Planting is for the Birds!

What is the easiest way to attract birds? Just put a feeder out and they will show up? Imagine what would happen if you planted for the birds. Building a "bird pantry" has many benefits and planting the right species will bring in all different kinds of birds for all different reasons. Birds like trees and shrubs to perch on allowing them to rest and catch "birds eye view" of their surroundings, hiding from your cat and other predators and building nests for babies. Like humans, birds prefer a variety of foods. A diversity of trees and shrubs will help satisfy this need. Plants provide seeds, nuts, berries, insects and fruit. Planting native plants attracts birds because specific plant species provide the nutrition that the birds need. Native plants not only increase the aesthetic value they also provide environmental value while providing for the birds.

Doves: Ponderosa Pine, Shore Pine, Black Hawthorn, Red Huckleberry and Bitter Cherry

Finches: Variety of conifers, Big Leaf Maple, Oregon Ash, Bitter Cherry, Black Hawthorn and Thimbleberry

Hummingbirds: Red Flowering Currant, Red & Blue Elderberry, Huckleberries, Salmonberry, Serviceberry and Snowberry

Grosbeaks: Black Hawthorn, Pacific Crabapple, Rose species, Red and Blue Elderberry

Orioles: Bitter Cherry, Black Hawthorn, Red Huckleberry, Salmonberry, Snowberry and Red and Blue Elderberry

Chickadees: Ponderosa Pine, Shore Pine and Big Leaf Maple

Towhee: Pacific Crabapple, Evergreen Huckleberry and Red Flowering Currant

Thrushes: Black Hawthorne, Red and Blue Elderberry, Red Flowering Currant, Rose hips, Salmonberry & Low Oregon Grape

Waxwings: Black Hawthorn, Pacific Crabapple, Indian Plum and Red Flowering Currant

Woodpecker: Conifers, Black Hawthorne, Red Flowering Currant, Pacific Crabapple Red and Blue Elderberry

Start creating your bird sanctuary today!
Contact the PMC for a complete list of plants for birds!
Harvest Order of Operations

Harvest usually starts the first week in December, which is weather dependant. Prior to harvest, we make sure our equipment is working properly, determine which plants will be harvested first (based on orders that will be shipped or pick-up early), and high-light detailed maps for the harvest crew. Packaging materials and supplies are received. We are also busy sowing the fall seed beds.

In December, we hire a seasonal crew of about 25, six outside and nineteen for the packing shed. The outside crew follows behind the tractor and lifter, manually lifting the plant material on to a trailer. They also cut the thousands of live-stake cuttings. The plants are brought inside for processing. The harvest crew can process from 20,000 plants to 40,000 plants a day.

The inside crew is busy sorting the plants for quality and height. These plants are then counted, root pruned, labeled and packaged. Once the bags are filled, wet cedar chips are placed around the plants so that the roots won't dry out during storage. The bags are counted and then placed in the cooler and inventory numbers are recorded. We have two people responsible for managing the cooler and building orders for shipping or for customer pick-up.

Throughout the year and especially during harvest, our sales department is busy filling orders and verifying inventory once the plants are harvested. Once the sale order is entered, the customer will receive a deposit invoice to secure the order. The sales department is also busy updated availability lists, customer lists and keeping our customers informed of any potential inventory changes. The 2008 harvest was a great success and we are looking forward to helping you with your plant needs for 2009!

A Plant to Consider

American Cranberry (*Viburnum trilobum*) can be found growing in riparian to deep wooded sites across North America. They are a deciduous plant with pale white flowers that transform into lush edible red berries. The berries tend to hang on the branches well into the winter, providing food to wildlife when other food sources are diminished. This hardy shrub is frost tolerant and can grow up to 3 feet per year. It prefers moist to well drained soils but can withstand small bouts of drought. Established plants produce more berries in full sun but tolerate shaded areas as well. With its fast growth rate, bright red berries and adaptability, high bush cranberry is an appealing shrub for both landscaping and restoration. It provides bank stability and wildlife food source. It can produce a thick hedge that can be a favorable windbreak or screen for any homeowner.

PMC Soils

Past newsletters have featured articles about facilities, equipment, procedures, staff and other things that go into making the PMC what it is today. The most important part of the PMC has thus far been left out, the soil. The predominant soil type here is a Pilchuck Sandy Loam. It is well drained, which is great during harvest. It does not retain some nutrients particularly well however. The PMC fallows fields to correct this problem. After harvest, chicken manure is applied to the field and worked into the soil. Then barley is sown at a high rate to grow for one season. During that time it is periodically mown to prevent it from producing seed that might cause future weed problems. At the end of the season the barley is worked into the ground to provide organic matter to the soil. The result has been reduced use of commercial fertilizers, increased tilth, and most importantly, more vigorous seedlings.
Pioneer species are the first to establish an area after disturbance such as fire or logging. These species are hardy plants with adapting characteristics such as adaptability, extensive root systems, fast growth rate, seed dispersal methods, soil building properties, wind and full sun tolerance. These species colonize and adapt readily to disturbed and changing environments, preparing the site for the next succession of species. Here are a few Pioneers of the Northwest.

