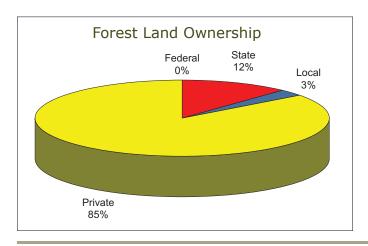
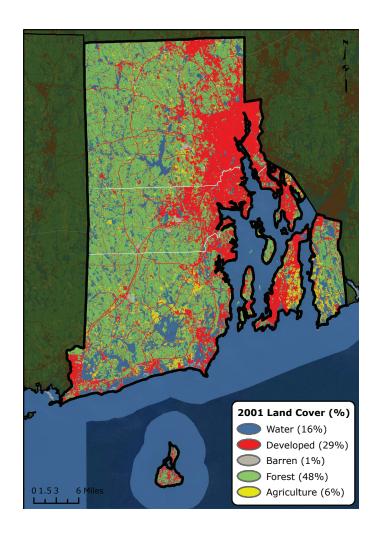


#### **Forest Resource Summary**

Rhode Island's forests are 85 percent privately owned, primarily by individuals who view their land as a source of enjoyment and a resource to be protected. The remainder of the forest land is in State or local town ownership. These forests are valued for clean air, protection of ground and surface water, wildlife habitat, wood fiber, and recreational opportunities. The latest forest inventory estimates that 48 percent of Rhode Island is forested, encompassing about 356,000 acres, with about a third of the State in development. The existence of intense public debate related to any impact on undeveloped lands is indicative of citizen concerns for the amenities provided by forest lands, whether privately or publicly

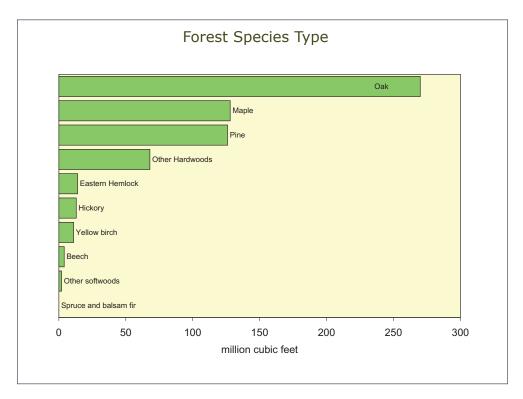






## Forest Health Programs in the Northeast

State forestry agencies work in partnership with the U.S. Forest Service to monitor forest conditions and trends in their State and respond to pest outbreaks to protect the forest resource.



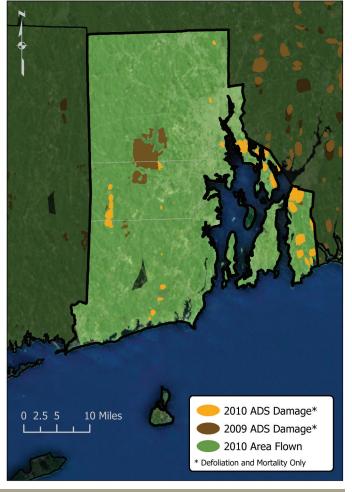
held. The forest resource is made up of a variety of forest types, mostly oak, maples, and pine, along with other hardwoods.

During a survey in 2005, 79 percent of the forest landowners thought that forest health was an important issue in the State. The concern for forest health increased by 2010, as reported in the Rhode Island Forest Resource Assessment, almost as significant a change in importance as forest fragmentation.

#### **Aerial Surveys**

In Rhode Island, about 16,700 acres were damaged, mostly from defoliation and tree mortality. Almost all of the defoliation was caused by the winter moth, and a complex of hardwood defoliators caused over 3,000 acres of mortality.

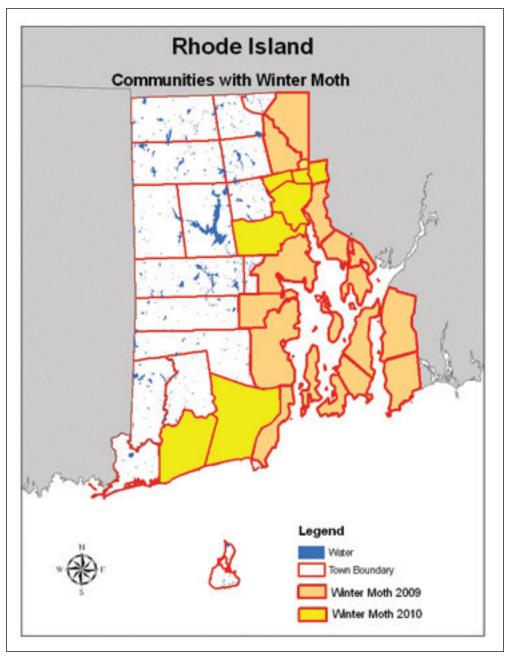
This map delineates aerial detection survey (ADS) results for Rhode Island in 2009 and 2010.



