

Northwest Native Plant Journal

A Bi-Monthly Web Magazine

(formerly NW Native Plant Newsletter)

Departments



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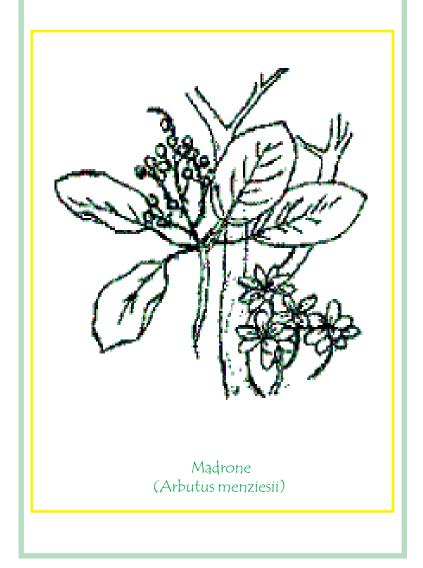
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About this Web Magazine

This Journal was created under the direction of Wally Hansen – a dedicated Grower, Aficionado and Passionate Lover of Northwest Native Plants.

This Journal is not 'commercial.' Our goals are:

- A To generate interest, even passion, concerning the magnificent Native Plants of the Pacific Northwest.
- B To help you create your own Native Plant Gardens, large or small, for home or work.
- C To help you propagate and "grow on" those species that interest you the most.
- D To inform both Home Gardeners and interested Professionals of many disciplines concerning trends and news items from my little corner of the world.
- E To help the reader enjoy native plants more by understanding the historical and cultural role of native plants (i.e.—use by Native Americans, Pioneers, Early Botanists, etc.).





On the Cover

Pacific Madrone (Arbutus menziesii)

All year long, this Northwest Native tree intrigues us with it's glossy dark green leaves, it's ever-changing bark that goes from almost pistachio green to cinnamon to deep brown.

Sometimes the bark is smooth and later in the year it darkens and begins to peel, revealing that fresh paler green color beneath.

The flowers are in clusters of creamy white (the blooms in our photo are nearly gone but a few remain). After the flowers come small red berries, providing yet another look for the tree.

Almost impossible to dig from the wild, the Madrone is also difficult to move when established. But good success has been experienced when a young tree is grown in the nursery in a pot and then planted out where it is to remain for it's lifetime--a long lifetime of never-ending and always changing beauty.





Painting by Heidi D. Hansen



Rare plant puzzle



Photo © Donald C. Eastman

Name this plant!

A clue to help your on your quest for the correct answer:

"It's cold outside - I stay close to the ground to keep warm - I even wait until mid -summer to produce my catkins! People say that I am beautiful!!!!

Send me an email with the correct botanical name of this plant . A small prize to those who correctly identify by March 15, 2006

Good luck!
Wally

Answer to last Journal's puzzle:

Parnassia fimbriata (Mount Hood grass-of-parnassus)

Congratulations to all who correctly answered!



To Do List

Caring for your NW Native Plant Garden

- **1** Time to plant bare root trees and shrubs. Add new plants in your landscape and garden now with this very affordable option.
- **2** Prune trees and shrubs. Shrubs can be pruned hard to stimulate new growth and restore shape. If your shrubs have nice blooms, wait until they flower and you can use the trimmings for indoor displays. Be careful with trees do not prune the leader by accident.
- **3** Clean up gardens, both large and small, early in the Spring. Compost what you can. If some plants had disease in the stems or leaves, put the trash in the garbage or if possible, burn it. Especially in new or crowded native plant gardens, control disease by cleanliness.



4 — If you have <u>Incense Cedar (Calocedrus [Libocedrus]decurrens</u>), spray once in March and again in April to prevent a disease that often shows up in a wet April. It seldom kills the Incense Cedar but it looks bad and weakens trees. The disease is called Broom Rust. It forms sticky orange blobs, almost over

night, Use Bayleton as a preventive spray.

- **5** Bordeaux and Lime-Sulfur. If you have <u>Native Crabapple (Pyrus [Malus] fusca)</u>, <u>Chokecherry (Prunus virginiana)</u> or <u>Bitter Cherry (Prunus emarginata)</u>, I suggest you make one or two applications of one of two old fashioned fungicides Bordeaux or Lime-Sulfur. Bordeaux is a mixture of copper sulfate and hydrated lime. It is rain-fast when sprayed on plants. Both are broad-spectrum fungicides and give protection against bacteria. Lime sulfur gives dormant season protection against insects and mites. You must apply before bud break.
- 6 Start mulching now to conserve water around plants for summer need. Mulching helps you grow better plants and keeps weeds at bay.

Sparky's Corner

A special message from our frisky contributor



We've been getting emails about my ancestry lately. (That means where I came from--who my parents are and my grandparents and their parents, etc.)

I always thought I was a Western Gray Squirrel but some of the people writing suggested I might be an Eastern Gray Squirrel or an Eastern Fox Squirrel.

So I asked my mom and you'll never guess what she said. She doesn't know for sure! But she said we are probably Eastern Fox Squirrels instead of the Western Gray Squirrel. Do you know what that means? I'm an alien!!!! I mean, my whole family came from some squirrels that were brought here to the Northwest a long time ago! Momma doesn't remember exactly when we got to Oregon but she said her grandma told her about our family living in the eastern part of this continent back in the old days.

I am very surprised and I wonder just how we happened to come here. Especially I wonder what this means. I mean, if I'm not a true Oregon native then what am I doing here and what about all the real native squirrels of the west? All the gardeners talk about plants that are aliens and how

they are crowding out the native plants. Does that mean alien squirrels are crowding out the native squirrels? I mean, what's the scoop here? I sure don't want to be crowding anybody out of anywhere. I like for everybody to get along and share the food and places to live and raise a family. All my friends feel that same way and I have lots of friends here at the nursery. And there's another thing--are my friends aliens too? Oh dear! I have to get to the bottom of this. Oh dear! What a worry! Gotta go and talk to Mama again. Maybe gramps knows something about this. Oh dear!

Dare to Bare!

What you need to know about bare root plants

Now through spring you can find bare root plants, both evergreen and deciduous. Plants can be purchased retail or wholesale at the nursery or by mail-order. Some nurseries send lists of bare root plants, some have this information on the internet and some offer both mailings and online catalogs.

