

Volume 8, Issue 2-2010

March-April 2010

Northwest Native Plant Journal

A (Usually) Monthly Web Magazine

Trillium: The Original Easter Lily



Published by Wallace W Hansen Northwest Native Plant Nursery & Gardens

Contents

In Every Issue

About this Journal.....	3
Garden chores to do now..5
Mystery plant puzzle.....6
Native plant web resources..	29
On the Cover.....	4
Sparky's Corner.....	7
This 'n That Notes from Jennifer....	28

Staff Photographer:
JoAnn Onstott

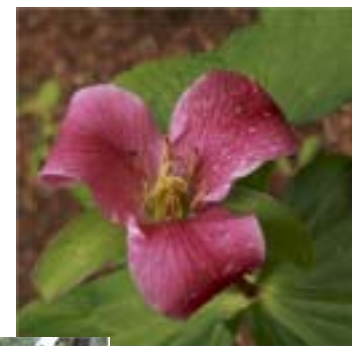


Editor: Jennifer Rehm
Webmaster and head writer for Wallace
W Hansen Native Plants of the NW
e-Mail: chillipepper6@comcast.net
www.chillirose.com

Feature Articles

Trillium time!

Native Easter lilies--wood-
land garden treasures...**8**



Wally's Trilliums

Short article and a poem
written by our garden's mas-
ter, Wally Hansen...**19**



Favorite research tools

On my desk right now...**21**
Trillium--great book...22
PLANTS database.....23
Science of plant
names.....24



All rights reserved. This entire publication Copyright © 2010 Wallace W Hansen. No part of this work may be reproduced or used in any form or by any means--graphic, electronic, or mechanical--without the written permission of Wallace W Hansen, except for reviewers who may quote brief passages. Any request for photocopying, recording, taping or information storage and retrieval systems of any part of this publication shall be directed in writing to the publisher: Wallace W Hansen, 2158 Bower Court SE, Salem OR 97317-9216

About this Journal

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.).



Spring Queen
(*Synthyris reniformis*)
Photo by JoAnn Onstott

Writers wanted: If you have expertise for any species of Northwest plants and wish to write an article for pay for publication in this Journal, please contact us via e-mail at nwplants@gmail.com Some articles (and pics) might deal with propagation, culture, diseases, restoration, reclamation, fertilizers, etc.



On the Cover: Trilliums!



Above, photo by JoAnn Onstott

At right, photo by
Jennifer Rehm

Two trilliums native to the Pacific northwest:

At left, a Western Trillium (*Trillium ovatum* ssp. *ovatum*) in a pot, three pure white flower petals atop three green pointed sepals atop a stem growing from the three large leaves.

Below, a whole bed of Sessile Trillium (*Trillium parviflorum*) growing side by side after a morning rain--a very beautiful groundcover in a patch of early spring sunlight among tall conifer sentries protecting this little Easter garden.



To Do List

Caring for your NW Native Plant Garden

- 1 – Plant almost anything. Frost is probably done for now. Get bare root plants if you can. They are ever so much easier to work with and better on the budget, too!
- 2 – Water new plants if the April showers don't take care of watering.
- 3 – Trim whatever needs it. Bring cuttings indoors for impromptu bouquets.

4 – Watch for slugs. They announce their presence with shiny slimy trails.

Birds will eat the slug eggs but the big old nasty slimy slugs are difficult for some birds to eat.

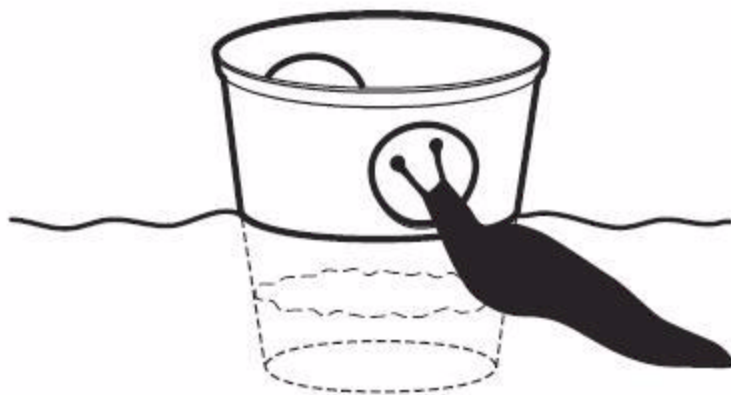
You can always pour boiling water on them.

