

### Summer Youth Crew

The Fish and Wildlife Department also facilitates a summer Oregon Youth Conservation Corps program. Since 1990, it has provided outdoor work opportunities for youth in Grand Ronde and the surrounding communities.

The youth crews continually build and maintain trails on the Reservation. The goal is to have a 20-mile trail system built and available for hiking, mountain biking and horseback riding.

The OYCC program has won the Frank Roberts Award for the best summer program in Oregon in 2002, 2006, 2008 and 2009.



Summer Youth Crew

Courtesy photo

### Salmon Distribution

Natural Resources also coordinates with the state of Oregon to receive 4,000 pounds of Chinook salmon annually for distribution to the membership. In the past, we also have found ways to tap federal hatcheries for surplus, which usually adds 4,000 to 12,000 additional pounds.

### Reforestation/Stand Establishment

Immediately following a timber harvest operation, Natural Resources Division staff focuses attention toward reforestation of the site. This process, often referred to as silviculture, begins with preparing the land.

It takes a long commitment that involves careful consideration of the correct seed source for the land; how long to grow the seedling before planting on the Reservation; how to control competing vegetation and how best to guide the young trees into mature forests. All this is done while addressing many other Tribal interests on the Reservation.

### Site Preparation

The preferred method of site preparation is prescribed fire. Burning is performed by department employees and conducted when soil and fuel moisture conditions will keep fire intensity low.

Low-intensity fires will most closely mimic natural fires and have insignificant impacts on site productivity. This method of site preparation will reduce the fire hazard and provide room for planting of seedlings.

When it is determined that prescribed fire is not the best choice, the site is prepared for planting through mechanical clearing. Machinery, provided by contracted vendors, is used to pile logging debris and create planting areas.

The techniques employed to reduce compaction during mechanical clearing include using low-ground pressure machines, clearing only when soils are very dry, and rehabilitation by ripping and/or water barring any ground-based skid trails after clearing.

To date, Natural Resources has machined piled and burned 472 acres within the planning period.

### Seed Source and Genetic Improvement

A good healthy forest begins with the seed source. Natural Resources takes advantage of genetic improvements in seed while maintaining native diversity. Through a cooperative agreement with the Bureau of Land Management, several conifer species (Douglas fir, western red cedar and western hemlock) have been selected for genetically controlled characteristics, such as growth, tree form and resistance to disease.

This seed source will comprise no more than 25 percent of the seedling production contracts. The remaining seed is collected on the Reservation

by felling phenol-typically superior trees in coordination with the projected 10-year harvest plan.

### Reforestation Methods/Planting Stock

Planting is the primary method of reforestation used on the Reservation. Artificial and natural seeding, with the exception of red alder and big leaf maple, are not effective or as rapid as planting.

Natural regeneration may supplement planting, but is not relied on for stocking. Within the current planning period, Natural Resources staff has reforested 547 acres. This work is contracted to ensure quick reforestation and better quality control.

The selection of tree species, planting density (usually 10 feet by 10 feet) and stock types depends on site characteristics, the composition of the original stand and projected future management of each stand.

Douglas fir is the major species planted, comprising 85 percent to 95 percent of the total trees. Western hemlock, western red cedar, grand fir, red alder and big leaf maple species comprise 5 percent to 15 percent of the stands.

Typically, a seedling is grown in the nursery for two years before being planted on the Reservation. This is intended to give the seedling a head-start over competing vegetation and greatly improves survival. Lewis River Reforestation and IFA Nursery are under contract to grow these 2-year-old seedlings for the Reservation. A total of 350,000 seedlings have been grown over the course of the plan.

### Vegetative Management

Brush control activities are performed to ensure tree plantation establishment and continual growth. The prescriptions to manage competing vegetation are very site specific and may include manual cutting and, on a very limited basis, herbicides.

Without these activities, the competing vegetative species can cause high mortality in regenerated stands. The purpose of these activities is not to completely eliminate other vegetative species, but to provide seedlings enough time so that they can successfully compete with vegetation.

Proper site preparation, such as prescribed fire and mechanical clearing, provides the initial advantage needed by seedlings to get ahead of vegetation and avoid the need for herbicides. This has been the experience on the Reservation as evidenced by numerous examples of successful reforestation without herbicide treatments.

Over the plan, Natural Resources employees have manually released approximately 226 acres. Of the 226 acres, five were treated by herbicides.

### Timber Stand Improvement

Timber stand improvement activities, such as pre-commercial thinning, fertilization and pruning, are performed to promote growth while maintaining health and productivity.

Monitoring these silvicultural treatments verifies that objectives are being met under the established guidelines set by the Natural Resources Division.

Within this planning period, employees have pre-commercial thinned 1,414 acres.

### Resource Protection

To date, insect and disease have caused minor damage on the Reservation. Staff monitors the forests for early signs of damage and reacts quickly on a site specific basis.



Douglas fir cones

Courtesy photo