

SAFC Pitches in on Hemlock Conservation Efforts

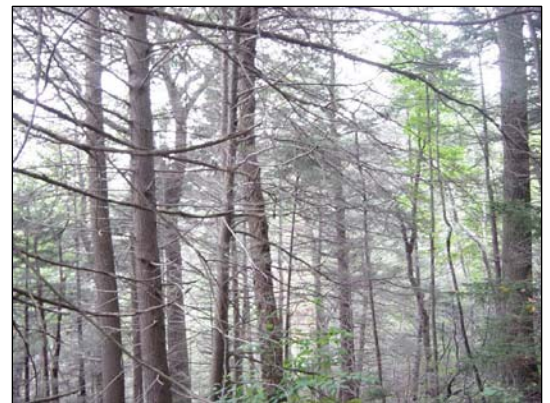
Imagine our mountain streams without Eastern Hemlocks. Imagine high rocky bluffs in the heart of the Southern Blue Ridge without Carolina Hemlocks. These emblematic trees are an integral part of our region, and their loss would fundamentally change our forests. Their presence would be missed by species and ecosystems dependent on these keystone trees, as well as the people who love them for their lacy beauty and inviting shade. Yet their absence is not just an imagined nightmare but a likely outcome unless a heroic and sustained effort is conducted to save this species from extinction.

SAFC is part of an effort to address the threat to hemlocks and to lay the groundwork for their eventual recovery. We are partnering with the US Forest Service in North Carolina, Wildlaw, and others interested in hemlock conservation, to reassess the condition and viability of existing Hemlock Conservation Areas and find additional replacement areas. This fall, working under a contract from Southern Appalachian Man and the Biosphere (SAMAB), and the US Fish and Wildlife Service, SAFC sent three field teams to over thirty existing treatment sites and potential replacement sites to help determine where future treatment efforts should be focused.



Both species of hemlock, Eastern and Carolina, are subject to a non-native exotic insect introduced from Asia. This insect, the Hemlock Woolly Adelgid, has been in Eastern North America for some time, however, the harsh cold winters in the areas where it was introduced slowed and limited its impact. As the adelgid spread southward, its impact has increased. The tiny insect sucks the sap from healthy hemlocks, eventually defoliating and killing them.

No native controls exist in our mountains for this pest, and our hemlock trees appear to have little resistance to combat the attacks. The decline of both Eastern and Carolina hemlock species in our mountains has been devastating and swift, and you've probably noticed dead or dying trees in your travels. Old growth Eastern Hemlock trees, in some cases over 500 years old, have been killed in just a few years, and the rarer Carolina Hemlock could be close to extirpation if trends continue.



As damage from the adelgid infestation has progressed, it has become clear that the long range strategy needs updating. Predator beetles, a natural control for the Hemlock Woolly

Adelgid, were originally heavily relied on for control of the adelgid. This solution still provides hope for a long range solution if the right combination of beetles and conditions are found, but predator beetle releases have so far not proved effective in controlling the infestations. Meanwhile, land managers have been working to keep wild populations of hemlock alive using chemical controls until the best long term solutions can be worked out. SAFC is confident that our work will provide the necessary information to focus hemlock treatment resources on populations that are still viable and help keep these populations healthy until a permanent solution is found.