The very idea of going out into the garden on a soggy early spring day to set out bare root plants seems to some an exercise in silliness, but to others it's well worth the effort.

What are the advantages?

The advantages of buying bare root trees, shrubs and perennials can be substantial and provide rewards to more than pay for the discomfort of late winter or early spring planting.

- ➤ Bare root plants will generally cost 40 to 70% less than the same plants purchased in containers a few months later.
- ➤ Bare root plants are much easier to handle than container grown plants. You don't have to contend with heavy soil and pots.
- > Some rarer varieties are only available bare root.



Oregon Myrtle (Umbellularia californica) Photo by JoAnn Onstott



Alaska Cedar (Chamaecyparis nootkatensis)
Photo by JoAnn Onstott

- ➤ Unlike container grown plants, bare root are rarely rootbound though it is possible if they are kept in plastic shipping bags for a long time.
- ➤ In addition to price, selection, and availability, some gardeners contend that bare root plants tend to establish more quickly than container plants. This is partly due to the plant's roots growing in just one kind of soil. The soil in containers is rarely the same as average garden soil. Two different soil types makes it difficult for water to uniformly penetrate the root zone. In fact, some rose gardeners say bare root planting produces better roses and actually remove all soil from container grown stock before planting out.

Where can I buy bare root plants?

You really have three main choices for buying bare root plants: 1) direct purchase at a nursery; 2) mail order and 3) retail garden stores.

Direct purchase: When buying directly at the nursery, look for strong stems, preferably those that have not already leafed out. If possible look at the roots. You want healthy root systems that are not slimy, covered with mold over 50% or more of the plant or a plant that is dry and withered. Sometimes the roots are packed in wood shavings or sphagnum and wrapped in opaque plastic and don't allow you to see the roots. In these cases, pass up the packages that are already opened or are waterlogged (they'll be squishy) or very dry (light and brittle).



Native roses travel well and are generally easy to grow. A good starter plant for gardeners new to bare root plants
Little Wild Rose (Rosa bymnocarpa)
Photo by JoAnn Onstott

Mail order: Know your nursery. Well-established, reputable nurseries offer bare root plants once a year at very good prices, even up to 70% off container plants. However, discount nurseries offer bare root plants sometimes year-round at prices that are amazingly low. If you find plants being offered for unbelievably low prices (\$1 or less for a tree is a good example), you may be disappointed in the quality of the plants. If the price seems too good to be true, it may not be such a good deal.

Bare root plants are sometimes dug from the field, held in cold storage, and shipped long distances under varying conditions. Check mail order plants as soon as they arrive for damages or inferior plant quality. Some large nurseries dig their bare root plants by machine and small branches or roots can be damaged this way. A bare root plant that is moldy, slimy or dry and brittle is not a good plant. A little mold will not affect the plant but if the roots or crown have mold over 50% or more of the plant, growth is not likely.

Contact the nursery at once if you find any problems. A good nursery is conscientious and will rectify anything that is not up to par. It is a wise gardener who knows the nursery's customer service policies before ordering.

Order early!

A nursery that has an annual bare root sale will begin that sale with a set quantity of plants. When they are sold out, you won't find them again until next year. If you've got your heart set on a particular shrub or tree, place your order as soon as possible. A good nursery harvests bare root plants at their peak and will ship your choices when they are dug. You may order in December but your plant may not be harvested until early spring. This is the high standard a good nursery will observe.

How do I know the plant is alive and healthy?

If you're not familiar with bare root plants it is not always easy to judge their health. They may not look like they are alive but here are some clues.

- --There should not be mold or mildew (or at least less than 50% of the plant) on the plants or on their packaging.
- --Rotten or 'funny' odors are not good. Earthy odors are ok.
- --The plant should be mostly unbroken—a few small twigs or roots may be broken on trees or shrubs.
- --The plant should feel heavy. If it feels light and looks dried out, it is probably no good.
- --Once planted you should get leaves the same year. If the plant does not show any growth the first year it is probably dead.



Shrubby Cinquefoil (Potentilla fruticosa)
A reliable performer offering scads of bright yellow blooms for a long season, followed by berries much loved by birds.

Photo by JoAnn Onstott



Wally holding some freshly harvested Big Leaf Maple (Acer macrophyllum) seedlings Photo by Jennifer Rehm

OK, my plants are here--now what?

Handling: When you get your plants, it is best to put them in the ground as soon as possible. If you can't plant immediately, follow either of these two holding methods depending on how soon you can plant.

Holding for 1 or 2 days: Moisture loss is the greatest threat to bare root plants. The average home temperature and humidity can cause bare root plants to lose 2-3% of moisture every hour. Exposure in a home environment overnight can easily kill a bare root plant. If you can't plant for a day or two, you can keep the plants in the bags they were shipped in. Usually these bags are specially prepared for bare root plant shipment and allow enough air exchange as long as the plants are in a cool (but not freezing) area such as an unheated garage. Don't open the bags and don't give them any water.

Holding for up to 3 months: If you cannot plant promptly, you can heel the plants in. This is a kind of temporary planting that will keep the roots moist and protect them during the delay in planting. Dig a trench in the soil or in a pile of mulch, compost or leaves. Set the tree or shrub so that it's roots lay fully in this trench. Cover the roots with soil or compost and wet thoroughly. You can keep plants heeled in for 3 months or even longer if you keep the roots moist.

How to plant: Besides your new plants, you'll need a spading fork or shovel, clippers, a bucket of water and a pair of gloves.

Consider carefully where your new plant will be located. It is usually best to follow any suggested spacing. Bear in mind how big the plant will be when mature. Buildings, power lines, septic tanks or sewer lines can be damaged by large trees and so can concrete or other pavement. Ever noticed a sidewalk buckling around a big old tree? Those roots are strong!

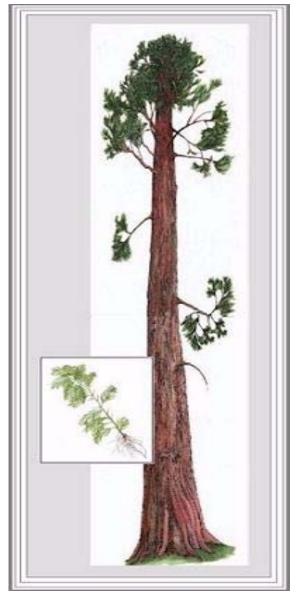
For each plant you've purchased, dig a hole 2-3 times wider than the plant's roots and slightly deeper than the roots. Check the condition of the soil. It should be moist but not soggy. If it's too wet, wait a few days before planting. If you have a drainage problem or there's simply too much rain for the soil to dry out enough, you may have to resort to raised areas above the grade or amply sized containers.