I've heard freezing them in a plastic bag also kills them but the very idea of slugs in the freezer is so disgusting who could do that?

Natural enemies of slugs are toads, garter snakes, spiders, daddy-long-legs, centipedes, ants, beetles and chickens, geese or ducks though those last three may be a bigger nuisance than the slugs.

And there is always the slug hotel which rarely fails but they have to be emptied often and the bait (usually beer) must be refreshed. These are simple to make or can be purchased if you need to spend money.

I think removing slugs may be a nice little cottage industry. Go round the neighborhood with a bucket and pick them off plants with tongs. Charge \$1 per slug? Just a thought. My dog barks at them. Though it amuses the dog, the slugs appear to be unimpressed.



Mystery plant puzzle



Can you help? This photo appeared in our graphics library, labeled
"NOT water birch"

Photo by JoAnn Onstott

Test your native plant knowledge--identify this northwest native. The reward is simple but very satisfying: You will be included in our list of Official Plant Detectives.

Send me an email
(NativePlantLady@nwplants.com)
with the correct botanical name
of this plant.

Good luck!

**P.S. Do you have a plant you'd
like to identify? Email it to us
and we'll show it here on our**

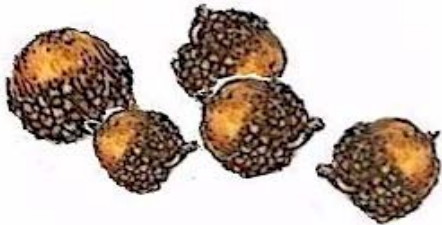
Official Plant Detectives

Jerry Murray
Sabrina Kis
Carol Hiler
Mike Burns
Nancy Whitehead
Pat Opdyke



Sparky's Corner

A special message from our frisky contributor



WE NEED YOUR HELP!

Sparky is missing from the garden!

He was last seen flying around the old Garry Oak grove. He usually plays with his friends but was alone this time. He is such a good squirrel, he always tells his mom where he is going and never stays out late.

We've looked out by the maple trees, we searched the Douglas Firs, we even tried calling him from the wild rose garden but he didn't answer.

Please help us! Sparky would never run away, he loves us all too much.

If you have an idea about where we should look for him, please send us an email to nwplants@gmail.com Put FIND SPARKY in the subject line.



Trillium Time

Native Easter Lily

Trilliums are up now in the garden. Here in the Pacific northwest, there are several trilliums native to the area. Most have a very limited range along the coastal regions. Others are more generously spread, and a few even grow from Canada to southern California and across the continent to Wyoming and Colorado.

These ranges are where Trilliums choose to live on their own without human intervention or manipulation. But with a gardener's assistance, they can survive and flourish, often becoming quite prolific if given an appropriate environment and a bit of luck.

Western Trillium (*Trillium ovatum* ssp. *ovatum*) Here we see a drift of Trillium in the making, naturalized in a raised bed. In time, it may outgrow its boundaries and slowly pool alongside the structure. Note the stem rising from the leaves, characteristic of this species. Photo by Jennifer Rehm



[More](#)

Trillium Time, continued

From the ground up (scaling the botanical ladder)

Our study of trilliums begins with a search of the USDA PLANTS database ([read about this on page 23](#)). I asked for trilliums native to Oregon which netted this result:



