

Northwest Native Plant Journal

A Monthly Web Magazine

(formerly NW Native Plant Newsletter)

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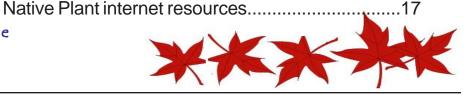
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About this Monthly Web Magazine

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:

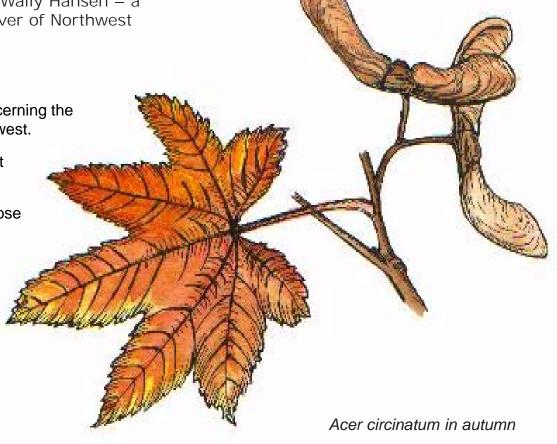
A — To generate interest, even passion, concerning the magnificent Native Plants of the Pacific Northwest.

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: This photograph of one of our Northwest Native huckleberries was taken last year in the nursery.



To Do list for native plants

A – Fall Leaves — You probably have a nice crop of fall leaves about now. They are a precious garden resource – pile them up and COMPOST. The native woodlanders especially like soil made from native deciduous trees – humus! There is equipment and composting information available everywhere. I make piles of leaves about 18" deep and use plenty of nitrogen fertilizer. Then I periodically till the compost area with a tiller. If you do not have many fall leaves, consider buying a load of hardwood sawdust and let it decompose for a couple of years.

B -Bordeaux and Lime-Sulfur — These old fashioned (several hundred years) "close to natural" herbicides are applied in early winter for many species. Make plans now and get materials early. This treatment can be used for many species. If you have Native Crabapple, Chokecherry or Bitter Cherry, I suggest you make one or two applications of these fungicides. 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 might apply early in the winter and later before bud break.

C – Divide Perennials — Check all your perennials while there are still some leaves. Many native plant perennials can be divided and Fall is a good time. If you can find separate crowns with roots, you can divide off a new plant. Certainly plants such as Oxalis, False Lily-of-the-Valley, False Solomon Seal, Wild Strawberries, Red Columbine, etc., can be easily divided.



D – Pruning Deciduous Shrubs — If some native deciduous shrubs grew too fast and are a bit leggy, you can prune back when the leaves are off. Shrubs can also be pruned to force bushiness. If you are going to take winter cuttings from the trim, wait until December. (Be very cautious in pruning young native trees—only to correct some improper shape, never cut the leader!)

E -Bulbs and Rhizomes — Get your native bulbs and rhizomes in now. Sometimes it is tricky to hold bulbs in refrigeration. This may break winter dormancy too early and the bulbs and rhizomes will "think" the winter is over and start sprouting!

Acer circinatum



Wild and Wonderful Oregon Huckleberries

Written by Nellie Stark

(Note - Dr. Nellie Stark is a Forest Ecologist living in Oregon, with considerable research in Vacciniums. She is the author of a book on huckleberries, <u>The Ecology and Culture of Montana Huckleberries</u>.)

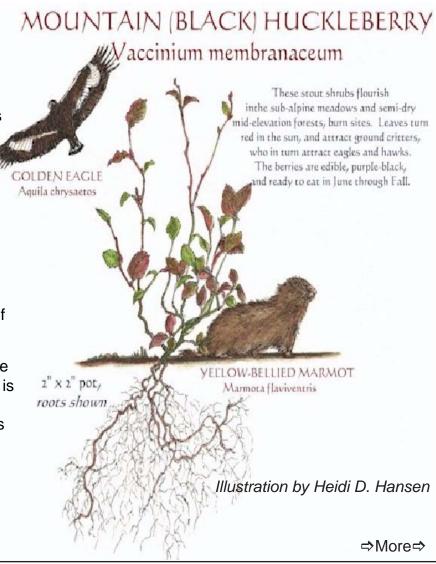
The greatest delight of summer is to come upon a wild patch of huckleberries that are ready to pick. The greatest disappointment for me is to find that same patch either before the fruit is ripe or after the crop is gone!

