OSU Fellows developed several lessons that involved the local communities to bring science into the K-12 students' homes and helps develop more support for science education in the small rural communities we partner with through the program. Examples of community involvement during the 2004-2005 school year include:

Salmon development: Oregonians are familiar with public debates on fish ladders, dams, and other salmon restoration projects. In Cascades Elementary in Lebanon, OSU Fellows obtained salmon eggs from the US Fish and Wildlife, and facilitated students raising salmon from eggs to fry in the classroom. During the process they learned about habitats, food chains, predator and prey interactions, and discussed non-point source pollution impacts on salmon. OSU Fellows worked with 5-6th graders who subsequently taught 4th graders about the salmon lifecycle. At the end of the unit, students, parents, and school administrators jointly released salmon fry in the Santiam River. The Principal commented on the unusually high number of parents that participated in the event, and the number of students that shared their salmon knowledge with their parents.

Storm Drain: In Alsea School, on the banks of Alsea River, OSU Fellows directed the students to work on a community-related issue. At the time, the community was involved in a debate about the need for a storm drain system and placement of a settling pond on the school property. OSU Fellows assisted the Alsea students in collecting base data on water quality and stream diversity for comparison with data to be collected by future classes. This provided a unique opportunity for the OSU Fellows to highlight the importance of baseline data for longitudinal research, while engaging the students in an issue of local relevance.

Extreme Makeover: Forest Edition: Falls City Elementary has a deforested habitat adjacent to the school that students refer to as a "stump field". In Track 1 OSU faculty and the community removed invasive blackberries to enable the students use the site as an outdoor lab for state required inquiry projects. OSU Fellows assisted the students in developing a plan for the area, taking baseline data, and planting seedlings. The outdoor lab was used for classroom activities: samples were collected from trees for DNA extraction; flora, fauna and fungi were collected for studying diversity and preparing dichotomous keys for classification. Students prepared an inventory of plants and insects. Future classes will add to the collections and the data base will benefit OSU researchers studying diversity or tracking rare species.

Discovering Partners in Nature: This program was initiated in 3 schools in spring 2005 with Toshiba America Foundation (TAF) support. The goal is to provide rural students a scientist experience while integrating scientific inquiry and discovery, experience with advanced technology, and an opportunity for scientific communication. K-12 students, with guidance from an OSU graduate student and OSU faculty, will collect flowers, and trap bees from around their schoolyards. Plants and bees will form a permanent collection at each school. Students will visit OSU to use a scanning electron microscope (SEM) to compare pollen samples from bees and flowers to discover for themselves which bees pollinate which flowers. They will present their results during a conference in spring 2006 on campus to be attended by university and school administrators, parents, community leaders, TAF, and Oregon stakeholders. This program has the added value of being part of a larger research study on bee diversity being conducted at OSU.