Firewood
A Major Vector of Forest Pest Movement

Jen Weimer
Forest Health Specialist
NH Division of Forests & Lands
The US imports firewood from at least 24 other countries.
Firewood can be easily purchased on the internet.
IS FIREWOOD A GOOD HABITAT FOR INSECTS AND DISEASES?

YES, IF

• The Bark is on
• The moisture content is still high
• Freshly cut
• Large and un-split pieces

• As wood moisture content decreases, larval development time increases:
  • Buprestidae have emerged after as long as 50 years from a window sill
  • Cerambycidae as much as 40 years from a bookcase

Northeastern Area, State & Private Forestry
Proceedings of Firewood Forum 2008
Frelighuysen Arboretum
New Jersey
April 15, 2008
At risk:
- Parks/campgrounds
- Out of state sportsmen
- Retail firewood sellers
- Homeowners who heat with firewood
- Major events that draw out-of-state visitors
Emerald Ash Borer
Confirmed Infestations due to Firewood:

- EAB Finds in Michigan Parks and Campgrounds
  - Private campground in Branch County
  - Private campground in Cheboygan County
  - Brimley State Park, Chippewa County
  - Charles Mears State Park, Oceana County
  - Straits State Park- Mackinac County
  - Young State Park- Charlevoix County
  - Sleeper State Park- Huron County
  - Ludington State Park- Mason County
  - Warren Dunes State Park- Berrien County
  - Rifle River Recreation Area-Ogemaw County
  - Mackinac State Forest- Montmorency County
  - Veterans Memorial State Forest Campground- Benzie County

- In Indiana
  - Private campground in Steuben County (State record)
  - Private campground in LaGrange County
  - Private campground in White County

- In West Virginia
  - Private campground in Fayette County (State record)
75% of these infestations caused by firewood movement.
Asian Longhorned Beetle

Jen Weimer, NH Division of Forests & Lands
ALB from Worcester, MA could easily come to NH in Firewood!
Other Pests in Firewood

Sirex Woodwasp
Gypsy Moth
Beech Scale
Numerous Bark Beetles

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Oak Wilt
Dutch Elm Disease
Butternut Canker
Sudden Oak Death

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Joseph O'Brien, USDA Forest Service
In 2006 we started a survey of campers at NH State Campgrounds and found that firewood was moving an astounding distance.

Firewood brought to NH from:

California
Virginia
New York
Quebec
Ontario
New Jersey
Connecticut
Rhode Island
North Carolina
Maryland
CAMPER FIREWOOD SURVEYS

2006 At Mount Monadnock SP
- 93 campers in survey
- 49% brought firewood from home
- 57% from out of state, 42% of those brought firewood
- 17% from outside New England, 18% of these folks brought firewood.

2007 At Several State Campgrounds
- 104 campers in survey
- 37% brought firewood from home
- 71% from out of state, 32% of those brought firewood
- 22% from outside New England, 26% of these folks brought firewood.

**NOTE:** Most campers were aware of the issue after arriving at campground and were nervous during survey. This may have lead to false data.
Campers Bringing Firewood from Home to State and Federal Campgrounds in NH

NOTE: Out of staters were targeted for survey in 2008.
Results to Date:

In just 9 samples from ME, MA, and NH

We have found:
Ants
Snails
Sow bugs
Spiders
Millipedes
Centipedes
Termites
Bark lice
Woodwasp

4 different species of bark beetles
So, We know firewood movement is a problem.

How do we fix it?

Help Protect our Trees

USE LOCAL FIREWOOD!

Bringing firewood into New Hampshire from other areas can accidentally spread damaging insects and diseases that threaten the health of our forests. Once infestation occurs, control of these pests involves drastic measures, including complete removal of all trees (infested or otherwise) in the affected and surrounding areas.

What you can do to help:

✓ Don’t travel with firewood
✓ Use local firewood
✓ Contact the Forest Health Office with concerns about pests in your firewood.

Transporting firewood spreads insects and tree diseases.

Firewood may contain insects and diseases.

NH Division of Forests and Lands Forest Health Section

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Visit us on the web at: nhdfl.org
Outreach

What We Have:
(Mixed Messages)

What We Need:

- Aggressive National Campaign & Federal Regulation
  - Standardized Treatment
  - Certification of Firewood
  - National Educational Message

Wisconsin Department of Natural Resources
WASHINGTON, Oct. 22, 2008--The U.S. Department of Agriculture’s Animal and Plant Health Inspection Service (APHIS) today issued a federal order, effective immediately, requiring heat treatment for shipments of all firewood made of hardwood species entering the United States from Canada.

To ensure that pests such as the Asian longhorned beetle or emerald ash borer do not enter the United States through the movement of firewood from Canada, APHIS is requiring all firewood made from any hardwood species be heat treated to a minimum temperature of 71.1° Centigrade for 75 minutes. Commercial shipments of firewood must also be accompanied by a treatment certificate issued by the treatment facility. Noncommercial shipments must be accompanied by either a treatment certificate issued by the treatment facility or an attached treatment label.

This action is necessary to prevent the introduction or spread of wood pests through the movement of firewood made from hardwood species from Canada into the United States.
Are Timber Mats a Vector for Pest Movement?