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Sizes and types of plant stock

Many of the plants grown at the PMC are available in one or more of the following stock types. Each stock type has its own advantages and disadvantages.

1-0 HARDWOOD



1-0 Hardwood

This is a plant that has grown for 1 year in a seedbed. They are almost always deciduous-hardwoods. 1-0 hardwood seedlings typically range in size from 8" to 18".

They are usually the smallest and least expensive stock type and are the easiest to plant correctly. They are more easily choked out by competing vegetation though. An effective weed control program will minimize that problem.

2-0 HARDWOOD



2-0 Hardwood

This refers to a plant that has grown 2 years in a seedbed. It can either be a hardwood or conifer. An obvious advantage of a 2-0 is size. A 2-0 hardwood can range from 18 to 60" tall depending on the species, which provides a plant better able to compete with surrounding vegetation and withstand light to moderate browsing.

They do cost more than a 1-0 and require a larger planting hole. The increased initial costs can lead to lower long-term costs due to higher survival and potentially less maintenance.

2-0 CONIFER



2-0 Conifer

2-0 conifers usually range from 8 to 24 inches tall.

The advantage of using a 2-0 instead of a transplant is cost, with the 2-0 often 50% the cost of a transplant. The disadvantage is a smaller root mass and stem caliper, the significance of which is often dependent upon the planting site. Reduced survivability and vigor is more noticeable on a more severe site.

1-1 TRANSPLANT

This is a transplant. It is a plant that was grown for one year in a seedbed, transplanted and grown for an additional year in a transplant bed. The advantages of a transplant are overall plant size and increased root mass. Plants with a larger root mass are usually quicker to establish and grow. These can be important advantages on sites that are more difficult due to inadequate moisture, and significant weed and browsing competition.

2-1 TRANSPLANT



2-1 Transplant

This is a transplant in which the plant was initially grown for 2 years in a seedbed then transplanted and grown for an additional year in a transplant bed.

A 2-1 transplant is usually larger than the stock-types listed above, and also more costly. They are typically used on more severe sites with less post-plant maintenance.

PLUG 1

This is a plant that was originally propagated and grown for 1 season in a greenhouse in a plug tray, then transplanted into a transplant bed for 1 season, which results in a seedling with a larger root system, especially relative to the size of the top of the plant. The plug 1 is often the most survivable and vigorous of the stock types listed, but can also be the most costly.



Plug 1

CONTAINERIZED

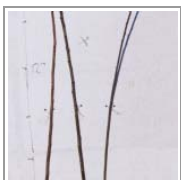


Containerized

The PMC is a bareroot nursery. It brokers, but does not grow containerized plants. Some advantages that containerized plant materials have over bare root is timing and handling. Bare root plants can only be planted when they are dormant. Containerized stock can be planted any time of year that the weather is suitable. In addition cold storage is not required as with bareroot stock, but is more expensive and difficult to ship.

Containerized plants come in a variety of sizes and shapes. Plugs typically refer to a plant that was grown in a plug tray with a cell cavity that is relatively long and narrow. Common plug sizes in the forest and conservation nursery industry range from 4 cubic inches in volume (pretty small for direct out-planting) to 10 cubic inches (more appropriate for out-planting) to super cells that exceed 20 cubic inches. Other commonly used container sizes include 4", 1 gallon, 2 gallon and 5 gallon.

CUTTINGS (UNROOTED)



Cuttings

The Willow species, and Black Cottonwood listed below are traditionally offered as 36" unrooted cuttings. The PMC also grows Red Osier Dogwood cuttings. These species work very well as unrooted cuttings for use as live stakes and other bio-engineering practices. Live stakes are easy to plant, often requiring a tamping bar to create a hole, and are less costly than a rooted seedling.