

## **Council High School's Greenhouses Benefit the Community**

*by Dale Fisk (The Adams County Record - April 18, 2013 Edition)*

The Council School District has a set of facilities that almost no other school has. One half of that set is two modern greenhouses. The other half is the biomass plant that supplies the greenhouses, and the schools, with heat and cooling. This extraordinary combination has enabled the school to expand its Professional/Technical program to include unique agricultural aspects to its industrial arts program.

Given that April 22 is Earth Day, it is an appropriate time to recognize the greenhouses and their contributions.

The first greenhouse came about when shop teacher Ron Corbett and Agricultural Science teacher Dawn Holmes applied for and received an Albertson Foundation grant that paid for everything but the actual construction. The high school shop class students built the greenhouse during the 1994-95 school year, and any additional costs were picked up by the school district.

This first greenhouse couldn't be used in the winter because it didn't have any heat supply. After the biomass plant came on line, it greatly expanded the possibilities. The school got a \$96,000 RAC grant in 2008 to grow native plants. School Superintendent Murray Dalglish said: "We tried to build the [second] greenhouse ourselves- to save money, but didn't have the expertise, so in 2011 we had a to contract out the construction to complete it using another RAC grant to complete the project. The biomass hot water is used to heat the floor (also in the old greenhouse) and to run two large heat pumps for the extreme cold times. The advantage we have with this greenhouse is we can operate it year round because we have cheap heat. It is a state of the art greenhouse, with most of the controls -- watering, shading, heating/cooling, fertilizing -- done mechanically without being labor intensive."

### **Harvesting, growing and planting**

For a number of years now, the school has been involved in a cooperative program with the Forest Service to grow and plant native vegetation in our area. Students from nearly every grade harvest seeds in the fall, picking them on the National Forest, other public land, or sometimes right on the school playground. They plant the seeds in starter flats and then transplant them into 10 cubic inch yellow tubes.

There is real science involved in this process that students are learning, and they're even developing their own interesting techniques. Some students have experimented with various solutions to improve seed sprouting and survival, and have discovered some secrets as to how to sprout things like willow starts. Among the seeds collected and grown are spirea, syringa, alder, dogwood and yarrow.

In the spring, students go out and plant their seedlings on Forest land. Right now the school has over 2500 native syringa and spirea starts growing in one greenhouse that are to be used for a county flood restoration program and various Forest Service projects on the Payette National Forest. Each student will also take a syringa seedling home to plant this year.

### **Funding**

The Southwest Idaho Resource Advisory Committee (RAC) funds make the cooperative programs with the Forest Service possible. RAC funds are available through the Secure Rural Schools and Community Self Determination Act, which was recently reauthorized by Congress for one year.

RAC-funded projects must be located on National Forest System Lands, or on nearby lands if the project will benefit resources on the National Forests. Projects can be completed by Forest Service personnel, through partnership agreements or by open-bid contracting with individuals and corporations. The RAC works closely with the Forest Service to recommend projects that benefits forest health, fish, wildlife, soils, watersheds and other resources; maintains roads, trails and other infrastructure; or controls noxious weeds.

## **Projects**

The agreement between the Forest Service and the schools is mutually beneficial. RAC contributes funds to the greenhouses, the greenhouses grow plants for the Forest, and Forest Service personnel work with the school and the students in the field. School Superintendent Murray Dalglish put it this way: *“It is a great success that we can provide students with a real life, hands on learning experience -- something that will benefit the forest, provide the Forest Service with native plants they may not otherwise be able to obtain or afford. It is a great partnership -- their professionals work with our students. It is a win-win for everyone.”*

As part of their agreement with the Forest Service, the school provides about 2,000 seedlings each year to be planted on the Forest. There are about 200 fir, spruce, and pine trees from the UI nursery growing in one greenhouse. Students transplanted them into gallon containers and are growing them for a campground restoration project.

Last May and June, a crew of students planted well over 3,000 trees and plants. One of their main projects was establishing ground cover on the obliterated part of the Beaver Creek Road. Melanie Vining is a Hydrologist for the West Zone of the Payette National Forest and has supervised the student crews. She said, “The kids went in there and spent over a week putting slash and other cover on the obliterated road right by the creek. The goal was to get vegetation to come back.”

RAC grants have paid high school crews to do planting projects for 3-4 weeks each year for the past 2 or 3 years. The Forest Service has even used post-fire funds to pay kids to plant in a burned area. And the County recently paid to have kids plant stabilizing vegetation on the banks and rebuilt areas of the Middle Fork Road.

This on-the-ground, hands-on learning is enjoyed by the kids, and they gained a new appreciation for the Forest and the environment. It also leads some kids to think about a career in forestry or a related field. Melanie Vining explained: “It seems like, if you have programs like this in schools, where kids are at least thinking about the land, and different uses for the land and how people use it, maybe it will spur interest in some of these kids to participate as a citizen and state or federal management process, or to go to school and pursue a natural resources career.”

Vining said the students have a sense of pride in what they have accomplished, and will look back on their work in future years and say, “I planted that in high school, and look at it now.” Melanie told about meeting an older gentleman while out on a Forest project near Mann Creek. The man pointed up at the mountainside covered with large trees and proudly said, “I planted those.” He had planted those trees while in the Civilian Conservation Corps (CCC) in the 1930s.

Some money is earned from selling plants grown in the greenhouses. For instance, Geranium and mixed hanging baskets are being sold at Council Floral and Garden Center for Mothers Day gifts. The school’s share of the profits is used to fund FFA travel and the plant projects themselves.