



Firewood Movement Threatens Mississippi Forests

The Mississippi Forestry Commission along with other southern states and state agencies are **warning us** that our outdoor activities can cause serious threats and/or damage to our forests. One of these activities is the movement of firewood to locations where we recreate. A position paper has been prepared identifying the problem associated with the movement of ash firewood into Mississippi and other southern states:

SOUTHERN GROUP OF STATE FORESTERS, FOREST HEALTH TASK FORCE and the SOUTHERN FOREST INSECT WORK CONFERENCE (SFIWC)

POSITION PAPER FHTF PP08-1: Restriction of Firewood Movement to Slow the Spread of Invasive Species Harmful to North American Forests

Summary Statement:

The introduction and establishment of non-native invasive forest pests pose an overwhelming threat to native North American plant and animal species, forests, and other natural ecosystems. The movement and spread of invasive forest pests are greatly facilitated by intra- and international trade of wood-based products. While phytosanitary standards involving heat treatment of all wood products, crates, pallets, etc. exist for internationally traded goods, such standards are not in place for many materials traded within U.S. borders and between states. **Firewood, in particular, has been largely unregulated both in the commercial sector and among private citizens, who often move firewood hundreds of miles from its source to camping destinations such as national parks**

and forests, state parks, or sporting events. If unregulated movement of this commodity continues, the rate and extent to which invasive wood-inhabiting pests are distributed in the U.S. will increase dramatically. The hastened spread and enhanced distribution of pests in firewood greatly increases the risk of ecological extinction of multiple tree species and untold billions of dollars in damage from invasive insects such as the emerald ash borer. These damages include costs associated with tree removals and replacement in municipalities, impacts to the tourist and recreation industry, ecosystem disruption, reduced biodiversity and loss of potential wood product markets.

Supporting/Background Information:

This position paper focuses specifically on the problem associated with firewood acting as a major vector for the rapid spread of invasive pest species. While unrestricted firewood movement has long been a problem and may have played an important role in the spread of other now well-established, invasive pests such as gypsy moth and oak wilt – the problem became most alarming following the discovery in 2002 and rapid spread of the **emerald ash borer** from the Detroit, Michigan area. The emerald ash borer, a wood-boring insect from Asia, has been estimated to spread on its own at the rate of about 2-10 miles per year. But, over the course of just six years, it has been found in 9 additional states. **Its current known range now extends from Montreal, Canada to southeastern Missouri, a distance of almost 1,000 miles. Most new discoveries were closely linked to campgrounds**

or major interstate corridors, strongly suggesting artificial movement via firewood being loaded into vehicles and transported to campsites hundreds of miles away. The unrestricted movement of firewood in this manner provides a mechanism for the rapid spread of established and future invasive pests, particularly wood-inhabiting species.

Firewood for sale and distribution also presents a significant problem. Firewood is sold by businesses large and small, including Home Depot, Lowe's, Wal-Mart, convenience stores and gas stations. An informal survey of firewood for sale in Virginia by the VA Department of Agriculture found that about 2/3 of the firewood came from outside Virginia's borders, including 13 states (western states among them) and 3 countries (Canada, Honduras, and Estonia). This situation is nothing short of a nightmare from the standpoint of importing invasive pests.

A variety of websites feature information and documents on the topic of firewood movement and invasive pests, including the Nature Conservancy's 'Don't Move Firewood' site at <http://www.dontmovefirewood.org/>, the U.S. Forest Service at <http://na.fs.fed.us/firewood/>, the National Association of State Foresters at <http://www.stateforesters.org/node/78>, and a multi-agency and university collaborative website on emerald ash borer information at <http://www.stopthebeetle.info/> or <http://www.emeraldashborer.info/>. Furthermore, numerous states and



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national parks such as Shenandoah National Park in Virginia (http://www.nps.gov/shen/planyourvisit/firewood_eab.htm) have enacted firewood bans or restrictions.

It is widely recognized that most states can adequately meet their own firewood needs and demands with locally-collected wood, and long-distance transport of this material becomes increasingly expensive as energy costs rise. Therefore, it is the opinion of the Forest Health Task Force and members of the Southern Forest Insect Work Conference that the current pattern and extent of firewood movement in the U.S. is both unacceptable and unsustainable. While a small number may profit from the economics of interstate firewood movement, society at large will suffer severe costs both directly and indirectly. Even though the firewood industry in most states is probably worth tens of millions of dollars, wood-boring insects such as the Asian Longhorned Beetle and the emerald ash borer have been projected to cause hundreds of billions of dollars in damage to urban forests alone if they become established from coast to coast (Nowak et al. 2001. *Journal of Economic Entomology* 94: 116-122). Of even greater impact is the potential intangible loss of entire tree genera (i.e., maple and ash) from the nation's landscape. Once they become well-established, invasive pests like the gypsy moth and emerald ash borer are capable of rapid spread. Accordingly, there is great value in slowing the spread of established non-native pests; monetary impacts are spread out over a

longer time frame, and the extra time may allow for science to come up with effective biological or other control options. Every dollar spent on the Gypsy Moth Slow the Spread Program, for example, has been shown to save taxpayers at least three dollars (Leuschner et al. 1996. *Southern Journal of Applied Forestry* 20: 65-73).

WHAT CAN WE DO?

Being informed is a key step. An excellent aid to that end was produced by the Texas Forest Service in cooperation with a number of agencies. Key points for Mississippians to be aware of as in Texas:

The emerald ash borer (EAB) may already be here.

- The insects may be transported long distances in firewood, so **do not bring firewood into the state.**
- Watch for symptoms of EAB infestation:
 - ash trees with dying or dead branches in upper crown
 - shoots or suckering along the trunk
 - bark splits with winding galleries and white larvae beneath the bark; heavy feeding by woodpeckers
 - "D"-shaped exit holes in bark
- Report dead and dying ash trees with these symptoms to your nearest Mississippi Forestry Commission or county extension office.

This non-native beetle kills ash trees and is well established in the Midwest. It has recently been detected in southern Missouri.

Help protect ash trees in forested and urban areas of Mississippi.

For additional information contact: Mississippi Forestry Commission Local Office or T. Evan Nebeker Forest Resource Protection tevannebeker@bellsouth.net

For more information on the Mississippi Forestry Commission Forest Health Program, contact:

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