With your spading fork, scratch the sides of the planting hole to allow the roots better purchase. They'll find their way into the dirt much easier if there are little nooks and crannies for them to crawl into.

How can you tell if the ground is too wet? Scoop up a handful of soil and squeeze it. If it forms a hard ball that you can actually squeeze water out of, it's too wet.

Another method is to make a ball of soil 2 inches across and toss it in the air. If it hangs together until impact it's probably too wet to work with.

This little bare root seedling can live hundreds of years and could be the tallest tree in the world—an honor held by one of it's ancestors! Giant Sequoia (Sequoiadendron giganteum) Painting by Heidi D. Hansen



Carefully take the plants out of any packing material. Do not put wood shavings or moss in the planting hole. Instead, save that to add to your compost pile. Soak the roots in a bucket of water or wash them off with the hose. Shade the plants so the roots will not heat up. Don't leave an unprotected plant lying on the ground while preparing the planting hole. Exposure for even a short time to sun and wind can severely damage the plants.



The Ginko is native to China and is the oldest known tree in the world. Some specimens are over 1,000 years old.

A bare root Ginko can grow to about 60 feet with a light and airy crown covered with lovely fan-shaped leaves.

Drawing by Marci Degman

Cleanly cut off any broken roots. Untwine any that are tangled, cutting them if necessary. You want the roots to be separated as much as possible. A root that circles around the root stock should be cut off or it may strangle the plant. Do NOT cut healthy roots shorter, even if it would make planting easier.

Heap a small pile of dirt in the bottom of the planting hole just enough to set the roots on. Fan the roots out around the dirt pile. The dirt line on the main stem of your plant will show the depth the plant was growing in the nursery. Keep the plant at this same depth. If planted too shallow, the plant will not have the stability it needs. If planted too deeply the plant may suffocate or not grow true to it's standard—it may be far bigger or smaller than usual. A good way to guage the level of the plant is to lay your shovel handle across the hole and see where it comes to on the plant.

Back fill with the dirt you removed when digging the hole. Do not use chemical fertilizers or fresh manure in the planting hole because the roots can be damaged by these. Hold the plant upright as you firm the dirt around it making sure to get the roots completely surrounded. No air pockets! Sprinkling a little water on the dirt as you fill the hole will help prevent leaving any cavities of air.

Dig a moat around the plant so you can water without disturbing the roots. You want the plant to be on an island in the middle of the moat. Once the plant is nicely settled into it's new home, water thoroughly.

Bare root trees may need to be staked for one year. Double-or even triple-staking is best. With a stake on either side of the tree the trunk won't rub against a stake and it will have much more stability. Slip a length of old garden hose or similar protection over the wire where it goes around the trunk so the bark won't be damaged. When you

put the stakes in, make sure the stakes are in the undisturbed area around the plant (not in the planting hole or the tree may fall over).

Mulch the plant with quality bark, straw, or compost but don't let the mulch touch the trunk of your plant.

Last step, label your plant with it's botanical name as well as it's common name. Note when you planted it and any other information that may come in handy later on. A gardener's journal is an excellent place to keep this information.

Wait at least four weeks before you fertilize the plant! Young roots are easily damaged by too much fertilizer.

Water the new plants about once a week for the first year until they get established – never let them dry out.

What kind of plants can I buy "bare root"?

Northwest native trees and shrubs, both evergreen and deciduous, are sold in bare root form. They are typically young plants which are easier to establish than older plants. For example, the Pacific Madrone is highly resentful of being disturbed and chances are they will not survive if planted later in their lives. The same holds true of Dogwoods. They just don't want to move around once they have found a home. Other trees and bushes are not so particular, but most will be happier if they are planted in the ground when they are young. Smaller plants are more resilient and less prone to damage that may occur in shipping.

The wide variety of trees and shrubs available bare root grows each year. On the next few pages, we list just some of the large assortment of native plants you may find right now.



Northwest Native Evergreen Trees

Abies amabilis, (PACIFIC SILVER FIR)

Abies grandis, (GRAND FIR)

Abies procera, (NOBLE FIR)

Calocedrus decurrens, (INCENSE CEDAR)

Cercocarpus ledifolius, (CURL LEAF MAHOGANY)

Chamaecyparis lawsoniana, (PORT ORFORD CEDAR)

Chamaecyparis nootkatensis, (ALASKA YELLOW CEDAR)

Cupressus bakeri, (BAKER'S CYPRESS)

Juniperus communis, (COMMON JUNIPER)

Juniperus scopulorum, (ROCKY MOUNTAIN JUNIPER)

Picea breweriana, (BREWER'S SPRUCE)

Picea engelmannii, (ENGELMANN SPRUCE)

Picea sitchensis, (SITKA SPRUCE)

Pinus aristata, (BRISTLE CONE PINE)

Pinus contorta v. contorta, (SHORE PINE)

Pinus contorta v. latifolia, (LODGEPOLE PINE)

Pinus monticola, (WESTERN WHITE PINE)

Pinus ponderosa, (PONDEROSA PINE)

Pseudotsuga menziesii, (DOUGLAS FIR)

Quercus vaccinifolia, (HUCKLEBERRY OAK)

Sequoia giganteum, (GIANT SEQUOIA)

Thuja plicata, (WESTERN RED CEDAR)

Tsuga heterophylla, (WESTERN HEMLOCK)

Tsuga mertensiana, (MOUNTAIN HEMLOCK)

Umbellularia californica, (OREGON MYRTLE)

Western Red Cedar (Thuja plicata) Photo by JoAnn Onstott



Northwest Native Deciduous Trees

Acer circinatum, (VINE MAPLE)

Acer glabrum, (DOUGLAS MAPLE)

Acer grandidentatum, (BIGTOOTH MAPLE)

Acer macrophyllum, (BIG-LEAF MAPLE)

Alnus rhombilfolia, (WHITE ALDER)

Alnus rubra, (RED ALDER)

Alnus sinuata, Sitka Alder

Betula glandulosa, (SCRUB BIRCH)

Betula neoalaskana, (YUKON WHITE BIRCH)

Betula occidentalis, (RED BIRCH)

