



Cedar stump with springboard cuts

Diversifying Your Forest with Western Red Cedar

By Tom Westergreen

Western Red Cedar (WRC) has been and still is one of the more important tree species in the Northwest United States. Today WRC is not as common as when it was a major component of the vast Old Growth forests of the Pacific Coast range, from northern California to southeast Alaska and easterly to northwest Montana. Those old growth Cedar were widely used by the Native Indians and extensively used by the early settlers for weather-resistant shake roofing and siding for building construction. WRC naturally seeded the forest after the Old Growth was



harvested, composing around 15% of the trees in these natural stands. Today's industrial plantations have fewer WRC, but should be a consideration for many small forest landowners to incorporate into their regeneration efforts.

So why diversify with WRC? Not only does the species have a wide geographic range, but also grows from sea level to higher mountain elevations (7,000 feet) It is a very shade tolerant species and can survive for many years in the shade of overstory trees. It grows on most soil types, but prefers moist sites. It is resistant to most root diseases that affect other conifers. WRC is a prolific re-seeder, with the tiny two-winged seeds capable of blowing long distances from the mother tree.

Even though the wood of young growth WRC is not as rot resistant as the tight grain old growth, it is still sought for its weathering capabilities and beautiful coloring. Although a minor species for the timber industry, specialized mills still purchase



WRC to manufacture products like fencing, siding, decking and power poles. A year ago, mill prices could average \$5,400 per truck load for Cedar

saw logs and a delivered loads of quality poles averaged \$9,400. Obviously, prices vary, but limited supply and continuing good demand should make planting WRC a consideration for diversifying your timber portfolio.

You might be getting the impression that I like WRC. That is true and even goes back to when I was in 8th grade and presented a 4-H Demonstration talk at the Puyallup Fair on, you guessed it, “Western Red Cedar.” So let me talk a little more about growing Cedar on our tree farm, which may be different than your property, but will give you some ideas on how to diversify with WRC.

Our lower elevation tree farm in the far northwest corner of Washington is just south of the Canadian border and has good conditions for growing WRC. We get over 40 inches of rain a year and the soils are mainly gravelly loam, while some areas are wetter and more shallow. This location has a fire history where the old growth was more scattered or

in protected clumps. After those trees were removed, the naturally regenerated forest was a mix of conifer and hardwoods like Big Leaf Maple. Harvests for us in the 60's and 70's were mostly overstory removal of the Maple, some Douglas-fir and large WRC, while carefully protecting the understory WRC. Using a small Caterpillar and spray young sons, Dad was able to harvest the merchantable trees and still leave enough small Cedar and Hemlock for adequate stocking so only spot planting was needed. After 50-60 years these areas have grown into very nice, valuable WRC stands.

Over the years we did some replanting with Cedar pull-ups and still try to protect any smaller non-merchantable Cedar in harvest units. For the last 20 years we worked to perfect our WRC regeneration plan. WRC can be frost sensitive. The Washington Tree Seed Transfer Zones, developed in 2003, suggests using reforestation seed that comes from within a 1,500 foot elevation band and about a four county distance north and south. Our locale has the occasional dry, cold northeast winds from the Fraser River Valley, so our local Whatcom County Farm Forestry Chapter chose to collect locally adapted seed for custom grown WRC seedlings. First, we tried smaller one-year old plug seedlings, but found



those were just easy candy for the deer to eat and struggled growing with the brush. The preferred WRC for us now is a plug seedling raised one year in a greenhouse then transplanted in a nursery field for the second year. These larger P-1 seedlings average about 18" in height, have a good caliber and very full, bushy roots.

Fortunately for us we only get animal damage from Black-tail Deer and only in the winter from October to April. We were planting later in the spring to avoid the deer's browsing season, but with the drier early summers, we now try to plant in early March. Seedlings are treated with Plantskydd organic

animal repellent for short-term protection until other browsing options leaf out.

To protect the seedlings from winter deer browse, we use a physical barrier of Tiller Netting, slipped



over each seedling in October and removed in April. This process is repeated for two to three years until the trees are out of the deer's reach of about five feet. Other tree farmers with more severe year-round browsing problems or elk, have utilized Rigid

Seedling Protection Tubes and for others the practice of planting a prickly Spruce seedling along with each Cedar. The Spruce is then cut out when the Cedars are out of the animals reach.

It is common for us to plant WRC along the plantations shaded edges or in small openings. WRC also is usually planted on the wetter areas of the unit, where Douglas-fir may struggle and then blow over. The WRC will survive and grow in these two situations, but the best growth comes in fuller sunlight and deeper soils not saturated most of the year. On the better sites we are seeing the Cedar grow comparable to the Douglas-fir as seen by this



P-1 cedar after three years growth. With the drier summers the last couple of years, some landowners with well drained, gravelly sites are seeing their WRC in the understory struggling and even dying.

Doing your research, studying your forest and talking to other local tree farmers will help you determine if diversifying with Western Red Cedar may be an option for the future of your forest's regeneration efforts.