Accepted taxa	Scientific Name	Common Name
Family	Liliaceae	Lily Family
Genus	Trillium L.	trillium
Species	Trillium albidum J.D. Freeman	giant white wakerobin
Species	Trillium angustipetalum (Torr.) J.D. Freeman	narrowpetal wakerobin
Variety	Trillium chloropetalum (Torr.) Howell var. angustipetalum (Torr.) Munz	
Variety	Trillium sessile L. var. angustipetalum Torr.	
Species	Trillium chloropetalum (Torr.) Howell	giant wakerobin
Variety	Trillium chloropetalum (Torr.) Howell var. chloropetalum	giant wakerobin
Variety	Trillium sessile L. var. chloropetalum Torr.	
Species	Trillium kurabayashii J.D. Freeman	giant purple wakerobin
Species	Trillium ovatum Pursh.	Pacific trillium
Subspecies	Trillium ovatum Pursh ssp. Ovatum	Pacific trillium
Species	Trillium parviflorum Soupup	smallflower walerobin
Species	Trillium petiolatum Pursh.	Idaho trillium
Species	Trillium rivale S. Watson	brook wakerobin

This photo is from the profile page of Genus Trillium in the PLANTS database. We use it with their permission. Credit goes to L. D. Bailey @ USDA-NRCS PLANTS Database.

Trillium Tip: Label your trilliums while they are up this spring. Then you will be able to locate them after they've gone to sleep for the winter. Accidentally digging them would be very sad!

[⇒ More ⇒](#)

Trillium Time, continued

Northwest Native Trilliums

Here in the northwest, we have, basically, two kinds of trilliums: Pediculate (having a stem or pedicel between leaf, and flower) and sessile (no stem between leaf, and flower).

The pediculate trilliums in our area are:

- Ovatum (Western Trillium)
- Rivale (Brook Wakerobin, found in the Siskiyous).

The sessile trilliums in our area are:

- Parviflorum
- Albidem (Freeman)
- Kurabayashi
- Cholorpetalum (found sometimes in southern Oregon, but mostly in California)
- Petiolatum (eastern Oregon).

Additionally, some of these hybridize and produce mystery trilliums in regions which border each other.

Western Trillium (*Trillium ovatum* ssp. *ovatum*)
Photo by Jennifer Rehm



Trillium Tip: Often found growing among groves of native deciduous trees, trilliums will form large swathes of bright white in eatly spring.

[⇒More⇒](#)

Trillium Time, continued

Species *Trillium albidum* J.D. Freeman, Giant White Wakerobin or Sweet Trillium

Flowers: White single flower with 3 upright petals directly above the plant's major leaves which have stems to 10 inches tall. Flower often turn pinkish with age. Interior parts of flower yellow-green, maybe tinged with purple as plant ages.

Blooms: February - March.

Leaves: Large green leaves, often with purple blotches, large and triangular; three per plant, radiating off stout stem above the ground.

Fruit/Seeds: ??

Location: Dappled sun to full shade, moist areas beneath bushes and/or trees.

Status: Not rare but not easy to find.

Native to: small area in southwest Washington, slightly inland in Oregon, northeast California



Giant White Wakerobin (*Trillium albidum*) Photo by Meneerke Bloem

Trillium Tip: Plant Trilliums beneath Sitka Spruce, native Oaks, deciduous trees native to the Pacific northwest.

[⇒ More ⇒](#)

Trillium Time, continued

Species *Trillium angustipetalum* (Torr.) J.D. Freeman, Narrowpetal Wakerobin

Flowers: Erect with spicy-musty odor, often resting on bracts maroon to green. Petals are long lasting and partially obscure stamens.

Blooms: Spring to early summer, March to June.

Leaves: Trio of leaves are sparsely mottled with dark greenish brown or rarely all green. Mottling becomes obscure with age.

Fruit/Seeds:

Location: Are fond of snuggling up in Giant Sequoia (*Sequoiadendron giganteum*) groves and deciduous trees where the soil is damp. Populate coastal mountains, oak groves, wooded canyon slopes and dense woods near streams.

Status: Not easily found.

Native to: Occurs in Sierra Nevada from Fresno County, north to Placer County. Disjunct in coastal mountains and hills of Santa Barbara and San Luis Obispo counties.

NOTE: Try as I might, I did not find a definitive answer to the difference between this trillium and *T. kurabayashii*.

