

New Hampshire  
Cooperative Forest Health Program Highlights  
2008

The most harmful forest damage causing agent in 2008 was a Tornado on July 24th. The tornado was later analyzed and listed as a category “F2” storm. This tornado traveled 49.5 miles on the ground damaging approximately 8,000 acres. The complete destruction of forests was contained to approximately 4,000 acres and an estimated 30 million board feet of timber has been salvaged to date.



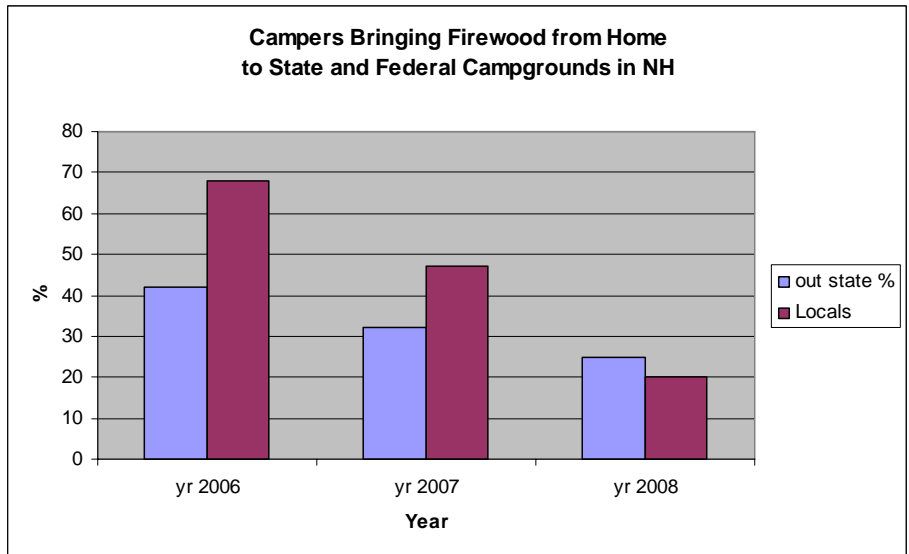
**Picture 1. Aerial view of tornado path. Approximately 1/4 mile wide by 49.5 miles long.**

Elongate hemlock scale was discovered in New Hampshire for the first time in May. The scale outbreak encompasses approximately 4 square miles in the Milford area. Small amounts of hemlock woolly adelgid have also been found in the same area. There is no easy control of this scale outbreak.



**Picture 2. Heavy elongate hemlock scale on the bottom of the needles. When there are high populations of the white male nymphs the infestations can look similar to hemlock woolly adelgid.**

Firewood movement continues to be a serious concern as a vector of damaging invasive forest pests. In 2006 a survey was done to determine how many campers were bringing firewood from home. Subsequently an outreach program was started to educate prospective campers about the risk of moving firewood long distances. In 2008 the survey data shows a substantial reduction in the percentage of campers hauling firewood.



In the summer of 2007 and 2008 the Forest Health program started an investigation into what pests have already been accidentally moved by camp firewood. Firewood was voluntarily exchanged for native wood and the confiscated material was placed in rearing barrels to over winter before being opened the following summer. Insects were fumigated and sorted after spending at least 6 months in the barrel.



**Picture 3. 30 gallon rearing barrel on the left and a sample of the bark beetles which emerged in June of 2008 after resting in the barrels for 10 months.**

Results from just 9 samples indicate there are a large number of insects traveling in firewood. These nine samples amounted to approximately 10 cubic feet of firewood and produced an amazing 8 different orders of insects. Most concerning was the four different species of bark beetles. One of which carries the oak wilt disease not yet known to exist in NH.

The exotic woodwasp *Sirex noctilio* was trapped for using trap trees stressed by herbicides and mechanical girdling. Funnel traps were deployed and serviced every two weeks. Host trees used in this survey included jack pine, pitch pine and red pine. Several native cericids were captured but no sirex noctilio. Several trap trees showing possible signs of wasp attack were cut and dissected. No signs of sirex were found.



**Picture 4. Frills were made in the trap trees and herbicides were applied to the cambium in May.**

Of the 40 towns surveyed throughout the southern part of the state, new infestations of Hemlock Woolly Adelgid were found in 3 towns. These include the towns of Auburn, Epsom, and Hinsdale. Numerous new infestations were also reported by landowners this year. This included the towns of Milford, Dover, Madbury, Pelham, and Hinsdale. The homeowner report in Milford led to the discovery of Elongate Hemlock Scale on an abutting property that also had HWA.

