http://www.mountainx.com/news/2011/forest_service_says_new_hemlock_treatments_are_working2 **Forest Service says new hemlock treatments are working** by <u>Susan Andrew</u> on 02/02/2011

Last fall, the U.S. Forest Service in North Carolina began using some new approaches to address hemlock trees under attack by the hemlock woolly adelgid in Western North Carolina's national forests. The insects, which look like tiny white fluffy masses on the trees, continue to kill eastern and Carolina hemlocks throughout their range, including WNC. Thousands of trees — no one knows for sure how many — have died across the landscape here, diminishing a keystone species that's been part of the local ecosystem for millennia. In this photo, the damaged and possibly dead trees stand out as gray sentinels in the forest.

The Forest Service and a team of partners recently reported some success in their efforts to protect trees from these tiny killers. The new treatment options have included aerial application of an adelgid-killing fungus; use of the chemical dinotefuran in high-priority areas where trees are in immediate danger of dying; expanding the number of sites that will be treated; releasing new species of predator beetles as they are evaluated; and allowing the use of the longer-lasting chemical, imidacloprid. Soil injection of



photo courtesy of the U.S. Forest Service

insecticides have proven effective in reducing adelgid populations, according to an agency statement. Predatory beetles have been released in several areas across the two national forests, with additional species of beetles studied as options by partner researchers and universities. An adelgid-killing fungus applied through aerial spray is under consideration for future use.

Back in August, Forest Supervisor **Marisue Hilliard** said, "We intend to use all appropriate tools in conserving hemlock for future generations." Hilliard's decision allowed expansion of the hemlock treatment areas, both to replace hemlock stands that were lost to the disease, and to add more areas overall. In addition, the wider range of treatments were intended to allow forest managers a broader selection of approaches for different areas, many of which occur adjacent to trout streams.