Betula papyrifera, (PAPER BIRCH)

Corylus cornuta, (WESTERN HAZELNUT)

Crataegus columbiana, (COLUMBIA HAWTHORN)

Crataegus douglasii, (DOUGLAS HAWTHORN)

Fraxinus latifolia, (OREGON ASH)

Ginkgo biloba, (MAIDENHAIR TREE)

Larix Iyallii, (ALPINE LARCH)

Larix occidentalis, (WESTERN LARCH)

Metasequoia glyptostroboides, (DAWN REDWOOD)

Populus tremuloides, (QUAKING ASPEN)

Populus trichocarpa, (BLACK COTTONWOOD)

Prunus americana, (NATIVE AMERICAN PLUM)

Prunus emarginata, (BITTERCHERRY)

Prunus virginiana, (CHOKECHERRY)

Pyrus [Malus] fusca, (WESTERN CRABAPPLE)

Rhamnus purshiana, (CASCARA)



Serviceberry (Amelanchier alnifolia)
White flowers make way for delicious fruit so good it
is raised as a commercial crop in Canada.
Photo by Wally

Northwest Native Shrubs

Amelanchier alnifolia, (SERVICEBERRY)
Aruncus [dioicus] sylvester, (GOATSBEARD)
Ceanothus cuneatus, (BUCKBRUSH)
Ceanothus integerrimus, (DEERBRUSH)
Ceanothus prostratus, (MAHALA MAT)
Ceanothus sanguineus,

(RED STEM CEANOTHUS)
Ceanothus velutinus, (SNOWBRUSH)
Clematis ligusticifolia, (WESTERN CLEMATIS)
Cornus sericea v. stolinifera,

(RED-OSIER DOGWOOD)
Lonicera hispidula, (PINK HONEYSUCKLE)
Lonicera involucrata, (TWINBERRY)
Mahonia aquifolium, (TALL OREGON GRAPE)
Mahonia nervosa, (CASCADE OREGON GRAPE)
Mahonia repens, (CREEPING OREGON GRAPE)
Myrica gale, (SWEET GALE)
Oemleria cerasiformis, (INDIAN PLUM)
Pachistima myrsinites, (OREGON BOXWOOD)

Physocarpus capitatus, (PACIFIC NINEBARK) Potentilla fruticosa, (SHRUBBY CINQUEFOIL)

Philadelphus lewisia, (MOCK ORANGE)

Twinberry (Lonicera involucrata)
A deciduous shrub with sweet yellow
flowers followed by these glossy dark
berries.

Photo by JoAnn Onstott Painting by Heidi D. Hansen

Rhus glabra, (SMOOTH SUMAC)

Rhus trilobata, (THREE-LEAF SUMAC)

Ribes aureum, (GOLDEN CURRANT)

Ribes cereum, (SQUAW CURRANT)

Ribes divaricatum, (BLACK GOOSEBERRY)

Ribes sanguineum, (RED FLOWERING CURRANT)

Rosa gymnocarpa, (LITTLE WILD ROSE)

Rosa nutkana, (NOOTKA ROSE)

(CLUSTERED ROSE), Superb native rose. Has several clustered pink flowers instead of solitary

flowers.

Rosa woodsii, (WOOD'S ROSE)

Rubus leucodermis, (WHITEBARK RASPBERRY)

Rubus parviflora, (THIMBLEBERRY)

Rubus spectabilia, (SALMONBERRY)

Rubus ursinus, (PACIFIC BLACKBERRY)

Sambucus cerulea, (BLUE ELDERBERRY)

Sambucus racemosa, (RED ELDERBERRY)

Sorbus scopulina, (GREENE MOUNTAIN ASH)

Spiraea betulifolia, (SHINY LEAF SPIREA)

Spiraea douglasii, (DOUGLAS SPIREA)

Symphoricarpos albus, (SNOWBERRY)

Symphoricarpos occidentalis, (WESTERN SNOWBERRY)

<u>Too many choices?</u> With all these choices in bare root plants, it is a bit like those ice cream shops with all the flavors. Even the most particular gardener can find plants to try in this exciting form.

Red Flowering Currant
(Ribes sanguineum)
A real star in the landscape, lovely to look
at and excellent as a cut flower.
Photo by JoAnn Onstott

Have an adventure this year--dare to bare!



Bircleaf Spirea (Spirea betulifolia)
Wonderful Northwest native shrub for all
gardens, from Victorian to modern.
Photo by JoAnn Onstott

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Mercury-News, Bay area from Gilroy and Santa Cruz to San Francisco, Bare-root plants are unpredictable but a bargain By Marilyn Waterman

Planting Bare Root Plants by Glenn Davis, El Dorado County Master Gardener

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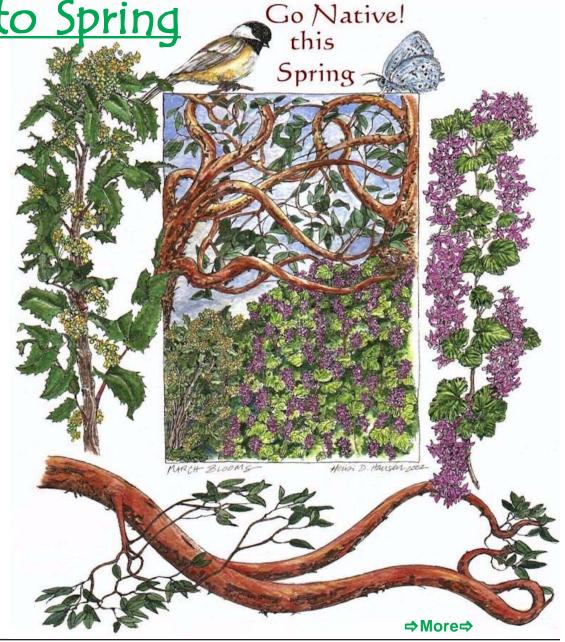
Treehugger.com, Dare to Garden Bare, by: John Laumer, March 10, 2005. Note: Thanks to this writer for inspiring the title of this article!

Artistic Transition to Spring

Paintings by Heidi D. Hansen

As we begin to see signs of spring throughout the land, we thought to share with you some of our favorite paintings of botanical artist Heidi Hansen. Wally's daughter has inherited his lifelong love of native plants as is evident in these exquisite watercolor paintings she has done over the past few years.