First, let's clear up the two names, "huckleberry" and "blueberry." Technically, any plant with the genus Vaccinium, and there are some 400 species worldwide, is a huckleberry. Many species grow in Malaysia and Southeast Asia.

The United States has a total of about 26 species. The cultivated highbush blueberry is an eastern species developed by intensive cross-breeding of superior plants of Vaccinium corymbosum and V. corymbosum f ashei (rabbiteye).

But easterners like to call the blue version a "blueberry" even though the plants still belong to the genus Vaccinium. To an easterner, a "huckleberry" is an entirely different species. "Blueberry" and "huckleberry" are two names that have been used interchangeably for many years and this misusage has created considerable misunderstanding.

I will try to use the preferred name for each of the native Oregon huckleberry species which I will describe, but understand that local usage may differ, depending on where you happen to live. There are even those who will argue that the genus Vaccinium is the "blueberry" genus!



Vaccinium species can vary in size from a few inches tall to small trees close to thirty feet tall. The Oregon bush types are usually less than six feet tall. They share a common huckleberry characteristic of having varied fruit colors: some are blue, some black, some red, some blue-black and some are purple to purple-black. Fruit shapes vary from round, rounded flat-topped to pear-shaped.

In nature, Oregon huckleberries rarely reproduce from seed, although seedlings are more common here than in the drier mountains of Montana to the east. Each plant may produce thousands of seeds during a season and many seeds germinate, but the young seedlings of most Oregon huckleberries are sensitive to drought and will die readily if exposed to even a few hours of drought. As a result, many of our huckleberries reproduce by rhizomes or underground stems that grow a few inches below ground and produce new plants and root systems at nodes.





Some plants can grow for hundreds of years, extending over a considerable area by simply growing more rhizomes each year. It is not impossible to find a single plant that covers a quarter of an acre and is several hundred years old!

Rooting habits vary considerably. Many of our Vacciniums have shallow roots and rhizomes, but a few are deep-rooted and much more drought resistant. Some of the rhizomatous types like the Mountain Huckleberry have tiny roots that are hard to see and extremely fragile. For this reason, it is almost impossible to dig them up and transplant them successfully unless you find a very young, small plant. The genus Vaccinium as a rule prefers acid soils and good available moisture year-round. The best fruit development occurs on sites with cool summer nights. The fruit of huckleberries in the wild is essential to the survival of a number of fruit eating birds, bats, bears, leaf cutter bees, chipmunks, squirrels, grouse and a host of other wild animals. Deer and elk will browse on the foliage and bears may pull up stems and eat the plants--fruit, leaves and all. Native Americans used the dried fruits extensively for their winter survival and lived on them in late summer when they were ripe. The fruits were baked into breads and combined with venison to make pemican. They used the leaves and rhizomes to produce a health-giving tea claimed to cure everything from

water retention, to colic to inducing labor. The fruits of the Bilberry are reported to provide anthocyanins that benefit eyesight and improve the health of fine blood vessels. At one time in the early twentieth century, train loads of these fruits were picked and sold. Whole families lived from the proceeds of picking berries in season and some became highly territorial, protecting their favorite patches, sometimes at gun point.

The wonder of huckleberries is the varied and colorful leaves. Some are deciduous and the leaves turn yellow, golden or red in the fall, often with other color highlights. Others like the Evergreen Huckleberry have shiny miniature holly-like leaves that remain green all year long. Almost any of our huckleberries



Illustration by Heidi D. Hansen

make excellent yard plants. They are good for anothering son and nounsh where there is adequate sunlight and water. Fruit production at lower elevations can be hit and miss, but when the plants do have fruit, the rewards are worth the wait because they make excellent jelly, pies, pancakes and muffins.

