

4.9. Keene, NH

The City of Keene is located in Cheshire County, and is used as a proxy for Southwestern New Hampshire. A fifty-mile radius around Keene includes parts or all of Cheshire, Sullivan, Grafton, Rockingham, Merrimack, and Hillsboro counties in New Hampshire; parts or all of Windsor, Rutland, Bennington, and Windham counties in Vermont; parts or all of Berkshire, Franklin, Hampshire, Franklin, Hampden, Worcester and Middlesex counties in Massachusetts.

4.9.1. Land Ownership

The vast majority of land in New Hampshire, Vermont and Massachusetts that is within 50 miles of Keene is owned and managed by non-industrial private landowners. A significant portion (the southern portion) of the Green Mountain National Forest in Vermont is within 50 miles of Keene. This region also includes the developed or rapidly developing areas of Manchester and Nashua, NH and Lowell, Worcester, Fitchburg/Leominster, and the northern part of the Springfield region in Massachusetts.

4.9.2. Other Industries Using Low-Grade Wood

Due to the distance to New England's paper mills and many wood-fired power plants, Southwestern New Hampshire traditionally has the weakest markets for low-grade wood. The following facilities that purchase or use significant volume of low-grade wood are located within 50 miles of Keene:

- Hemphill Power & Light is a 13.8 MW wood-fired power plant in Springfield, NH in Sullivan County. This facility, which operates under a rate order that expires in November 2007, generally uses a little over 200,000 tons of whole-tree chips annually.
- Pinetree Power – Fitchburg is located in Westminister, MA. This 17 MW facility uses whole tree chips (many from land clearing), as well as pallets, paper cubes and methane from a nearby landfill to generate electricity.
- In addition to these facilities, Cousineau Forest Products and HHP, both located in Henniker, NH purchase and move significant quantities of low-grade wood, supplying a variety of markets.

4.9.3. Timber Growth

With existing markets for sawlogs, veneer and low-grade wood, the area within a 75-mile radius of Keene, New Hampshire has timber growth in excess of removals (from timber harvest or land conversion).



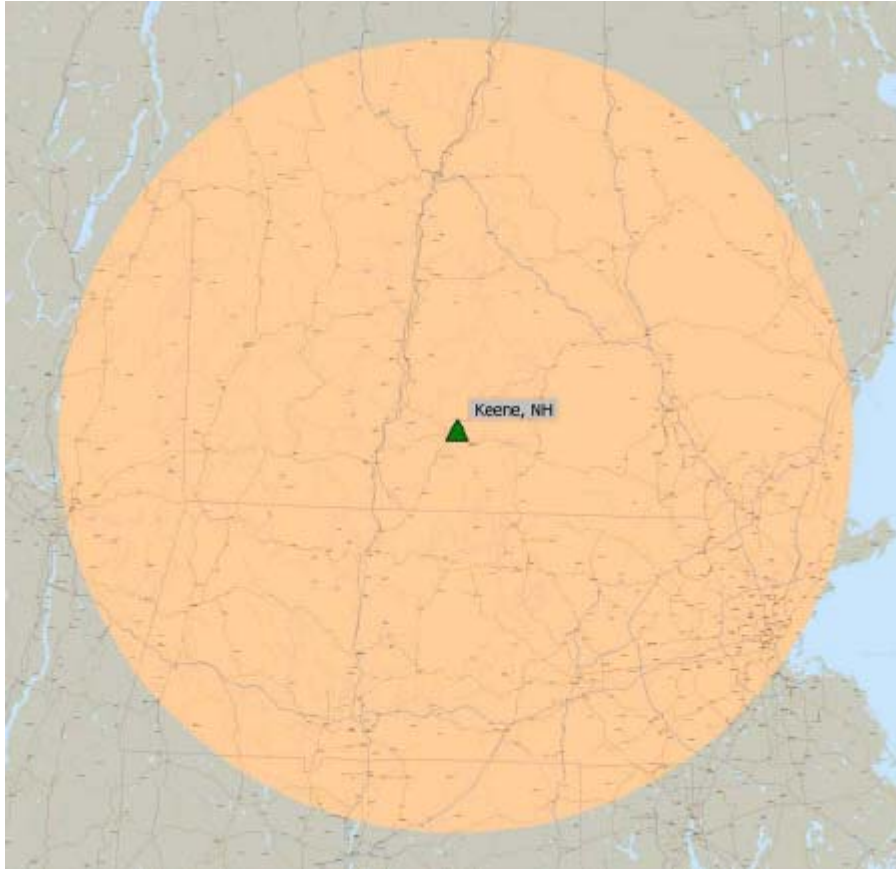


Figure 9. 75-Mile Radius – Keene, NH

FIA data show that, for all species, annual growth exceeds removals by 2.2 million tons. Growth is greater than removals for all major species in the region except paper birch, oak and poplar. The species red maple, beech, white pine and hemlock show significant net growth (growth less removals).