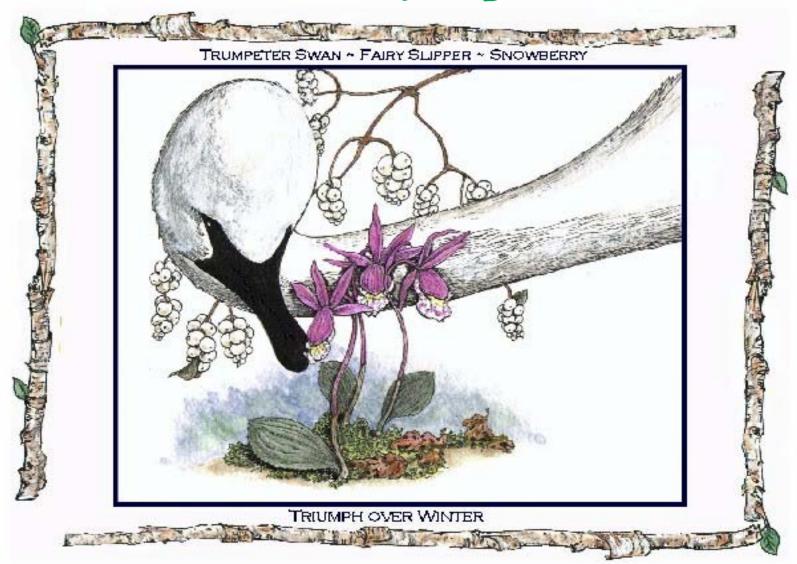
Here are just a few of Heidi's artistic visions from woods and meadows, valleys and hills, Northwest Native plants every one.

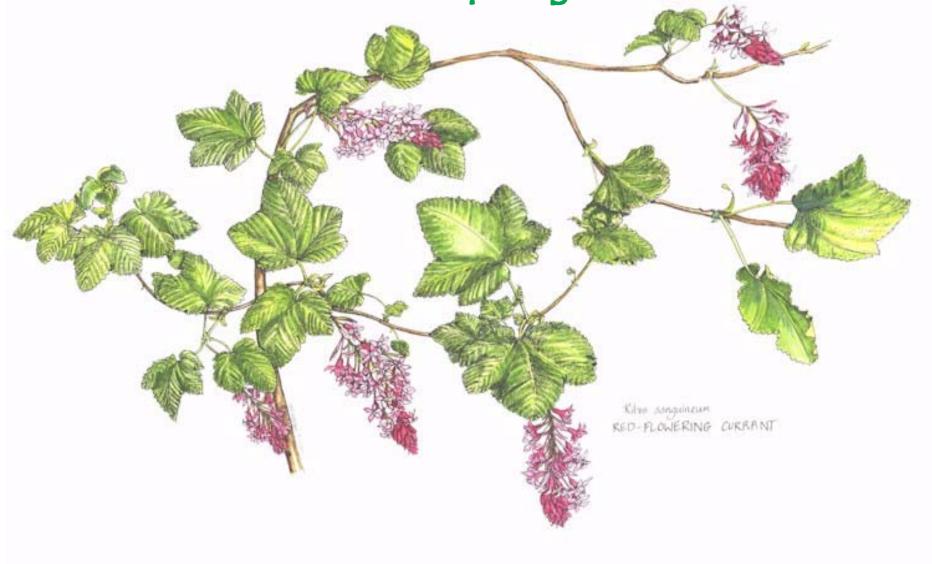


Artistic Transition to Spring, continued

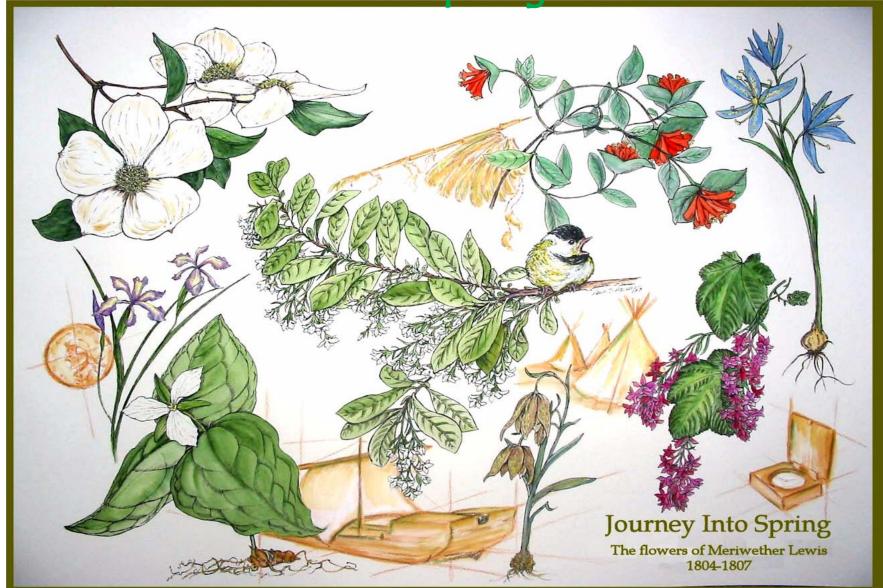
Indian Plum with White Oak: January Winter into Spring He who bends to himself a joy Does the winged life destroy: But he who kisses the joy as it flies Lives in eternity's sunrise.

"Eternity" – William Blake











The Value of Native Trees

Money does grow on trees!

We've all heard the old saying, "Money doesn't grow on trees." Taken literally, this is true. However from a landscaping point of view, it's absolutely false! Many studies have been done to gauge the impact on the value of a home when a mature native tree is in the landscape. Every single one of these studies is in agreement: the presence of native trees, especially large ones, increases the home's value.



Pacific Dogwood (Cornus nuttallii)
Photo by Jennifer Rehm

"A mature native tree enhances the aesthetic, resale and rental value of property."

I've often noticed a home being sold and the very next step the new owners take is to remove or drastically reduce any existing plants. So many beautiful mature native trees and shrubs have been sacrificed in the interest of "cleaning up the yard." I've heard rationalizations for this behavior from "that tree is just too big" to "I'd rather have one of those palm trees there" to "I don't know what it is so I'm taking it out and putting in something I can identify."