Considerable research has been done on the ecology and culture of these plants. A brief list of recent publications appears at the end of this article. Note that heights and elevations are given as the "most common ranges" and that some of these plants can exceed the average size or elevational range reported here. Flower characteristics have been omitted because of the extremely technical descriptions needed for the flowers, but all Vaccinium species have fat, globular flowers, either white to pink to pale red which are borne in bunches or individually and are extremely attractive. All dimensions are given in metric because berry diameters do not translate into English units easily.

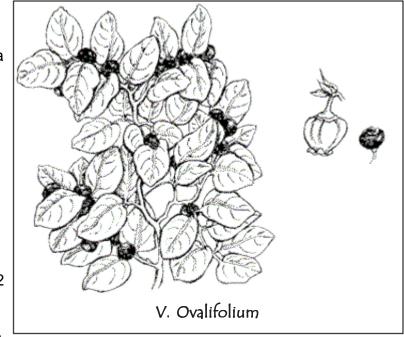
CHARACTERISTICS OF THE WILD OREGON HUCKLEBERRIES

1. Vaccinium alaskense is correctly called V. ovalifolium (Vander Kloet, 1988). (Oval-leaved Blueberry or Alaska Blueberry). The shrubs are crown-forming, have rhizomes and are 50-90 cm high. The plants rarely grow in extensive colonies, tending to form small clumps instead. The stems are angled in cross section and yellow-green to brown. The leaves are deciduous, ovate to

elliptical, 16-20 mm wide, 25-39 mm long with a pale upper surface that is usually shiny. The fruit is conspicuous, blue, has a waxy bloom, or can be dull purplish black and is 8-10 mm wide. The plants grow from the northern Cascades of Oregon to the Aleutian Islands and inland to northern Idaho. A few disjunct populations can be found in the Black Hills of South Dakota, left over from a time when the

plants grew continuously to the west coast under a more favorable, moist climate. Other populations occur on the shores of Lake Superior, in the Gaspe Peninsula and on the north shore of the St. Lawrence River clear to Cape Breton Island and Newfoundland. They prefer moist coniferous forests from sea level to 2100 m elevation. Plants may be found in subalpine ravines. The fruit is edible but tends to have poor flavor, gritty seeds and rots readily. Poor storage qualities have limited the commercial use and use by native Americans. This is one of the most colorful plants for fruit production ornamentally since the plants often bear profusely and are covered with blue berries which can be eaten by birds.

2. Vaccinium caespitosum (Dwarf Blueberry, Dwarf Whortleberry) These plants grow as shrubs, 5 to 1 3 cm high, forming low mats with shallow rhizomes. The twigs are angled slightly and are yellow-green to reddish- green or sometimes brown, with a fine pubescence. The deciduous leaves are oblanceolate (lance-shaped with the point of attachment at the narrow tip), 6-12 mm wide and 12 to 26 mm long. The leaves are green above with a paler underside. The margins are saw-toothed from the tip at least half way back to the mid section of the blade. The berries are blue with a waxy bloom that wipes



off easily and can be dull black 5-9 mm wide. The plants grow from Alaska to Newfoundland dropping south to the Atlantic Seaboard, to Southern Maine and Vermont, and in the west to Colorado-New Mexico and in the coastal mountains of Oregon and California. Plants may also be found at high elevations in the Cascades of Oregon. One isolated population occurs in central Mexico. The plants prefer dry to wet acidic soils from sea level to 3800 m elevation. They grow in the mountains along rocky ledges, on subalpine talus slopes, in wet meadows and even to the edge of glaciers. They can also be found on rocky or sandy lake shores, on heaths, in dry oak woods, poplar forests, open spruce woods, and in open pine and fir woods. It has a broad tolerance to soils and elevation as well as to vegetation types, making it a good plant for low mat-type plantings. It is an excellent soil stabilizer, once the plants are established. The fruits are very small, sweet and delicious and hard to pick, but worth the effort. The Native Americans used these fruits extensively for dried winter \Rightarrow More \Rightarrow

The Wild Garden: Hansen's Northwest Native Plant Database

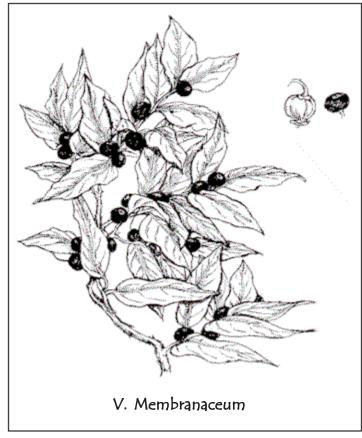
3. Vaccinium deliciosum (Cascade Bilberry or Blue Huckleberry) These shrubs are 7 to 28 cm high, rhizomatous and form extensive

mats in open colonies. The twigs have a waxy bloom and are green and lack hairs.

