

# STATE & PRIVATE FORESTRY'S FOREST HEALTH PROTECTION & CONSERVATION EDUCATION PROGRAMS

## FORTH GRADERS IN NORTHERN IDAHO HELP SOLVE THE MYSTERY OF DYING FIR TREES

When fourth-grade teacher Jane Thornes drove by some dead and dying subalpine fir trees along a highway, little did she know that her students would work with the US Forest Service to determine the reason why. But – that's exactly what happened at Heyburn Elementary. Here's how...

When Jane told her students what she had seen, she piqued their curiosity. They discussed the effect of dying firs on the aesthetics of the area and what it would mean to animal habitat and to the timber-based economy in their part of the state. They wondered whether other types of fir trees were affected.

Students first read about conifer species. Then it was time to get outside. They started with a tree identification walk around the school neighborhood. They learned how to measure trees, use a compass, and estimate distances based on their own walking strides.

The kids explored the effects of disease on forest health through two Project Learning Tree hands-on activities. By then, they had come up with a likely culprit: balsam woolly adelgid, a tiny wood-boring insect that affects many types of firs. But proving the theory meant leaving the classroom and heading outside.

Carol Randall, a Forest Service entomologist who works in the Forest Health Protection's Coeur d'Alene Field Office, selected a site that the kids could study. It ended up being a two-mile hike from the nearest road, but off they went without complaint. Sure enough, the data they collected showed that the adelgid had infested not only all the subalpine fir trees they studied but also many grand fir trees.

The Forest Service is using the students' findings to develop plans to fight the balsam woolly adelgid. A dedicated class of fourth-graders, moving outside their classroom, provided data and motivation that has supported forest managers' decisions.

And that's not the only way that Jane helps Heywood kids learn outside. Each year, the fourth-graders visit a local stream and monitor its water quality.

**“Getting outside with hands-on activities, especially collecting data that could be utilized by professionals, gives more meaning to learning for our students.”**

*Jane Thornes, 4<sup>th</sup> grade teacher, Heyburn Elementary School*