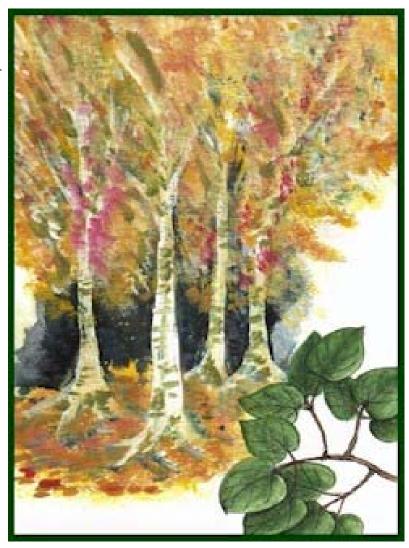
I bought a home with a wonderful, fully grown native maple in the front yard and a fabulous Doug Fir in the back yard. Well-meaning friends continue to tell me I had better cut them down. Both are very healthy, neither is too close to the house so they don't drop things in the gutters and none of the roots are buckling the street or sidewalk. I'm keeping these old guys!

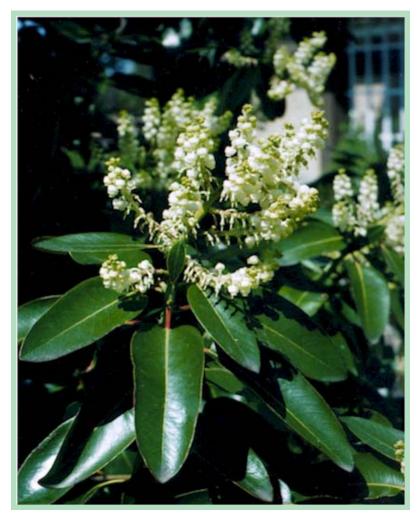
Even during construction, protecting any existing trees will pay big dividends. Most important is preserving the tree's critical root zone. In the main, trees get their nutritional needs filled by the roots. But when the root zone is overlaid by buildings, sidewalks or parking areas the roots can't do their job in supporting the crown. Before beginning any construction, map out the space each tree requires to survive and plan around it. Using stepping stones instead of a solid path is an example of good planning. Other choices for pathways include porous materials such as nut shells (filberts are a natural choice here in Oregon), bricks with spaces between them, bark or shavings. Take care not to compact the soil beneath trees. Erecting a temporary fence around the root zone is a good practice.

Research is underway to find the best ways of growing trees in urban areas. Materials are being tested that allow roots to thrive under pavement so a developed space can coexist with healthy trees. Using aggregate or stone with organic matter mixed in to prevent air pockets and allow fine roots to grow is one method being tested.

Good pruning of trees if necessary is crucial to their health. Often a tree will have been hacked at for several years leaving stumps and dead branches, water sprouts and other opportunities for disease and pests. Cleaning up old wounds and damaged areas will give the tree a healthy leg up instead of sacrificing the tree.

A grove of NW Native Paper Birch (Betula papyrifera)
Attractive, easy to grow, very valuable in the landscape
Painting by Heidi D. Hansen





Madrone (Arbutus menziesii) Photo by Wilbur Bluhm

Another part of caring for trees is mulching. Create a proper mulch barrier around trunks to keep mowers and weed trimmers and pedestrians away from the tree trunk. But refrain from "volcano mulching" or piling mulch up around the base of the tree. All that is needed is a simple layer of mulch about 2 inches deep from the trunk as far out as the widest branches. A good ground cover makes excellent living mulch.

One very attractive method of protecting tree trunks is to build a short fence of some sort around the trunk. This can be done with found materials or regular fencing. I saw one tree being protected by four old fireplace grates stood on end and connected by wire. Beautiful!

Big native trees are common in parks or government-owned properties but most of the mature native trees are on privately-owned land. In California, 80% of hardwood rangelands are owned by private parties. Oak stands have been found to be contributors to the overall property value, not just in individual properties but in the whole neighborhood. A stand of Oaks increases the value of an entire community.

According to a recent study, 5-acre lots with at least 40 Oaks per acre are worth 27% more than land without Oaks. This is based on spacing of the trees at 33 feet or less. Two-acre lots with 40 Oaks per acre are worth 22% more than bare land. Denser stands of Oaks did not add as much value but were still considerably more than bare land. These values are not based on how much the trees would be worth when cut down. They reflect the value of living, healthy, mature trees.

Conversely, another study of an area in San Diego County of 6,000 acre Oak woodland surrounded by 4,800 individual parcels of which 57% had home construction. In comparing the distance of the individual parcels from the Oaks it was determined that the land value decreased by \$324 for every 1000 feet the property was from the Oaks. Houses were devalued by \$3 per square foot for every 1000 feet from the Oaks.

The conclusions drawn by these two studies were that maintaining the health of trees on private land was very beneficial in increasing the value. It was suggested that, since neighborhoods with native trees have a higher value it might be a good idea to take steps to protect the trees by neighborhood charters or agreements, especially in view of the conservation value as well as economic.

Another study done in San Francisco estimates that trees can increase the value of a home by 4%.

Yet another research project drawn on the effect of trees on hospital patients found that those patients with rooms looking out onto vegetation recovered faster from surgery as well as from stress-related conditions.



Sitka Spruce (Picea sitchensis)
Photo by JoAnn Onstott

Aside from simply raising property values outright, mature native trees in the landscape can lower the day-to-day cost of keeping the home comfortable. Properly placed, trees offer shade and reduce air conditioning costs during the warm season. In winter, they serve as a windbreak and can reduce heating costs by as much as 30%.

It is estimated that Americans spend approximately \$30 billion every year maintaining lawns. The average lawn takes 65 hours per year to mow. A price comparison indicates it costs \$9,750 per acre for five years of turf management whereas low-maintenance wildflowers cost \$5,630 per acre for 5 years.

There are government and private programs in existence which compensate landowners for managing property in environmentally sound methods. There are also programs that offer incentives for wildlife habitats. A Conservation Easement may be available if your property has a forested area. Contact the USDA Natural Resources Conservation Service for specific information.