Leaves are egg-shaped to lance-shaped with the attachment on the narrow end, 9
17 mm wide, 17-35 mm long, smooth, lacking hairs but may have a waxy bloom. The

Leaves are egg-shaped to lance-shaped with the attachment on the narrow end, 9-17 mm wide, 17-35 mm long, smooth, lacking hairs but may have a waxy bloom. The edges are saw-toothed for the upper two-thirds of the length and the leaves are deciduous. The berries are blue and waxy, rarely a dull black and are 9-11 mm in diameter. The low shrubs grow from the Pacific Coastal Mountains from Southern British Columbia to eastern Idaho, to the Cascades of Oregon and northern California. They can be found in alpine meadows, subalpine coniferous forests, and on talus slopes from 600 to 2000 m elevation. The species is often confused with V. caespitosum and has not been developed extensively commercially. But the fruit are large and palatable and were collected by Native Americans for food in preference

4. Vaccinium globulare (Globe Huckleberry, Blue Huckleberry, Montana Huckleberry). This species has been merged with Vaccinium membranaceum by Vander Kloet (1988). The author thinks that there are distinctive differences in V. globulare that justify considering it as at least a variant of V. membranaceum. The plant as it occurs in Montana has been studied extensively by Stark (1996). Since the layman would not find distinctive differences between the two populations, the author will discuss V. membranaceum and V. globulare together, under the former scientific name with the common name of Mountain Huckleberry, Big Huckleberry or Thin-leaved Huckleberry. Shrubs with indistinct crowns are common for this rhizomatous plant which may form small to very extensive clumps. The plants vary in height depending on location, but are generally 45 to 110 cm high. The current



seasons twigs are green to reddish green, slightly angled in cross-section, free of hairs or may have hairs in lines. Older stems are light brown to tan. Leaves are green, glandular beneath and usually at least twice as long as wide (broadly elliptical to egg-shaped) 11-23 mm wide, 25 to 50 mm long. The margins are sharply serrate (saw- toothed). The fruit can vary from shiny black, dull black, blue, red, blue-black to purple and measure 9-11 (14) mm in diameter. The plants grow at lower elevations in Oregon and Washington, 500 to 2000 m and are found

⇒More⇒

to the smaller fruited V. caespitosum.

normally above 600 m elevation in Montana. They extend from the Rocky Mountains from the southwestern Northwest Territories south to northern California, through the Cascades, to Montana, northern Utah with disjunct populations in northern Michigan and central Arizona. They grow in moist coniferous forests, cut-over stands, on talus slopes, in alpine fir forests and alpine heaths up to 3500 m elevation. The fruit is some of the sweetest and most desirable of all the huckleberry family and were avidly sought by Native Americans. Today many people still pick the delicious fruits which make tasty deserts. Fruit ripens from mid-July to mid-September and are a mainstay for bears, birds, squirrels and chipmunks as well as many other animals. They are not exploited as extensively today as in the past, but some are harvested for jams and candies.

5. Vaccinium myrtillus (Bilberry, Dwarf Bilberry, Mountain Bilberry) This species forms shrubs 17-45 cm high which are strongly rhizomatous and grow often in peaty soils forming open colonies. The twigs are 3-angled in cross-section and are green. The twigs lack fine hairs. The leaves are broadly elliptical to egg-shaped 7-11 mm wide, 19-27 mm long, green and usually lacking hairs above but are weakly glandular below. The margins are sawtoothed to at least the mid portion of the leaf. The fruit is purple-black, lacks a waxy covering, is 7-9 mm in diameter and extremely tasty. The plants grow in the alpine and subalpine of much of the world, including Europe, Asia, Russia. Here it grows from southeastern British Columbia to central Oregon mountains. It also grows in central Colorado, Utah, north central New Mexico and southern Arizona. The plants prefer open moist coniferous forests such as lodgepole pine or spruce, hummocky peat ground, seeps and moraines above 1600 m elevation. The fruit is small but often plentiful and extremely tasty. The fruit is grown and harvested in many parts of the world for its high content of anthocyanins which benefit eyesight and the flow of blood through fine blood vessels. Other species of Vaccinium have been tested by the author for anthocyanins and many were nearly as high in content as the prized Bilberry.