Pacific Northwest Pioneers That Merit Attention

**Red Alder (Alnus rubra)** This tree is often a naturally occurring pioneering species on clear cuts, burns, land slides and other disturbed sites. Once established, it is fast to grow above competing vegetation and provides shade for the surrounding habitat. Red Alder as well as Sitka Alder is a soil building species. It is nitrogen fixing, meaning that it is able to convert nitrogen from the atmosphere into a form available for plants in the soil. It also adds a considerable amount of organic matter to the soil through heavy leaf fall. Red Alder has significant commercial value in the Pacific Northwest. Its wood is valued for furniture, cabinet building, veneer, musical instruments and fuel.

**Big Leaf Maple (Acer macrophyllum)** This large deciduous tree has many uses as a conservation species. It is favored as a riparian restoration tree due to its adaptability, vigor, growth rate, size and stature. It quickly grows above weed competition and provides shade for streams and shade seeking plants. Once established on a site, it provides diverse wildlife habitat such as; forage for deer and elk, nesting for birds, and its seeds are used as food by many species of birds and animals. A mature specimen provides considerable leaf litter for the soil, and is therefore considered a soil building species. It also has commercial value in furniture, cabinet building, veneer, musical instruments and fuel.

**Black Cottonwood (Populus trichocarpa)** Black Cottonwood is not only a commercially valuable tree, it provides ecological value as well. They are an extremely fast growing tree with an aggressive root system. They have a large canopy which provides shade in the summer and replenishes the soil in the fall. They are a large adaptable tree that is easily established on a multitude of sites. They have numerous seeds that are widely distributed with high germination rates. They also readily re-sprout from stumps, roots, branches, and downed logs. Small shoots with green leaves root where they fall or are transported by water some distance before establishing themselves on a stream bank.

**Paper Birch (Betula papyrifera)** Paper Birch is a true pioneer species in every sense of the word and does this on a wide range of sites. Like many other pioneer species, this one is not very shade tolerant making it ideal for disturbed open areas. Although paper birch has shown the ability to grow directly on mine spoils, it thrives best on sites that do not dry out too soon or too much during the summer. Supplemental irrigation does benefit seedlings if they dry out.

**Shore Pine (Pinus contorta contorta)** Shore Pine has proven itself as a pioneer species by being able to adapt to a wide range of sites and tolerance to a variety of disturbances. It has exhibited an ability to compete with reed canary grass and other invaders, particularly when planted on a close spacing. Its high level of drought tolerance also makes it a good restoration species for drier upland sites. It can survive the rigors of re-establishing hot, open sites, allowing more suitable conditions for other species to ready to naturalize and establish. It often grows where Western Red Cedar, Douglas Fir, Willows and Cottonwoods fall prey to field mice, voles, and larger foragers.

**Sitka Alder (Alnus sinuata)** This is an excellent pioneer species with a fast growth rate which quickly provides sheltered conditions for more permanent trees to become established. Sitka Alder grows well in poor soil because it contains bacteria on the roots that fix nitrogen in the soil which is readily available for nearby plant uptake. Alders are deciduous trees harboring a hardy leaf canopy that enriches the soil every autumn helping build up the humus content. They also have an excellent root system which helps control soil erosion.
The last newsletter featured an article on seed propagation at the PMC. This time we will look at one specific and important part of seed propagation; seed collection. Most of the seed used here comes from the wild, from natively growing parent plants. The main reason for doing it that way is to take advantage of the genetic makeup of a population that thrives within its region and environment. That way the seedlings produced from that seed lot can be returned to its ecoregion and have a better chance to thrive where it is planted.

The PMC identifies what species it plans to grow from what areas. It uses contract collectors, as well as in-house collections, to meet those needs. Parent plants are located and positively identified. As seed maturity dates draw close, the plants are monitored to determine the optimal collection time. Collectors then go out to gather the seed. Actually berries, hips, capsules, achenes, acorns or cones are collected and returned for processing to extract and clean the seed. Berries and rose hips are macerated in blenders to break up the fruit and release the seeds they hold. The pulp floats up on a bucket of water and the seeds sink where they can be collected. Capsules are dried and crushed to release the seed and either screens or an air-column separator are used to separate the seed from the chaff. Cones are tumbled to release the seed from the cone. After seed extraction, seeds are dried and stored until needed. Most winged seeds are de-winged to better enable them to go through the seed drill.

These methods result in the over 650 lbs of seed used every year, which makes up the 200 + individual seed lots used. The seeds vary from Quaking Aspen which is over 2,000,000 seeds per pound to Oregon White Oak which is only 80 seeds/lb.

This article only briefly covers seed collection. Anyone wanting to learn more should contact us.