New Zealand's Sustainable Farming Fund Project. This project focuses on managing native trees on farms. Some cases were monitored visually and noted that there was a decrease in weeds and pests. However, the results were not closely measured so could not be quantified. A few gave rough estimates that they experienced a 20% increase in lambing with native shelter. Other benefits:

Decreased stock handling time

Fewer stock losses

Fewer stock behavior problems

Increased production (milk/lambs)

Increased pasture utilization through subdivision

Fewer weeds

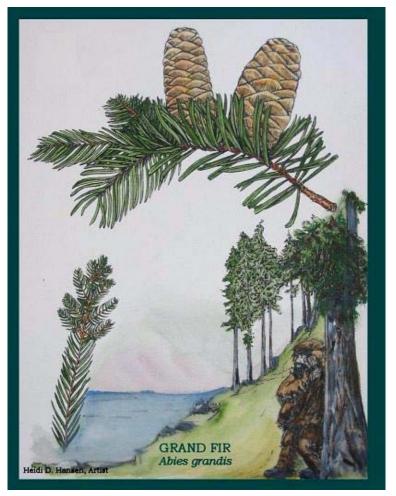
Less erosion

Increased property value

More bird life

Clearer streams

Fewer possums



Grand Fir (Abies grandis) Painting by Heidi D. Hansen



Canada's Green Community program estimated that, besides beautifying neighborhoods, one tree can remove 60,000 pounds of air pollution in 50 years. Two mature trees will provide enough oxygen for a family of 4.

Native trees vs. non-natives: Many people make the mistake of planting a tree that comes from other parts of the world, thinking they will do as well for wildlife and for property values as natives. This is patently incorrect. For instance a popular dogwood originally from Japan is lovely but the berries are too big for most North American birds to swallow. A dogwood native to our area is attractive to 75 species of birds. Since it is native to the Northwest, this dogwood has food value specifically suited to our birds: its fruit is high in fats that provide birds more energy than sugars do.

Non-native trees often have the potential to escape the controlled environment of a yard and take over surrounding woodlands. These escape artists can alter the native forest severely, causing sharp declines in native plant populations.

At one time native trees were difficult to find in nurseries. Nowadays it is much easier to find just about any native tree grown in local nurseries specializing in native plants.

Never ever dig native plants in the wild! Make sure the nursery where you shop for your native plants propagates their own stock. There are some unscrupulous nurseries that still go out into the wilderness and



dig their plants though they are being "weeded out" when this improper business practice is discovered.

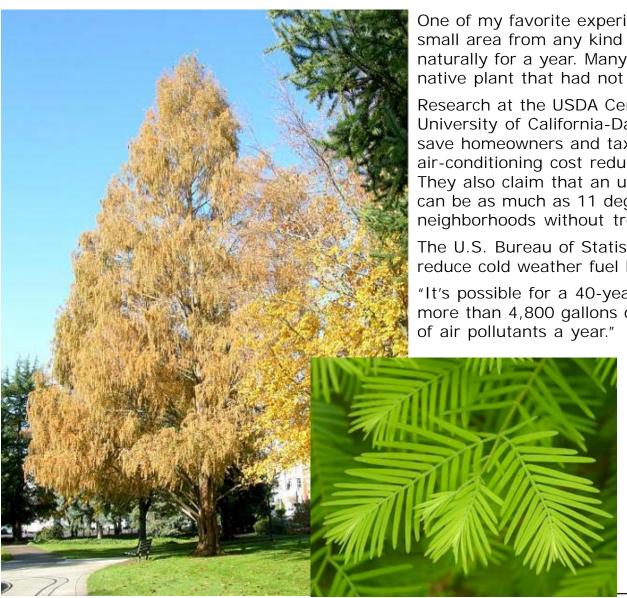
Rocky Mountain Juniper (Juniperus scopulorum)

Who can deny the value of ancient bonsai? Imagine this in your yard!

Photo by JoAnn Onstott



The Wild Garden: Hansen's Northwest Native Plant Database



One of my favorite experiments in my own yard is to "protect" a small area from any kind of disruption and allow it to grow naturally for a year. Many times I've been rewarded with a new native plant that had not previously been found there.

Research at the USDA Center for Urban Forest Research at the University of California-Davis state that a mature native tree can save homeowners and taxpayers \$160 a year. Their estimate of air-conditioning cost reduction is 30% with just one good tree. They also claim that an urban neighborhood with mature trees can be as much as 11 degrees cooler in the summer than neighborhoods without trees.

The U.S. Bureau of Statistics reports that evergreen trees can reduce cold weather fuel bills by 20%.

"It's possible for a 40-year-old ash tree in California to intercept more than 4,800 gallons of storm water and remove six pounds of air pollutants a year."

Dawn Redwood (Metasequoia glyptostroides)

Mature tree at the Oregon State Capitol grounds in autumn
Closeup taken at the nursery in summer

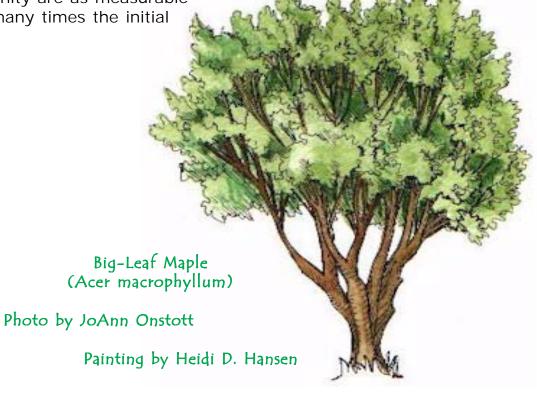
Photos by JoAnn Onstott

An acre of mature trees can remove the carbon dioxide pollution every year that would be produced by driving a car 26,000 miles.

But perhaps most significant to the homeowner is that mature trees, especially natives, increase the property value of a home, sometimes by as much as 10 percent.

Native trees grow in value as they grow in stature. The benefits to the homeowner, the neighborhood and the entire community are as measurable as the very size of the tree. It's value that returns many times the initial cost of the plant: truly living treasure.





Resources:

Preserving Mature Trees Often Increases Property Value by Barbara L. Sherf, Land Development Today, http://www.landdevelopmenttoday.com/Article473.htm

California's Hardwood Rangelands: Production and Conservation Values, Integrated Hardwood Range Management Program, Richard B. Standiford, Justin Vreeland, Bill Tietje, http://danr.ucop.edu/ihrmp/oak89.htm

Diamond, N.K. R.B. Standiford, P.C. Passof, and J. LeBlanc. 1987. Oak trees have varied effect on land values. California Agriculture 41(9,10):4-6

Native plants provide wildlife habitat! Native plants protect water quality! Native plants save money and time! Virginia Department of Environmental Quality, http://www.deq.virginia.gov/coastal/go-native.html



Grand Fir (Abies grandis) Painting by Heidi D. Hansen

The benefits of an urban forest, San Francisco Department of the Environment, http://www.sfenvironment.com/aboutus/openspaces/urbanforest/benefits.htm

MacDonald, Lynn. Autumn 1996. Global problems, local solutions: measuring the value of the urban forest. American Forests.