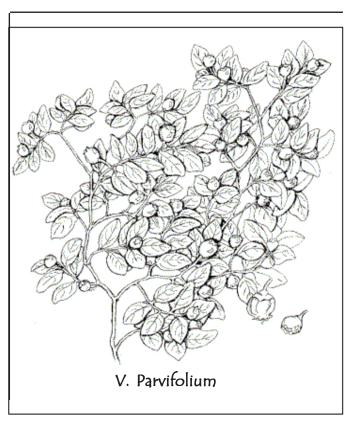


6. Vaccinium occidentale (now merged with V. uliginosum by Vander Kloet, 1988) (Bilberry, Tundra Bilberry, Alpine Bilberry, Bog Bilberry) These plants grow as shrubs 12 to 40 cm high and make low, rhizomatous dense mats or open extensive colonies. Current season twigs are pale green, lacking hairs or with very short hairs. The leaves are deciduous, circular to egg-shaped or narrowly

elliptical, 3-7 mm wide, and 8-14 mm long. The leaves are green above and pale and lacking hairs or short-hairy beneath, but may have a waxy bloom beneath. The margins of the leaf are not saw-toothed. The berry is 6-8 mm wide and is blue and has a waxy powder on the

surface. The plants grow on the coast of Greenland, throughout much of northern alpine and arctic Canada, to Alaska and down the west coast of Canada to the coast of Oregon, with a few scattered populations in northeastern Utah and northern California. Plants can be found on the summit of the White Mountains of New Hampshire. These plants have a strong preference for acidic soils (pH 3.5-6.2) and can endure drier or wetter soils, organic or inorganic. They are common in open alpine shrub fields, talus slopes, outcrops, eskers, moraines, muskegs, bogs, and low tundra. The fruits are edible and were frozen for use by the Inuits.

7. Vaccinium ovatum (Evergreen Huckleberry, Shot Huckleberry) These plants grow as upright shrubs 40-120 cm high, forming small clumps in the coastal areas, often on sand. The twigs have long, straight spreading hairs and are green. The leaves are evergreen, shjny with a dark green hue above and pale and glandular beneath. Leaves are narrowly egg-shaped, 8-12 mm wide, and 21-29 mm long. The berries are 6-8 mm wide, firm, are blue, dull black to shiny black with a white bloom that can be wiped off. The margins are sharply serrated or saw-toothed. These plants grow from central British Columbia to central California and abound along the Oregon coastal sand dunes. They prefer coniferous forests and open stabilized sand dunes along the coast where there is adequate sunlight. They were a major source of food for Native Americans and the fruit, although small and troublesome to pick, is extremely tasty and makes excellent pies. They can be picked as late as December because the berries, which are firm, persist. This is an excellent shrub for ornamental use since it has such attractive evergreen foliage and great clusters of edible and showy fruit.



8. Vaccinium parvifolium (Red Huckleberry) These shrubs grow well in the mountains to 124-260 cm height, forming definite crowns. They may sucker if injured, but are deeper rooted than most of the Oregon species. Twigs of the current season are green, sharply angled, lacking hairs or having weak hairs in lines down the stem. The leaves are oval to oblong-elliptical, 8-14 mm wide and

13-25 mm long, lacking hairs above but often with short hairs below. The leaf margins are not saw-toothed. The berries are 7 -9 mm wide, a bright red and may have a weak waxy coating on the outside. The plants grow along the Pacific Coast from Alaska to northern California and inland to southeastern British Columbia. They occur along roads and in coniferous woods in the Cascades of Oregon. They often grow on rotting logs or stumps in logged-over areas from sea level to 400 m elevation and in some drier forests up to 1100 m elevation further inland. The plants prefer sunny habitats. The fruit is used by Native Americans even today and are easy to harvest

because of their size and the fact that they persist on the twigs for up to two months. The plants make a stunning ornamental because the abundant red berries contrast with the green foliage and later the pale green stems. The leaves often turn a brilliant red in the fall which is also an asset.

