Non-native Invasive Plant Treatments

A total of 492 acres of non-native invasive plants were treated across the Allegheny National Forest (ANF). Treatments were accomplished via stewardship contracts, ANF staff, Federal Correctional Institute McKean prison crew, and Youth Conservation Corps (YCC). Some of the species treated included: garlic mustard (*Alliaria petiolata*), goatsrue (*Galega officinalis*), multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), exotic bush honeysuckles (*Lonicera* sp.), glossy buckthorn (*Frangula alnus*), and purple loosestrife (*Lythrum salicaria*). Three outreach/education sessions on invasive plant identification and their impacts were given to ANF staff.

Zebra Mussel Monitoring

To monitor the risk of additional zebra mussel introductions into the Allegheny River and prevent boaters with a high risk of harboring the species from launching, 831 boaters were randomly screened at two Forest Service boat launches. Also, for boats that were launched without being screened, trailers (1,305) were inspected in parking lots for evidence of aquatic vegetation that might harbor zebra mussels. No evidence of the species was detected.

Gypsy Moth Monitoring

Egg mass data collected on over 190 plots (7,859 acres) in the fall of 2013 predicted overall “nuisance” levels of gypsy moth defoliation for 2014. Little gypsy moth caused defoliation was observed in 2014; however, light, individual oak tree mortality was observed in 2014 in areas that experienced a late freeze and heavy gypsy moth defoliation in 2013. One area on the Bradford Ranger District was detected where over 100 acres of concentrated oak mortality occurred. This was attributed to two localized late frosts followed by heavy gypsy moth mortality. District staff are evaluating this area, and addressing the tree mortality through ongoing projects.

Hemlock Woolly Adelgid Monitoring

ANF and State & Private Forestry (S&PF) staff worked with the Pennsylvania Department of Conservation and Natural Resources to host two workshops aimed at training volunteers to identify and report HWA infestations in northwestern Pennsylvania. An additional workshop was held in southern New York (Allegheny State Park). Participants observed HWA first-hand and gained experience in detection, monitoring, and reporting protocols. They also had an opportunity to volunteer for the “Adopt-a-Hemlock” program to conduct surveys and report new infestations in local hemlock forests. To date, about 50 areas have been adopted by trained volunteers to complete HWA as possible while out in general forest areas. HWA was discovered for the first time in Allegheny State Park by volunteers who participated in the volunteer training workshop.

Hemlock Conservation Strategy

In 2012, recognizing that HWA would soon spread to the ANF, the ANF and The Nature Conservancy (TNC) organized a partnership of land owners and managers and other interested groups and organizations to develop a collaborative strategy for landscape-level conservation of the hemlock resource. The strategy focused on the High Allegheny Unglaciated Plateau (EPA ecoregion 212Ga), an area covering nearly 2.5 million acres extending into New York State and including the ANF. Representatives of
almost 50 groups, agencies, organizations, and institutions participated in this effort with the combined acreage of partner ownerships comprising nearly 50% of the ecoregion’s total land area.

The goal of the collaboration was to develop a plan for prioritizing important hemlock areas in order to best allocate limited treatment resources. Considering the ecological, social and economic values provided by hemlock, collaborators identified 146 hemlock conservation areas, or larger priority landscapes, including 44 smaller focal priority areas within the entire High Allegheny Unglaciated Plateau. Eleven of these hemlock conservation areas contain documented old growth and 23 are used for research purposes. 1,288 miles of streams fall within the hemlock conservation areas, a vast majority of which are classed as high quality waters. One of the hemlock conservation areas encompasses Pennsylvania’s Cook Forest State Park, now home to the greatest concentration of tall, old-growth hemlock in the eastern United States.

Moving forward, the partnership submitted a multi-state proposal through the FY 15 Northeastern Area State & Private Forestry call for Landscape-Scale Restoration applications. If funded, the proposal would provide for Cooperative Management Area activities in New York and Pennsylvania: intensive monitoring of HWA infestations and hemlock health, treatments in hemlock conservation areas, and additional outreach and education efforts.

### Priority Hemlock Conservation Areas

<table>
<thead>
<tr>
<th>Species Targeted</th>
<th>Accomplishment</th>
<th>Funding</th>
<th>Fund Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNIPs</td>
<td>492 acres</td>
<td>$100,038</td>
<td>NFVW, GSRV, NFTM,</td>
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<tr>
<td>Zebra mussel</td>
<td>831 boats, 1,305 trailers</td>
<td>$4,000</td>
<td>NFIM, NFWF, NFRW</td>
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<tr>
<td>Gypsy moth</td>
<td>190 plots (7,859 acres)</td>
<td>$12,500</td>
<td>NFVW</td>
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<tr>
<td>HWA</td>
<td>50 sites (nearly 2,000 trees)</td>
<td>50 days</td>
<td>n/a</td>
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<tr>
<td>Hemlock conservation</td>
<td>Implement CCSA with PA TNC</td>
<td>$9,225</td>
<td>NFVW</td>
</tr>
</tbody>
</table>

![Priority hemlock conservation areas in High Allegheny Unglaciated Plateau Hemlock Conservation Strategy](image)

Allegheny National Forest
4 Farm Colony Drive
Warren, PA 16365