In 1975, J.D. Freeman proposed a new status for *T. angustipetalum* (Torrey) J.D. Freeman, based on *T. sessile* var. *angustipetalum* Torrey. We do not have a photograph of this trillium in our library and those I viewed on the internet showed no obvious characteristics of *T. angustipetalum* that illustrated the distinction between the two plants. As a result, I thought this beautiful photo of Western Trillium (*Trillium ovatum*) would suffice in the eye-candy department.



Photo by JoAnn Onstott

Trillium Tip: Good native shrubs for Trillium underplanting are Pacific Rhodie (*Rhododendron macrophyllum*), Western Azalea (*Rhododendron occidentale*),

[⇒ More ⇒](#)

Trillium Time, continued

Species *Trillium Chloropetalum* (Torr.) Howell, Giant Wakerobin

Flowers: Dark red to greenish-white, three erect petals one to two inches long; single flower directly above leaves. Interior parts of flower mainly purple.

Blooms: February - March.

Leaves: Dark green with purple blotches, large and triangular; three per plant.

Fruit/Seeds: ??

Location: Shady, moist trails, woods and thickets.

Status: Common.

Further description & Comment: 12 to 18 inches tall. Distinguished from *Trillium albidum* (Sweet Trillium) by the purple interior flower parts, darker flower and slightly larger size.

Native to: Found sometimes in southern Oregon, but mostly in California.

NOTE: This plant is not yet represented in our graphics library, so we present this stunning photo of a Sessile Trillium on the verge of blooming.



Trillium parviflorum, Sessile Trillium. Photo by JoAnn Onstott

Trillium Tip: Native perennials that do well with Trilliums include Lady Fern (*Athyrium filix-femina* var. *cyclosorum*), Bunchberry (*Cornus unalaschkensis*), Twinflower (*Linnaea borealis* var. *longiflora*) and most violets.

[⇒ More ⇒](#)

Trillium Time, continued

Species *Trillium kurabayashi* J.D. Freeman, Giant Purple Wakerobin

Flowers: Sessile above leaves, sepals are lance-shaped, green, often marked with purple. Each petal from 2-3 inches long, erect. Colorful flowers are dark liver-red and often become twisted with age.

Blooms: Early spring

Leaves: Mottled with dark brown, to 6 inches long and 5 inches wide.

Fruit/Seeds:

Location: First of the native Trilliums to bloom, the drama this one creates never disappoints. Grows in rich moist soils with deep humus, near coast. Soil must be well drained. Limited sunlight is preferable over deep shade. Can form large colonies.

Status: Rare

Native to: Southwest Oregon to northwest California.

Trillium kurabayashi, Giant Purple Wakerobin.
Photo by JoAnn Onstott



Trillium Tip: Do not pick the flowers!!!! It takes a trillium 8 to 10 years to bloom the first time. The green parts above ground are the lifeline of each trillium and if they are damaged it will take time to recover. Be safe--don't pick them.

[⇒More⇒](#)

Trillium Time, continued

Species *Trillium ovatum* Pursh., Pacific Trillium

Flowers: White turning pink with age; single flower; 3 oval petals sitting 2 inches above the plant's major leaves. Interior parts of flower reddish.

Blooms: February - March.

Leaves: Solid, green to dark-green, large and triangular; three per plant, radiating off stout stem above the ground.

Fruit/Seeds: Fleshy yellowish 3-sided slightly winged capsule filled with tiny seeds.

Location: Shady, moist trails. Often growing in bottom story of bushy areas. Plaskon Nature Trail (San Pedro Valley County Park), Saddle Pass area on San Pedro Road (McNee Ranch State Park).

Status: Native - Common, but not easy to find.

Native to: Canada provinces Alberta and British Columbia, states Washington, Oregon, California, Idaho, Colorado, Montana and Wyoming.

Distinguishing characteristics: Has stalked flowers and sessile unmottled leaves forming a single whorl of 3 below the solitary flower.



Trillium ovatum, Western Trillium . Photo by JoAnn Onstott

Lifecycle of a trillium: Each trillium begins with a single seed. An ant (or sometimes a mouse) carry the seed to the ground. If the soil is consistently moist, a viable seed may germinate and that may take several years.

