Sizing Up Destruction

Managing for Results at Largest EAB Delimitation Survey in New York

The Challenge

The emerald ash borer (EAB) is one of the most destructive invasive insects to be detected in the United States in recent years. This beetle, a native of Asia, was first found in 2002 near Detroit, MI. Since then, EAB populations have been detected farther afield killing tens of millions of ash trees in 15 States and two Canadian Provinces.

In July 2010 a massive outlier EAB infestation was discovered in eastern New York. Forest health managers there needed to determine the population's extent before the infestation spread further. Their goal: pull together personnel from across the Northeast to augment their limited resources. Working together, they might delimit the EAB population in the Hudson River Valley to make better science-based management decisions.

The Solution

The managers successfully determined the extent of the EAB population by debarking ash trees throughout the survey area during the winter of 2010-11 while the insects lay dormant under the bark. Using volunteers from 30 agencies from New York and New England, officials from the U.S. Forest Service and the New York Department of Environmental Conservation (NY DEC) coordinated several training workshops. Participants learned how to effectively debark ash trees to identify EAB life stages when detecting, delimiting, and surveying low-density EAB populations. More than 100 people participated in the training and surveys. The Forest Service Northeastern Area State and Private Forestry unit provided per diem and lodging for the New England volunteers to participate in the program. The remaining funds came from NY DEC's operating budget.

Resulting Benefits

The surveys effectively determined where the EAB population was within the Hudson River Valley. Relatively low-cost training for forest health volunteers provided even greater returns for the New York EAB field operations

Volunteers from 30 agencies from New York and New England were part of the effort to identify the extent of the New York emerald ash borer infestation.



Parks & Recreation – Forest Resource Protection, carefully samples ash bolts as part of an EAB delimitation survey in New York. (Photo by Nathan W. Siegert)

effort. The survey results provided critical information that formed the basis for field management decisions in 2011 and after. Forest health managers from six States also received relevant training at one time, which helped save time and money.

Sharing Success

New England State forest health managers are using their training and real-world field survey experience to monitor the EAB in their respective States. In addition, some of the surveys were conducted on New York City watershed property with the New York Department of Environmental Protection (NY DEP). As a result, NY DEP officials are now working closely with the Forest Service to protect the watershed by determining the risk posed by EAB. The Forest Service is assessing ash density and distribution on NY DEP's watershed land to help them prioritize EAB management. They will use this vital data to develop eq focus their efforts. The Forest Service is considering using this management strategy as a model for other infestation management operations.



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