













It's important to remember that whatever method of release you use in your plantation, the objective is to control competing vegetation for a specific period with little or no damage to the planted seedlings.

### **Inspect your plantation**

Plantation release is most effective if done before seedlings are too badly damaged. This means that you should inspect your plantation periodically.

For small areas, a walk-through that crisscrosses along a route representative of the unit might be adequate. Larger plantations might require a more systematic survey, using plot lines in a formal grid that are laid out on a map or photo.

During your inspection, note survival problems that might be developing, animal damage, crowding, and overtopping by competing vegetation. It's a good idea to document your inspection on a simple map for your management file.

### **Reduce animal damage**

An added benefit of controlling vegetation after plantation establishment can be reduced animal damage. Populations of voles, deer mice, rabbits, and mountain beaver tend to increase when food supplies are abundant.

As well as providing food, grasses and forbs offer these animals protective cover from predators. When these plants are reduced, small mammals move to other sites where food is more abundant. The crop trees benefit from increased availability of nutrients and moisture and, as a result, grow vigorously above the level of animal damage. What's more, increased early height growth, achieved with effective vegetation control, may reduce or even eliminate the need to protect seedlings from animal damage.

### **How much release is enough?**

It's important to remember that where timber production is the primary motive, the goal of any release treatment is to achieve free-to-grow status

as early as possible, not to eradicate all competing vegetation. Over-treating wastes money and effort and can damage crop trees.

Large voids or bare spots may increase your crop trees' exposure to harsh elements such as wind, frost, and erosion. Voids can be invaded by more competitive, harder-to-kill species, thereby aggravating the problem. Open areas can encourage and concentrate animal use and damage.

Remember, too, that grasses, forbs, and woody vegetation provide valuable habitat for a variety of wildlife species. If managing for wildlife is among your goals, consider retaining some grasses and shrubs in a young plantation. While crop tree growth will be slowed somewhat, species that rely on brushier conditions (sometimes called early seral habitat) will benefit.

When planning your release treatments, it's important to choose the right method and level of release for your site and your management goals.

### **For further reading**

#### **OSU Extension publications**

Find these and other forestry publications in the OSU Extension Catalog at <http://extension.oregonstate.edu/catalog/>

*Enhancing Reforestation Success in the Inland Northwest* (PNW 520-E)

*Pacific Northwest Weed Management Handbook* (revised annually)

*Successful Reforestation: An Overview* (EC 1498-E)

#### **Other publications**

*Guide to Reforestation in Oregon*. 2006. College of Forestry, Oregon State University.

*Competing Vegetation in Ponderosa Pine Plantations: Ecology and Control*. PSW 113, USFS General Technical Report, 1989.