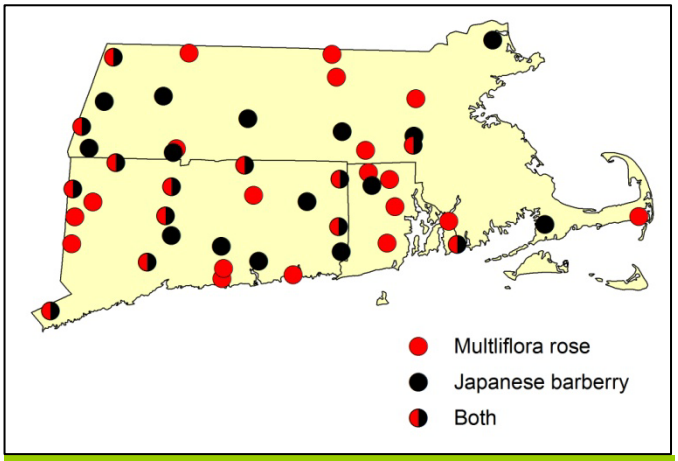

Figure 6. – Approximate location of invasives monitoring plots with multiflora rose and Japanese barberry, Southern New England, 2007-2009.

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FIA Program Information

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Additional Connecticut Inventory Information

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