

**LEFT:** Bob Christianson, center, worked with North St. Louis SWCD-based regional Farm Bill forester Zach Evans, left, and North St. Louis SWCD forester Tristan Nelson on a project to remove dead and dying balsam from 6 acres near Brimson. Hull Forest Products completed the work in August. The project was made possible through the Arrowhead Forest Partnership, an agreement between NRCS and five northeastern Minnesota SWCDs. It addressed resource concerns including the fire risk, spruce budworm outbreak, tree and plant diversity, and wildlife habitat.

**RIGHT, FROM TOP:** Christianson will rely on pine and aspen to regenerate naturally. Decomposing wood chips feed the natural regeneration. Fallen logs supply nutrients and water, as well as food and protection for insects and small mammals.

**Photo Credits:**

Ann Wessel, BWSR



# NRCS-SWCD forestry partnership supports fire safety in Arrowhead



Minnesota NRCS website: [www.mn.nrcs.usda.gov](http://www.mn.nrcs.usda.gov)

**B**RIMSON — Bob and Colleen Christianson cut the fire risk to their property this summer when they cut and mulched dead and dying balsam fir trees left in the wake of a spruce budworm outbreak.

“The biggest problem I was worried about was the fire danger. And if any fire got going in here, it would burn everything. Not only that, I wanted to improve the land for wildlife,” Bob Christianson said.

Spruce budworm is native to Minnesota, where 100-plus years of fire suppression

allowed dense stands of balsam fir to flourish. Despite its name, spruce budworm prefers balsam fir. Outbreaks kill vast swaths of trees — nearly 665,000 acres in northern St. Louis, Lake and Cook counties in 2023, according to the Minnesota Department of Natural Resources [forest health report](#).

“Balsam, a lot of times even when it’s alive, it does a good job burning. But when it’s dead, it’s even worse. We’re seeing the highest levels of defoliation now since at least the 1960s,” said North St. Louis Soil & Water Conservation

**VIDEO:** [“North St. Louis SWCD Forestry: NRCS Partnership”](#)

District (SWCD) forester Tristan Nelson. “If there were a wildfire to come through, there would have been a bigger threat to the area.”

Brimson was among the spruce budworm outbreak hotspots in late 2024.

The Christiansons’ project involved 6 acres bordering their house and road.

The work was made possible through the Arrowhead Forest Partnership (AFP), an agreement between the USDA’s Natural Resources Conservation Service (NRCS) and five northeastern Minnesota soil and water conservation districts.

The AFP started in September 2018. Since then, NRCS has contributed \$1,142,235 through two three-year agreements and two one-year extensions that fund regional Farm Bill foresters. The contribution agreement also reimburses SWCDs for work that district foresters complete. And it covers those SWCDs’ costs for their work related to NRCS Environmental Quality Incentives Program (EQIP) projects.

The North St. Louis SWCD is using an NRCS reimbursement (which is not tied to the AFP) to make SWCD forester-written Woodland Stewardship Plans available for free to landowners, up to 250 acres. Landowners’ priorities shape Woodland Stewardship Plans — in-depth management recommendations tailored to each type of forest cover. The plans and implementation are optional.

“The goal, bigger picture, is to get a more fire-adaptive community in the Arrowhead. It’s also to try and (help



*Christianson walked down a path where spruce budworm decimated a stand of balsam fir. Cutting and chipping those trees reduced the fire danger. The decomposing wood chips will feed the natural regeneration of other species.*

private landowners) tackle multiple resource concerns,” said North St. Louis SWCD-based regional Farm Bill forester Zach Evans.

EQIP assistance from NRCS covered 75% of the \$2,000-per-acre cost to complete the Christianson project.

“I couldn’t afford to do it without that (assistance) — not in a larger scale. Every part of it was great, except for the paperwork,” Christianson said.

Hull Forest Products completed the work in August, turning a dense stand of mature balsam into wood chips that will feed the pine, maple — and possibly oak — seedlings that Christianson expects to naturally regenerate along with aspen

and other understory plants. The crew left a few dead pines as wildlife habitat. Downed logs remain for insects, reptiles and small mammals.

Christianson said the balsam fir fed red squirrels and provided thermal cover for deer, but little else.

“It’s going to be great for wildlife, bring in a different variety of animals and plants,” Christianson said in mid-November as he walked the site with Nelson and Evans. “It’s going to be ever-changing, so it’s going to be pretty nice to see.”

Nelson wrote Christianson’s Woodland Stewardship Plan, met with the contractor, and certified project completion. Evans worked with Christianson on the EQIP application, contract

and payment.

Although he is familiar with every inch of the woods, Christianson said seeing it every day made it harder to recognize what had gradually changed over the years and might benefit from management. He bought the 40-acre property 15 years ago, and moved there 10 years ago after retiring from his job as a Twin Cities-based large-appliance service technician.

“All the large balsams are dead and gone. I didn’t realize that it would kill everything,” Christianson said of the outbreak. “It’s incredible what it’s done, and now it’s time to start fresh.”

For Christianson, that means focusing on forest health and wildlife on the newly cleared site, and in the black spruce-tamarack and jack pine stands elsewhere on the property.

Foresters working through the AFP have submitted 100-plus EQIP applications for practice plans related to resource concerns. Work has focused on clearing dead and dying balsam, removing invasive species, and planting trees on sites ranging from a half-acre to 300 acres.

“Diversity in the stand is the biggest thing,” Nelson said. “On a larger scale, we’re reducing that fire risk. If there were a fire to start here, (before) pre-treatment there’d be a real good chance of a crown fire — which could spread who knows how far. It could be really devastating for the area. But reducing that fire risk hopefully will help protect against that.”

---

*USDA is an equal opportunity provider, employer and lender.*