Fall at the PMC

It is no surprise that the PMC is a seasonal business. There may be some however that do not realize how busy each season can be here. Fall is certainly no exception.

By the time autumn arrives, most of the growing activities have wound down. The fertilizer spreader and root pruner (under-cutter) have been winterized and stored. Weed control activities have thankfully been accomplished. And hopefully there will not be any need for irrigation, unless... (see below).

One activity that occupies a significant amount of time is seed collection and processing. These tasks start in the summer, but the seed maturation dates for many species that the PMC propagates occur in the fall. A few examples include some of the Roses, Snowberry, Spirea, and Red Alder. The PMC grows these species and others in significant quantities and it takes a surprising amount of time to collect and process a sufficient volume of seeds to make that happen. Fortunately, contract seed collectors do most of that.

A lot of the deciduous tree and shrub seed that the PMC collects or purchases is sown in the fall. Fall sowing mimics mother nature. Seed is deposited on the ground, the cold and moist winter breaks down the seed dormancy, and they germinate in Spring. Fall seed sowing involves preparing seedbed, sowing the seed with our new seed drill, and top dressing the bed with an insulating blanket of sawdust. There will be over 10 miles of fall seed bed before Thanksgiving.

As mentioned earlier, irrigation is usually finished by fall, with one exception. Once every few years the region experiences a damaging early freeze. These freeze events are damaging because they occur before some species are fully dormant. As a result, the cold hardiness of these plants is less. If the temperature is predicted to drop into the mid 20’s in October or November, PMC staff usually initiate frost control measures. That is where the irrigation system comes into play. It is used to transfer the latent heat from the water to the plant to protect it from damaging temperatures. When the temperature drops below freezing on these nights the system is turned on and runs until the temperature rises into the mid 30’s (hopefully the next day). This process continues every night until temperatures moderate. This is the most counter-intuitive thing a grower can do, but thankfully it works.

The preparations and the start of harvest wrap up fall. Packaging is received, the processing line is readied, the cooler is turned on, tractors are hooked up to trailers and the lifter and a crew is hired. Before you know it, harvest is in full swing, winter is here and everyone is left wondering where fall went. As with every season, it is lost in the sweep of time. Of course that means that winter will also be lost in the race and spring planting season will be upon us. So get ready for your planting projects and let us know how we can help.

Who We Are

~ Staff ~

Jim Brown
Manager and Technical

Lori McLaughlin
Administrative Manager & Bookkeeper

Jacquie Gauthier
Sales Manager

Bill Mulder
Farm Operations Supervisor

Efrain Tapia
Equipment Operator

Administrative Board

Kelly Niemi
Chairperson

Lynn Brown
Financial

Duane Weston
Employee Policies

Jerry Hendrickson
Farm Operations

Bob Clark
Marketing

Contact Information:

WACD Plant Material Center
16564 Bradley Road
Bow, WA 98232
Phone: (360) 757-1094
Fax: (360) 757-3923
E-mail: pmcsales@clearwire.net
Or visit our website at www.wacd.org
Conservation on the Ground in Skagit County

Gazing out over a sea of blue tubes landowner Travis Martinez quietly asks, “…so you think it turned out alright?” Having owned the land since 1993, Travis has dealt with the high water and drainage issues every year while running cattle. The flood waters prove to be problematic for Martinez and adjacent landowners. He decided that the land would be best utilized as habitat, and the Conservation Reserve Enhancement Program (CREP) was the answer.

The CREP project is located just east of Sedro-Woolley on the south side of HWY 20 nicely sandwiched between Red Creek and Hansen Creek. Both Creeks annually outgrow their banks filling the adjacent fields with excess water and silt. Hansen creek is a tributary to the Skagit River and is vital salmon habitat. The Martinez project will not only enhance the salmon habitat with shade and clean cool water, but will help to minimize flooding in the area. With the long hours contributed by Travis and his crews as well as help from organizations such as Skagit Conservation District, Skagit River Systems Cooperative and the WACD Plant Materials Center, the project planning, implementation and maintenance has been a great success.

Planting season in the northwest overlaps with flooding season and project planners have many solutions for this depending on the site. Knowing the high flood waters would be an issue; planting mounds were developed with the use of an excavator. The mounds help keep the plants out of the high water for as long as possible until the plants can become properly rooted and established to withstand the seasonal flooding. This method was only used in the most critical areas as it can be costly. In combination with the mound building, the addition of the correct plants for seasonally flooded areas is extremely important. Species such as Sitka Spruce, Western Red Cedar, Spirea, Black Twinberry, Ninebark, Red Osier Dogwood and a variety of Willows do very well in wet soils. A mix of 14,000 bareroot conifers, shrubs and hardwoods were planted on the 25 acre site in spring, 2011. The plant material is far beyond peaking out the tops of the 36” protective blue tubes and thriving with only an estimated 5% mortality. “Look at that plant, and that one, and all of those ones!” exclaimed Martinez as he pointed out the tremendous amount of new growth on the plants in one year.