9. Vaccinium scoparium (Grouse Whortleberry, Whortleberry, Small-leaved Huckleberry) These shrubs grow to 6-14 cm high and are rhizomatous, forming mats or colonies. The twigs are purplegreen, slightly angular, with a weak fuzz on them. The leaves tend to be evergreen, but may be deciduous in years of drought. The leaves are 3-5 mm wide, 10-16 mm long, green and usually sparsely glandular beneath with sharply serrate margins. The berry is a dull black, 5- 7 mm in diameter and edible. The plants grow from southeastern British Columbia and adjacent Alberta east to the Black Hills of South Dakota and south to southwestern Colorado. The plants are found mostly on alpine and subalpine meadows, heaths, talus slopes, and moraines and along the edges of subalpine coniferous forests from 1500 to 2400 m elevation. The tiny red berries were used extensively by Native Americans and are quite edible. The plants make excellent low ground cover, but require a lot of water.

References:

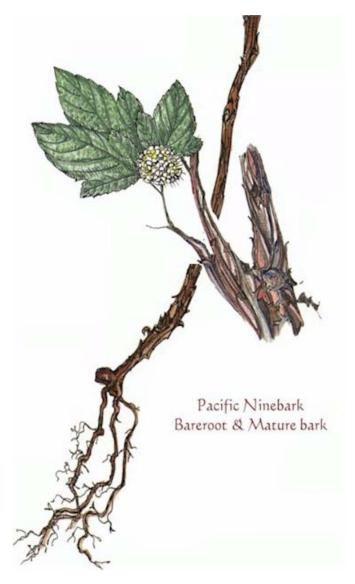
Hitchcock, C. Leo and Cronquist, A. 1973. Flora of the Pacific Northwest, An Illustrated Manual. Univ. of Washington Press. 730 p.

Stark, N. and S. Baker. 1992. The Ecology and Culture of the Montana Huckleberry. Univ. of Montana Press.

Vander Kloet, S. 1988. The genus Vaccinium in North America. Research Branch, Agriculture Canada.



V. Parvifolium



Get ready

Propagating native plants by winter cuttings

Some evergreen trees and shrubs can be propagated by winter cuttings. Why not try winter cuttings for this winter's gardening project? For example, you might try Kinnikinnik and Yew and Blueblossom Evergreen Lilac. Take the cuttings with leaves or needles on top, and stems 3 to 8". Dip in rooting hormone powder and stick in flats containing a mixture of peat moss and plenty of fine pumice. Place in a protected area that has some heat and sunlight. Keep damp but not saturated. Be patient — when you gently tug on a cutting and it does not move, the root is starting to form. When roots have formed, start feeding the plant with a weak liquid fertilizer (every week). Grow the plants until bushy roots have formed, probably well into Spring. Then the plants can be transplanted into larger pots or directly into the outdoor garden. Do not rush moving the tender plants from a cozy greenhouse or windowsill into the outdoors, with cold nights. Think of these new plants as "new babies."

Deciduous shrubs should be handled differently. After all leaves are down and after a first frost, take your cuttings, usually about 6 inches and pencil thin. Keep damp and dip in rooting compound. Now we want a callus to form at the root end of the cutting. Tie the cuttings in bundles, wrapped in plastic (except the bottoms with the rooting hormone dip) vertically in a large plastic box with damp peat moss in the bottom. Bury the closed box into the ground with about six inches of soil over the top. Get these in before Christmas. Then you must start peeking in early February. When a callus forms on the bottom of the cutting and the new buds are swelling, remove from underground and stick in flats, following the process outlined above for evergreen cuttings. Why not try Salmonberry, Twinberry, Nine Bark and most anything you can find? This is more an art than science so be patient, use your gardener's sixth sense and keep trying.