McPherson, E. Gregory, Maco, Scott E., Simpson, James R., Peper, Puala J., Xiao, Qingfu, VanDerZanden, Ann Marie, Bell, Neil. 2002. Western Washington and Oregon Community Tree Guide: Benefits, Costs and Strategic Planting. International Society of Arboriculture, Pacific Northwest Chapter, Silverton, Oregon.

Anderson, L.M. and Cordell, H.K. 1988. Influence of trees on residential property values in Athens, Georgia (U.S.A.): A survey based on actual sales prices. Landscape and Urban Planning 15: 153-164.

Tyrvainen, Liisa and Miettinen, Antti. 2000. Property prices and urban forest amenities. Journal of Environmental

Economics and Management, 39: 205-223.

The Benefits of Managing Your Property for Wildlife, Melissa J. Santiago and Amanda D. Rodewald, Ph.D., Ohio State University, http://ohioline.osu.edu/w-fact/0017.html

Tree Planting Program, Green Venture, a member of Green Communities Canada, http://www.greenventure.ca/tp.asp

SFF Project, New Zealand Ministry of Agriculture and Forestry , http://www.maf.govt.nz/sff/about-projects/decision-management-and-learning/03204trees.htm

Backyard HabitatTM, By Doreen Cubie, National Wildlife Federation, http://www.nwf.org/nationalwildlife/article.cfm?articleId=842&issueId=64



Photo by JoAnn Onstott



Useful Plant Databases on the Web

Here is a good collection of web data bases that will be useful to professional growers and all native plant gardeners. This list is from a larger list compiled by Lawyer Nursery in 2002 and published in one of their flyers. I wish to thank them for this public service.

Wally

American Bonsai Society

http://www.absbonsai.org/abs_home.html

Bonsai web

http://www.bonsaiweb.com

Portal of links to educate about the art of bonsai.

CalPhotos

http://elib.cs.berkeley.edu/photos/

Over 33,000 plant images from the University of California, Berkley

Cornell University online grafting course

http://instruct1.cit.cornell.edu/courses/hort494/graftage/hort494.index.html

Fire effects on plant species

http://www.fs.fed.us/database/feis/

USDA, Forest Service site.

Flora of North America Web Site

http://hua.huh.harvard.edu/FNA/

Taxonomic relationships, distributions, and morphological characteristics of all plants native and naturalized found in North America.



Useful Plant Databases on the Web, Continued

Bonsai web

http://www.bonsaiweb.com

Portal of links to educate about the art of bonsai.

Fire effects on plant species

http://www.fs.fed.us/database/feis/

USDA, Forest Service site.

Forest Types of the United States

http://forestry.about.com/library/tree/bltypdex.htm

Maps of the most common forest types.

Forestry index

http://forestryindex.net/

Links to news & info on the forestry industry.

Cornell University online grafting course

http://instruct1.cit.cornell.edu/courses/hort494/graftage/hort494.index.html

Growit.com Rooting Database

http://www.growit.com/Know/Rooting.htm

"Extensive information on rooting cuttings of woody plants, organized by botanical name. Developed for commercial growers."

The Native Plant Network

http://nativeplants.for.uidaho.edu/network/

Information on how to propagate native plants of North America.

Useful Plant Databases on the Web, Continued

Woody Plant Seed Manual

http://www.wpsm.net/

Manual by the US Forest Service covering seed biology, genetic Improvement of forest trees, seed testing, certification of tree seeds and other woody plant materials, and nursery practices.

River Corridor and Wetland Restoration

http://www.epa.gov/owow/wetlands/restore/ Environmental Protection Agency (EPA) site

Soils

http://homepages.which.net/~fred.moor/soil/links/10102.htm A website about soil fertility, chemistry, and pH with many interesting links.

Soil Science Society of America

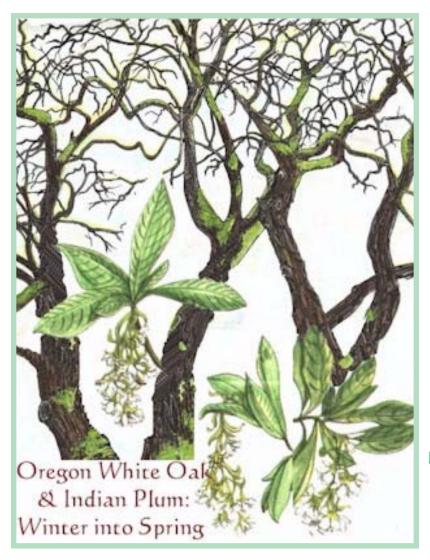
http://www.soils.org/

Website for soil science professionals. Offers information and links.



Personal notes from Wally

The Winter of 2006 is too long with us! SPRING - We eagerly await! Longfellow said it best -



Good luck!
Wally



Painting by Heidi D. Hansen WOODS IN WINTER

—Henry Wadsworth Longfellow

When winter winds are piercing chill,
And through the hawthorn blows the gale,
With solemn feet I tread the hill,
That overbrows the lonely vale.

O'er the bare upland, and away Through the long reach of desert woods, The embracing sunbeams chastely play, And gladden these deep solitudes.

Alas! how changed from the fair scene, When birds sang out their mellow lay, And winds were soft, and woods were green, And the song ceased not with the day!

But still wild music is abroad, Pale, desert woods! within your crowd; And gathering winds, in hoarse accord, Amid the vocal reeds pipe loud.

Chill airs and wintry winds! my ear
Has grown familiar with your song;
I hear it in the opening year,
I listen, and it cheers me long.



NOTICE: NURSERY IS CLOSED

In November 2010,
Wallace W Hansen Northwest Native Plants
Native Plant Nursery and Gardens
closed permanently.



Many thanks to all our gardening friends for your interest in the native plants of the Pacific northwest. It has been our pleasure to serve you.

www.nwplants.com

Our website, www.nwplants.com, is no longer commercial. Our goal is to continue Wally's legacy of generating interest, even passion, in the magnificent native plants of the Pacific Northwest through information and illustration.

Good luck! Good gardening!

Serviceberry (Amelanchier alnifolia)