Estimated annual forest growth and removals within a 75-mile radius of Keene, NH

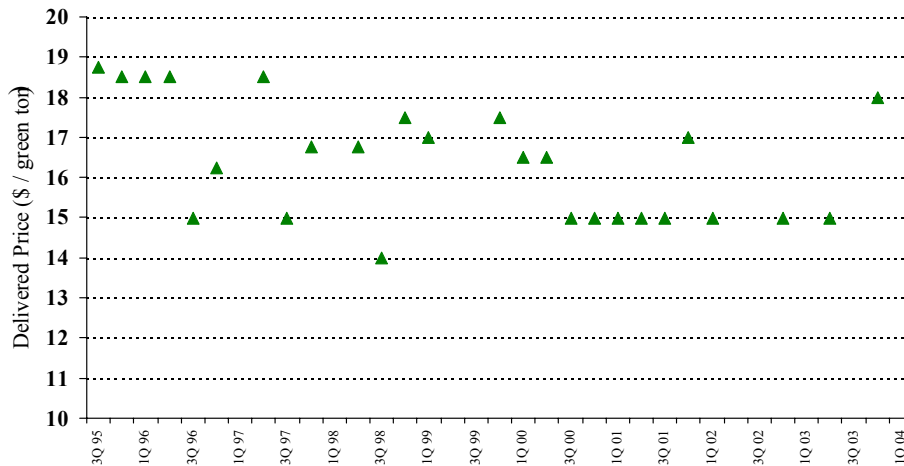
Source: USDA Forest Service Forest Inventory and Analysis for New Hampshire, Vermont, Massachusetts, and Maine*. All live trees >4.9" diameter at breast height.

	Net Growth⁸	Harvest Removals	Land Use Removals	Net Change
	<i>tons</i>			
Spruce-Fir	142,789	(52,684)	(2,165)	87,941
White Pine	913,533	(296,619)	(296,511)	320,404
Hemlock	589,558	(82,881)	(17,886)	488,791
Other Softwood	59,908	(4,627)	(42,455)	12,826
Red Maple	1,021,800	(247,398)	(114,125)	660,278
Sugar Maple	331,424	(123,607)	(29,212)	178,605
Yellow Birch	124,525	(25,664)	(97,607)	1,254
Paper Birch	(5,659)	(69,282)	(7,494)	(82,435)
Beech	308,268	(42,915)	(18,139)	247,214
White Ash	246,113	(63,715)	(10,186)	172,212
Poplar species	14,652	(32,271)	(7,219)	(24,838)
Oak species	640,732	(269,115)	(575,242)	(203,626)
Other Hardwood	499,628	(86,962)	(94,518)	318,148
All Species	4,887,271	(1,397,740)	(1,312,758)	2,176,773

4.9.4. Whole Tree Chips

Historically, Southern New Hampshire has the weakest market for whole-tree chips and other forms of low-grade wood. Between the third quarter of 1995 and the first quarter of 2003, the average price for whole tree chips in this region was \$16.40 per green ton, delivered. Since the third quarter of 2000, reported whole tree chip prices have been consistently below \$18 per green ton, and have generally been \$15 per green ton.





Data Source: NHTOA Timber Crier

Figure 10. Delivered Price, Whole Tree Chips, Southern NH (per ton)

4.9.5. Sawmill Residue

A significant number of sawmills operate within a 50-mile radius of Keene. Mills in this region saw hardwood, white pine and other softwood species. These mills produce roughly 226,000 tons of sawmill residue each year, including over 60,000 tons of sawdust. Self-reported weighted average pricing (delivered) for this residue is \$23.00/ton for hardwood mill chips, \$21.00/ton for softwood mill chips, and \$9.50/ton for sawdust. At present, this residue is used in either paper mills or wood-fired power plants in the region, or sold to local farmers for animal bedding.

	Sawmill Chips						Total Sawdust	Total
	White Pine	Red Oak	Other Softwood	Other Hardwood	Total Softwood	Total Hardwood		
Annual Tons	80,640	15,180	18,600	45,360	66,120	99,240	60,540	225,900
Daily tons	221	42	51	124	181	272	166	619

