The End of Another Growing Season

“To everything there is a season, and a time to every purpose under the heaven:”

What was written in Ecclesiastes 3:1 well over 2,000 years ago applies to the bare root nursery of today. Particularly in verse 2, “a time to plant and a time to uproot,”

The time to plant has come and gone at the PMC. The time to uproot will be here soon. In between is the growing season, and what a growing season it has been. The unusually warm, dry summer has helped produce some of the nicest plants ever in unprecedented quantities.

Uprooting, or lifting the seedlings cannot begin until they are in deep dormancy. The most practical way to determine when the plants are fully dormant is by tracking the chilling hours they accrue in the fall. When they have accumulated over 300 hours below 40˚ F they are considered sufficiently dormant for lifting. That usually does not occur until late November or early December.

This marks the beginning of another harvest season, “a time to uproot,”. Twenty-two seasonal workers are hired to help get the plants out of the field and into bags in the cooler. Six work in the field lifting and 16 work in the packing shed processing and packaging. Together they average 35,000 plants a day. By the time harvest is over, usually in late February or early March, over 1.5 million plants will have been processed through the facility.

The first plants to be lifted are ones that have been requested by customers who plant in December. One just needs to provide advance notice to have their plants readied for early planting.

The only thing that will cause delay is frozen weather. Plants cannot be lifted out of frozen ground. There are still many species of plants available at the PMC. Our availability list is posted on our website, www.wacdpmc.org.

Our phone number and email address are listed to the right on this newsletter. The time to plant bare root seedlings is soon approaching. The Plant Materials Center would like to help.

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The Walla Walla Conservation District has been busy getting conservation on the ground with about 3,300 acres in CREP, translating into about 200 miles of planted stream and river-bank. For several years, Mike Denny has spearheaded this effort, now continued by Jeff Klundt as Mike has moved to the Pomeroy office.

The goal of water quality improvement in this primarily agricultural region requires slowing soil erosion, filtering pollutants and reducing water temperature for fish habitat. One strategy to address these issues is the planting of buffer strips.

There are several challenges to getting these buffer strips established. In the drier, western part of Walla Walla county, near the confluence of the Snake and Columbia Rivers, only an average of 8" of precipitation are received per year. In the area of many projects along the Touchet and Walla Walla Rivers, they get 9-10" of precipitation. Going east toward the Blue Mountains, elevation increases and 19-20" of precipitation are average. Also, soils are naturally fairly alkaline, and invasive weeds such as indigo, poison hemlock, and kochia must be managed.

To create successful buffer plantings in these conditions, the following strategies are employed:

Fencing is installed to keep out livestock if necessary. After spraying the area to control weeds, the site is prepared by disk-ing and laying out strips of 15’x300’ black plastic mulch in rows, between which strips of grass are seeded. The grass strips are excellent at preventing phosphate runoff from entering the stream.

Timing of planting is October 15 through March 15 for best survival. Plants growing here at the PMC in Bow are not dormant during the early part of the planting window, but we may be able to supply bare root plants for you in November if you’re willing to sign a waiver regarding the survival risks of bare rooting non-dormant plants.

Trees and shrubs are planted into the black plastic mulch, which helps retain soil moisture and suppresses weed growth. The plastic is not removed, but as trees grow over the years, the holes into which they’re planted are enlarged. Junipers are favorites in the driest locations, adding in more Ponderosa pine as the rainfall increases. Successful shrub and hardwood species include blue elderberry, chokecherry, mock orange, roses, golden curreat, and serviceberry, among others. Willow cuttings, which have been soaked in water for a week to ten days for maximum hydration, are installed closest to the water and on steeply eroded banks. Longer cutting lengths of 4-6’ are used, planting as deeply as possible to get them near the water table especially if the bank is deeply eroded. Five years of maintenance is paid for through the CREP program.

The Walla Walla CD office helps landowners in many other ways according to their individual needs, including irrigation efficiency, piping of open irrigation ditches, and erosion prevention by installation of large woody debris structures into streams. Great job!
Eastern Washington Species of Merit

The Plant Materials Center grows many species useful for planting projects East of the Cascades. In addition to those highlighted below, we also grow red-twig dogwoods, water birch, ceanothus, silver-buffaloberry, wood’s rose, vine maple, Oregon grape and western larch.

