



Chapter 3 - Tree and Plant Identification

Revised 2025

The most basic skill that a forester must possess is the ability to recognize the trees and plants in an area. After a little practice, tree and plant identification becomes second nature: A quick glimpse of a tree's bark or a plant's leaf is often all that is needed to correctly identify the specimen.

The best way to learn the native tree and plant species is to spend some time with a forester or other knowledgeable person. Tree and plant identification is a skill that is difficult to learn out of a book. If no one is available to teach you how to identify trees and plants, perhaps you can hike on a nature trail that has plant species identified with labels. Many parks and recreation areas have excellent nature trails.

CONTEST TIP: There is often more than one commonly used name for a single type of tree or shrub. For example, Ponderosa pine is sometimes referred to as bull pine or yellow pine. Lodgepole pine may be called jack pine, black pine or red pine. Douglas-fir may be called red fir. Grand fir may be called white fir. With so many common names being used in different areas, it's important to know the most accepted local names **and** the scientific names used by professional foresters and botanists throughout the world. In addition, scientists may revise scientific names as more knowledge about a plant's genetics becomes available.

At the Forestry Contest, you should use the plant names given in this chapter.

The Idaho native plants you must be able to identify for the Forestry Contest are:

Conifer Trees

- Douglas-fir (*Pseudotsuga menziesii*)
- Subalpine fir (*Abies lasiocarpa*)
- Engelmann spruce (*Picea engelmannii*)
- Western hemlock (*Tsuga heterophylla*)
- Grand fir (*Abies grandis*)
- Western larch (*Larix occidentalis*)
- Lodgepole pine (*Pinus contorta*)
- Western Redcedar (*Thuja plicata*)
- Ponderosa pine (*Pinus ponderosa*)
- Western white pine (*Pinus monticola*)

Deciduous Trees

- Black cottonwood (*Populus trichocarpa*)
- Quaking aspen (*Populus tremuloides*)
- Paper birch (*Betula papyrifera*)

Shrubs

- Blue huckleberry (*Vaccinium globulare*)
- Red-osier dogwood (*Cornus stolonifera*)
- Buffaloberry (*Shepherdia canadensis*)
- Serviceberry (*Amelanchier alnifolia*)
- Kinnickinnick (*Arctostaphylos uva-ursi*)
- Shiny-leaf spiraea (*Spiraea betulifolia*)
- Mountain maple (*Acer glabrum*)
- Snowberry (*Symphoricarpos albus*)
- Ocean spray (*Holodiscus discolor*)
- Syringa (*Philadelphus lewisii*)
- Oregon grape (*Berberis repens*)
- Twinflower (*Linnaea borealis*)
- Pachistima (*Pachistima myrsinites*)
- Wild rose (*Rosa gymnocarpa*)
- Ninebark (*Physocarpus malvaceus*)

Reference: Patterson, P.A., Neiman, K. E., & Tonn, J. R. (1985). *Field guide to forest plants of northern Idaho*. Odgen, UT: USDA Forest Service, Intermountain Research Station.

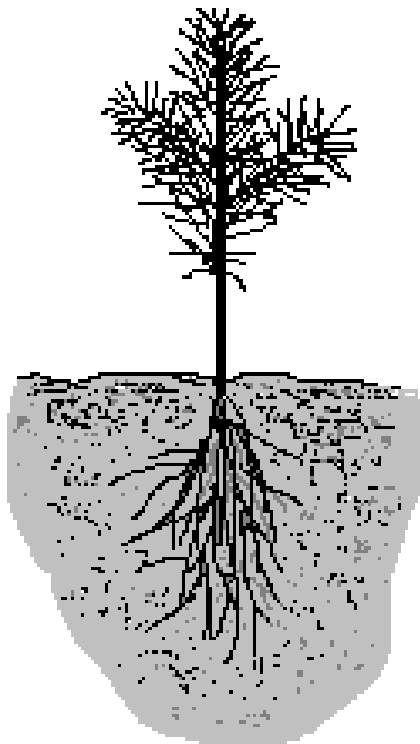
Tree Planting

It is important to be able to tell if a tree seedling has been planted correctly or not. The picture below shows a correctly planted tree seedling. The next page shows a variety of incorrectly planted tree seedlings.

1. Before planting, a two to three-foot area is "**scalped**" using a Hoedad, Pulaski or shovel to remove vegetation (grass, etc.) that would otherwise compete with the seedling for moisture and nutrients.
2. The tree seedling is **oriented vertically** in **mineral soil** with its roots spread outward and down.

There are **no large air pockets or loose soil** around the roots.

3. The soil is even with the **root collar** (the line on the stem showing where the soil level was when the seedling was grown in the nursery).
4. **Shade**, such as a log, rock, or cedar shingle, is provided on the southwest side of the tree.



Correctly Planted Tree Seedling

Unacceptably Planted Trees



"L" Roots



Too Shallow



Too Deep



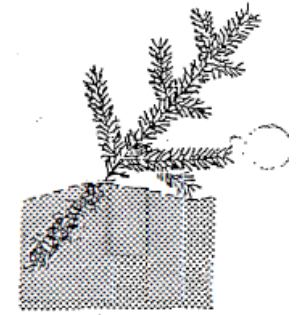
Improper
Tamping



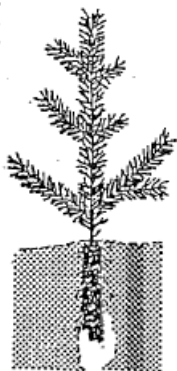
Planted In
Debris



Planted On
A Mound



Not Vertical



Air Pocket



Inadequate
Tamping



Improper Handling
Damaged Tree



Inadequate
Scalp



Dropped
Tree



No Microsite
Or Shade



Inadequate
Spacing