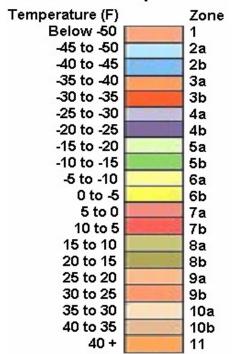


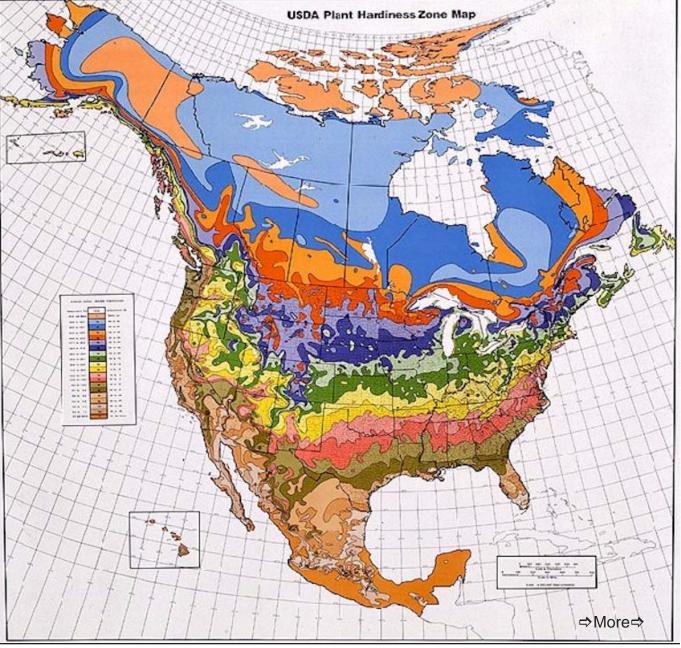
What's your Zone?

New USDA Hardiness Zones are now available

As you can see, there are more "official" zones now to address the variations of climate in our continent.

Average Annual Minimum Temperature

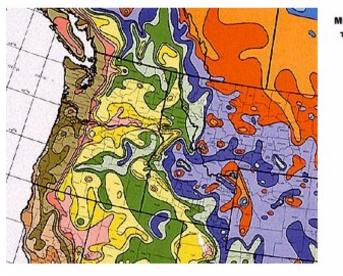


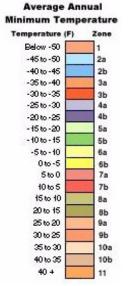


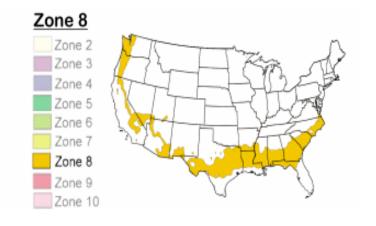
What's your Zone?, continued

The new map works just like the old one did: find your area in your state and check the temperature key to get your zone. The map shows in detail the lowest temperatures that can be expected each year, based on the lowest average recorded each winter from 1987 to 2001.

If you find this a map hard to read, there are two excellent tools on the internet to help you find the right zone. The National Arbor Day Foundation allows you to find your zone by zip code. Just type in your zip code and click on the button to look it up. Go to www.arborday.org/trees/whatzone.html. We entered 97301 and our result is shown at right.







Or, you can go to the

National Arboretum's website at www.usna.usda.gov/Hardzone and see another version. There, you can click on your area on the interactive map or click on your state abbreviation to see details of that area. We clicked on Oregon and got the results shown at left.

The American Horticultural Society also has an excellent internet article on this new map which explains the hardiness zones clearly. See their website at www.ahs.org/publications/ usda_hardiness_zone_map.htm.

Whichever tool you use to find your USDA plant hardiness zone, you'll

be able to tell what plants will thrive in your area. We have noted appropriate zones for each plant in our extensive catalog. See our catalog online at www.nwplants.com/business/catalog.