**Ponderosa Pine** (*Pinus ponderosa*) - Beautiful pine tree with long green needles in groups of two to three. Mature trees have reddish bark with black crevices. Ponderosa Pine can grow to over 100 feet tall and the trunk can reach 3 feet in diameter. It is tolerant of minimal precipitation in the summer months, although it typically survives seasonal droughts better in medium and coarser textured soils, where moisture is less tightly bound in the soil. It is generally considered intolerant of shade. Ample sunlight is important for good vigor.

**Mock Orange** (*Philadelphus lewisii*) - The showy white, sweetly scented flowers bloom from May through July. Many pollinators utilize the bloom time of this popular plant. It is a drought and fire tolerant shrub that can be found in course, well-drained soils. It is an excellent species for upland soil stabilization. It also provides browse for larger ungulates, which it seems to tolerate remarkably well in the absence of browsing, it can reach 8’ tall with a similar spread.

**Blue Elderberry** (*Sambucus nigra ssp cerulea*) - Elderberries are large deciduous shrubs that can grow to 12-15 feet tall, preferring sunny dry habitats. Beautiful creamy-white flower clusters attract pollinators and the blue berries that follow are adored by birds.

**Golden Currant** (*Ribes aureum*) - These are attractive shrubs with yellow flowers and tasty orange fruits that can be made into jelly. East of the Cascades, they can be found in sunny spots along gravel banks and flood plains of streams and rivers. They can grow to 8-10 feet tall, will slowly spread to form a thicket, and will re-sprout well after disturbance.

**Serviceberry** (*Amelanchier alnifolia*) - Serviceberry is a common shrub across much of North America, with white flowers and juicy bluish-purple fruits. Found in open woodlands and sunny locations, this plant provides a staple food source for birds and other animals. These shrubs can reach 15 feet tall, but are variable according to site conditions. They can re-sprout after disturbance of fire or browse.

**Choke Cherry** (*Prunus virginiana*) - Choke cherry can grow as a large deciduous shrub or small tree reaching 10 to 20 feet tall. It is often found in masses in open woodlands and clearings, especially along watercourses east of the Cascades. The lovely white flowers mature into red to purple fruits that are astringent but sweet when ripe.

**Quaking Aspen** (*Populus tremuloides*) - This is the most widely distributed tree in North America. It is fast to become established on even some of the most disturbed sites especially after fire. It offers shelter and food to a diverse assortment of wildlife species. Its ornamental values speak for themselves. They can grow over 80 feet tall, and tolerate a wide range of environmental conditions. They are best suited to sites that have good exposure to the sun, and soils that are moist but well drained.

**Willows** (*Salix*) - Willows are an important component of riparian systems, providing erosion control with their strong roots, shade for lowering water temperature, and food for browsing and insect-eating animals and birds. Their tolerance of disturbance like fluctuating water levels and heavy pruning is impressive. Stakes can be planted on steep incised banks. For east of the Cascades, we have Coyote, Drummond, MacKenzie, Pacific, Peachleaf, and Yellow willows available as live stakes. Others are available for west of the Cascades.
Cascara is many different things to some. To the herbalist or pharmacologist its bark is an important source of medicine. To the plant taxonomist, identifying the correct Genus it belongs to has been somewhat controversial. To many species of indigenous and migratory birds, it is a very important food source. To most however it goes unnoticed and underappreciated.

It is understandable how this plant can be overlooked in the wild. It often grows with Red Alder which has a similar bark and from a distance the leaves may look similar. Upon closer look though there are distinct differences. The leaves of Cascara are glossy with prominent veins.

Morphologically this plant can be hard to pin down. It can grow as multi-stemmed shrub or as a single trunk smaller tree. It may only grow 10 feet tall or over 30. It can grow in full sun or deep shade. It can be found on course well drained soils or in swamps. Its fall color may be brilliant yellow (more likely in full sun), or the leaves may not turn color at all before falling. In April they produce clusters of small white flowers. These flowers give rise to prominent black berries by late summer, which are an important food for many species of birds, including Cedar Wax Wings.

Cascara has been an important species to humans as well. Its bark has been used as an effective laxative. Before WWII the pharmacy industry used it extensively. Collecting Cascara bark was an important business in the Northwest. In recent years there has been considerable debate as to which Genus Cascara belongs in. Historically it was *Rhamnus* (*Rhamnus purshiana*) . More recently, with the increasing use of DNA analysis, it was determined that it is actually a member of the Genus *Frangula*. Therefore its currently accepted botanical name is *Frangula purshiana*.

Regardless of what name one uses, Cascara is another one of the PNW’s great native plants and the PMC has some great looking plants available.