### **Forest Damage**

The annual **aerial survey** was flown in May to document winter moth defoliation with the help of the Massachusetts Department of Conservation and Recreation. Aerial surveys were repeated in July by Rhode Island Department of Environmental Management

personnel to record the impacts of other defoliators and forest damage. During the May aerial survey, 13,280 acres of **winter moth** defoliation were observed. This invasive insect has defoliated Rhode Island forests for several years.



Map of areas affected by winter moth in Rhode Island

Rainfall amounts in March 2010 were in the 200-year-flood category—16.34 inches of rain fell during this month at the Providence airport. White pine tip dieback in 2010 was reported through ground observations along the western part of the State, and red pine scale caused another 50 acres of mortality. There were also over 3,100 acres of mortality due to repeated defoliation by gypsy moth, forest tent caterpillar, and orange striped oakworm. Mortality continues to increase following these repeated defoliations years after the last recorded damage.

# Forest Health Special Surveys

As part of a **firewood vector analysis**, a survey was conducted based on a zip code search of registered guests to Rhode Island campgrounds. Over the last year, 413 campers visited the State's 28 campgrounds from areas of known Asian longhorned beetle infestation; however, no introduction of this forest pest was observed.

As part of a seasonal home survey that began in fall 2009, letters were sent to community tax assessors asking for assistance with a survey of landowners from zip codes in the Worcester, MA-infested area. Within 34 communities that responded, there were 359 seasonal homes owned by people from the infested area. There is no evidence that these homeowners brought firewood to their seasonal homes in Rhode Island. The

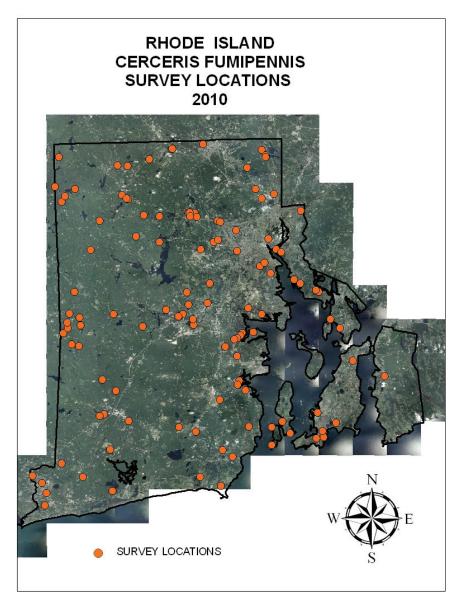
message of not moving firewood appears to be getting out to the public.

Rhode Island also conducted a biosurveillance survey for emerald ash borer utilizing GIS mapping and Google Earth searches to determine potential sites for the *Cerceris fumipennis* predatory wasp. The State visited 45 sites—21 identified in previous years and 24 new areas. An estimated 578 degree days had accrued by the date of the wasp's emergence. A total of 58 buprestid beetles were collected and sent to Cornell University for identification. No emerald ash borers have been found in Rhode Island.

To increase **public awareness about invasive insect species**, 103 woods
operators and 720 arborists received
Asian longhorned beetle and emerald ash
borer identification cards in the mail. Pest
Alerts were included in the information
packets as well as contact information. Four
outdoor events for the general public held
throughout Rhode Island drew roughly 2,100
participants. Attendees received information
cards and Pest Alerts, and viewed displays of
insect signs and damage symptoms.

Informational packets have been distributed regarding the recent State legislation for invasive species. A variety of displays about invasive insects were also presented at the State House Agriculture Day with 450 in attendance. A local news channel aired an interview in July regarding the "Don't Move Firewood" campaign to alert the public of the potential spread of these pests.

The Rhode Island Forest Resources Assessment was recently completed, which includes forest health as a major component. For more information, go to: http://www. dem.ri.gov/programs/bnatres/forest/pdf/ assestra.pdf.



Map of emerald ash borer biosurveillance survey locations.



Forest Health Protection USDA Forest Service 271 Mast Rd. Durham, NH 03824 603-868-7708 http://www.na.fs.fed.us



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