Landscaping and restoration

With bare root plants in the winter

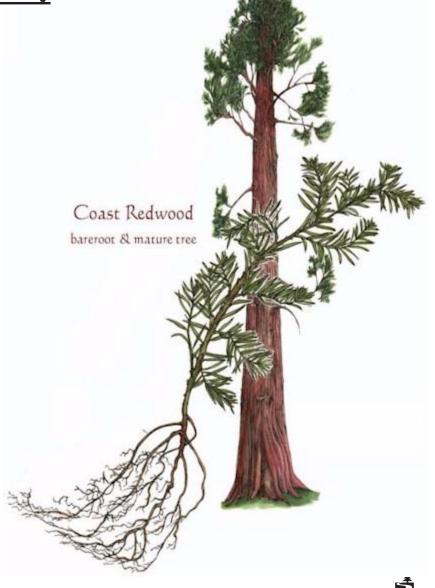
Northwest Native plants can be established on your property from plants that are established in plastic pots. Some of these plants can also be planted as Bare Root plants. usually in January through April, depending on your climate.

Plants that are well established in containers are more expensive that Bare Root Plants but the survival rate is much higher as well as the initial growth rate.

Bare Root plants are shipped without soil on the roots during the period of maximum dormancy, usually in January, February and March.

They require immediate planting out and in general must be managed better than plants grown in containers. You should have your soil well prepared by the time the plants arrive.

> From seeds, Coast Redwoods (Seguoia sempervirens) grow naturally in the forest. Given a head start at the nursery, it is amazing to think a bareroot youngster only 1-2 feet tall can grow to the tallest tree in the world!





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

CalPhotos

http://elil.cs.berkeley.edu/photos/flora/

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

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.

Native Plants of British Columbia

http://rbcm1.rbsm.gov.bc.ca/nh_papers/nativeplants/index.html

Photo and data for native British trees which are often used in the North American landscape.

National Agroforestry Center

http://www.unl.edu/nac/

NAC conducts research on how to design and install forested buffers to protect water quality and develops agroforestry technology for natural resource professionals who directly assist landowners and communities.

American Bonsai Society

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



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

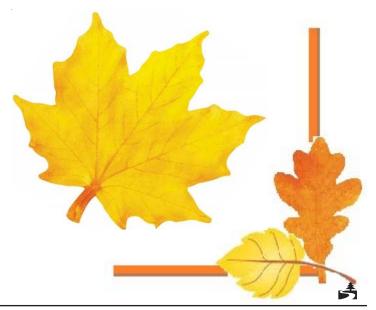
http://homepages.which.net/~fred.moor/soil/links/10102.htm

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

I have a beautiful Native Plant Garden here in Oregon. But the words "beautiful Garden" are rather trite, inappropriate, sterile, lifeless. I look out my office window and see life – movement – vitality - A handsome Incense Cedar is crowding against my window, gently caressed by a soft September breeze. Splashes of golden sunlight play everchanging patterns against the tall Garry Oaks and Douglas Fir trees. Understory native shrubs fill the lower areas with intricate patterns which continually change as the day progresses. As the panorama fades into the evening, I leave by desk, take my Mt Fuji stick and walk the garden paths – the air is cool, invigorating, stimulating - there is a bonding, a connection that is inexplicit. However, an explanation is emerging - an article in the Wall St Journal, Aug 26, 2003, "Flower Power: How Gardens Improve Your Health." This fine article describes an emerging new practice of horticulture therapy. Studies have found that simply viewing a garden . . . can quickly reduce blood pressure and pulse rate and even increase brain activity that controls mood lifting feelings." That is a start but there is plenty more – All gardens help but native plant gardens are especially good – I know!

Rudyard Kipling, one of my heroes, identified this same this kinship in his poem "The Glory Of The Garden" about 100 years ago -. note the following excerpts.



Our England is a garden that is full of stately views, Of borders, beds and shrubberies and lawns and avenues, With statues on the terraces and peacocks strutting by; But the Glory of the Garden lies in more than meets the eye.

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There's not a pair of legs so thin, there's not a head so thick, There's not a hand so weak and white, nor yet a heart so sick, But it can find some needful job that's crying to be done, For the Glory of the Garden glorifieth every one.

Oh, Adam was a gardener, and God who made him sees That half a proper gardener's work is done upon his knees, So when your work is finished, you can wash your hands and pray For the Glory of the Garden that it may not pass away! And the Glory of the Garden it shall never pass away!

Good Luck!

Wally



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!