In order to keep the thousands of seedlings alive, proper maintenance of the planting is critical. The trees and shrubs were planted in a linear fashion allowing the next three years of maintenance that is required by CREP standards, to be facilitated with as much ease as possible. Blue tubes for browse protection have been placed on each plant to discourage wildlife forage until the plants can become established. The blue tubes also help protect the plant from herbicide and weed-eaters that are necessary to control the invasive reed canary grass. Fringing invasive Himalayan blackberry is also a threat to the plants and is being suppressed with the combination of herbicides and mowing.

The result of all the hard work just after one season is breathtaking. With two blue herons swooping in and out, dragonflies darting in all directions, frogs burping in the stream and multiple hawks in an almost choreographed display overhead, the restoration efforts are already beginning to function as suitable habitat, while directing the flood waters downstream. This is just the beginning for this wonderful project as maintenance efforts and logistical concerns will continue to be ironed out. The lasting product of the hard work will be enjoyed by all generations to come.
Plants and People

Ethnobotany is the scientific study between people and their relationships with plants. Historically the store down the road was none other than the living things out in nature. The basic needs in a person’s life come from the land and a majority of them are derived from plant material. The uses of plant material include; food, shelter, tools, clothing, currency, medicine, spirituality and many more. It is very important to be versed in positive plant identification and the methodologies to use ethnobotanical practices. Each plant can have multiple different uses. Below is a list of some of the favorites.

Buffalo Berry (*Shepherdia canadensis*)
Often thought of as a specie only found east of the Cascade mountains, there are also pockets of them in the Puget Sound area. The bright juicy red berries can be bitter but when mixed with sweeter items such as hemlock cambium, camas bulbs and salal berries they make a delicious “Indian ice-cream”.

Mock Orange (*Philadelphus lewisii*)
Leaves and flowers lather for natural soap. Various salves and compresses were used externally to relieve swellings as an anti-rheumatic for sores, hemorrhoids and eczema. A decoction was taken internally for lung problems and as a cathartic. The strong hard branches were made into bows and arrows, digging sticks, fish spears, clubs, brooms, combs, tobacco pipes, cradle hoops and snowshoes.

Oregon Grape (*Mahonia aquifolium* and *nervosa*)
New growth of foliage are pleasantly edible and full of vitamin C. Acidic fruits can be eaten raw or cooked. The berries can have a potent flavor, but mix well with sweeter berries such as pacific blackberry, salal, salmonberry and thimbleberry for jams, jellies or meat glazes. Stuff them in wild game or add them in tea as a tasty flavoring. The yellow flowers can be eaten, but in small doses. The bright yellow bark was used to dye baskets. The woody material has medicinal properties for eye and liver issues.

Thimbleberry (*Rubus parviflorus*)
Bright red thimble look-a-like berries are deliciously edible. The new shoots are edible once peeled and resemble a spagetti like noodle, but are virtually tasteless, crisp and full of water. The soft large leaves are viewed by some as one of the most important trail side resources that can be utilized as “natures toilet paper”.

Western Hemlock (*Tsuga heterophylla*)
The high tannin content in the bark was historically used by Native Americans for a red-brown dye on baskets and wools. The bark can also be finely chopped and boiled into a liquid that was used on baskets to make them water-tight. When the bark was mashed with salmon eggs it turns a yellow-orange colored paint used for dipping nets and paddles making them invisible to fish. The Pitch was mixed into different liniments for topical application some helping with common colds or to prevent sunburn.

Western Red Cedar (*Thuja Plicata*)
Often referred to as the tree used from “cradle to coffin” because it’s many uses throughout a persons life. New growth is edible with a citrusy taste full of vitamin C. A strip of bark was traditionally taken from trees making sure not to kill the tree, to use for baskets, shelter, fire starter and more. The wood was used for many building projects such as houses, canoes, tools as well as a heat source.

Woods Rose (*Rosa woodsii*)
Rose Hips source of vitamin A and C and can be made into a powder as flavor for soups or made into syrup. The fragrant pinkish petals can be eaten raw, added to salads for color, candied, made into syrup or dried for perfume. Inner bark of the stem was smoked like tobacco by Native Americans.

There is a wealth of knowledge on ethno-botanical practices such as web pages, books and classes. For a complete list of resources contact the PMC.

Caution: Refrain from consuming any unknown plants or plant products without the guidance of a professional.
Red Flowering Currant (Ribes sanguineum) is an attractive deciduous plant that can grow to 8ft tall and 6 ft wide. This hardy plant grows best on well drained soils with good exposure. It is an excellent conservation species for drier, upland sites. It has been a prized ornamental species ever since the botanist-explorer David Douglas shipped specimens back to England. It is one of the first shrubs to bloom around here in the early spring. Its bright rose red clusters of flowers draw the attention of man and bird alike.

The flowers produce clusters of dark purple berries by mid to late summer. While the berries are edible and nutritious, they are not considered very flavorful. They were consumed by some regional tribes, but were not highly regarded.

This year’s crop of Red Flowering Currant at the PMC is the best ever. The plants are robust and there are lots of them.

Red Flowering Currant is particularly important to the Rufous Hummingbird. Its bloom period coincides with the birds migration up from Mexico in early spring. Its flowers provide nectar which is an important food source for this hummingbird as well as Anna’s Hummingbird, a year-round resident.