



Old hemlock forest in the Slab City tract of the Harvard Forest

An Ecological History of Massachusetts Forests

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The forests of Massachusetts present a history of almost continual change, albeit change that has varied greatly in scale, rates, and causes through time. The importance of human disturbance relative to natural disturbance has steadily increased—gradually at first, as aboriginal activity expanded to include agriculture, and then rapidly since European settlement. Just as the variety, frequency, and extent of human disturbance have increased through time, they can be expected to continue increasing and changing into the future.

European settlement in the seventeenth and eighteenth centuries brought a dramatic transformation as much of the land was deforested and farmed and the remainder was logged, grazed, or burned. Since the mid-nineteenth century, agriculture and forest use have declined, forest area and age have increased, and the land has become more “natural” than at any time postsettlement. But despite the natural appearance of much of the modern landscape, a legacy of intensive past use remains in vegetation structure and composition, in landscape patterns, and ongoing dynamics. Consequently, an understanding of the history of human influence must be an integral part of ecological study and a critical component of conservation planning and resource management.

For millennia our forests had been evolving into the landscape that greeted the settlers. One reasonable start for our forests’ history is the end of the last glacial period, more than 13,000 years ago.

ICE AGE
13,000 Tundra
11,500 Spruce woodland and forest
10,000 Human arrival
9,500 Pine forest
8,000 Mixed deciduous forest
5,000 Hemlock decline
3,000 Arrival of chestnut trees
1,000 Native American agriculture
250–350 European settlement
150 Peak of agricultural clearing
85 Chestnut blight
60 1938 hurricane
PRESENT

Approximate chronology of important events in the development of Massachusetts’ forests, given in years before present.