[⇒ More ⇒](#)

Trillium Time, continued

Species *Trillium parviflorum* Soupup, Smallflower Wakerobin

Flowers: Long lasting, erect three-petal flowers with spicy odor reminiscent of cloves.

Blooms: Late March to early May.

Leaves: Blade green ovate to broadly ovate leaves, scattered mottling which becomes obscure with age.

Fruit/Seeds:

Location: This plant varies from very short, slender, small-bracted plants to tall, broad, umbrella-bracted giants. No matter the plant size, the flower and petals are constant--one remarkable difference between *T. parviflorum* and *T. albidum*. The latter species can also be enormous but when that is the case the flower petals are very long, broad and conspicuously obovate-diamond shaped. However, some botanists do not consider the two to be distinctly different.

Status: Considered Sensitive in Washington

Native to: In four Washington counties (Pierce, Thurston, Lewis and Clark). Presence in Oregon is very small.



Trillium parviflorum, Sessile Trillium. Photo by JoAnn Onstott

Lifecycle of a trillium: The second year of a trillium's life brings a single seed leaf.

[↪ More ↪](#)

Trillium Time, continued

Species *Trillium petiolatum* Pursh., Idaho Trillium

Flowers: Solitary sessile with three green sepals. Petals of 3, usually reddish-purple or sometimes yellowish, greenish or brownish.

Blooms: Very early spring.

Leaves: Leaves 3, shorted, not mottled, leaf blade nearly orbicular to broadly ovate, roundly or nearly cordate at the base and rounded at the tip.

Fruit/Seeds: Fruit is a fleshy capsule.

Location: Found on streambanks and moist meadows and in thickets at low to moderate elevations.

Status: Close to rare.

Native to: The northeast part of Oregon, eastern and some central areas of Washington, and Idaho.

Additional information: Jim McClements says of this plant, "This is quite a contrary Trillium that blooms very early in the spring in wet areas in the prairies and woodland edges of Western Oregon, Washington and Eastern Idaho."

Trillium petiolatum Pursh., Idaho Trillium.
This specimen was collected by Souppop on May 6, 1806 at
Clearwater River near Potlatch River in Idaho.



Lifecycle of a trillium: In its third year of life, a trillium produces its first true leaf.

[➔More➔](#)

Trillium Time, continued

Species *Trillium rivale* S. Watson, Brook Wakerobin

Flowers: Erect, rapidly recurving below bradts after pollination, odorless. White or rarely pale pink, usually has dark madder-purple flecks, rarely almost entirely covered with madder-purple that does not change with age. Oddly, after flowering the entire plant may enlarge and become more robust and turgid with very glossy leaves.

Blooms: Early March to early June and withering in summer.

Leaves:

Fruit/Seeds:

Location: Find this plant on open, grassy hillsides with manzanita shrubbery, pine groves, clearings in sequoia groves, roadside banks, ledges and gravelly talus.

Status:

Native to: Confined to the Klamath and Siskiyou mountains of southwestern Oregon and California. Has strong affinity for banks along streams and adjacent to trickles in *Darlingtonia* bogs.

From the Case book, Trilliums:

“Easily one of the most charming and beautiful of trilliums...also grows in an area of exceptional beauty.”



Trillium rivale, Brook Wakerobin. Photo by Meneerke Bloem.

Lifecycle of a trillium: After the third year, it usually takes 2 or more years to bring on the three leaves we are familiar with.

[⇒ More ⇒](#)

Wally's Trilliums

From our newsletter dated March 2002

My trilliums are up again – Easter is coming!! They have not bloomed yet but are a beautiful sight already! They will reach their peak of beauty around Easter. Trilliums are my lifelong favorite. As a depression kid in Washington State near the Canadian border way out in the country, we called Trilliums, “Easter Lilies.” I loved those trilliums, along the damp, shady creek bottoms. I picked them for my Mother, who always was so thankful!



I have an ancient, huge Dictionary belonging to my Grandfather, dated about 1900. I found a very fragile but complete dried Western Trillium, with rose tints, between the pages. Some shy country girl carefully placed it there about a hundred years ago – something of beauty – something of purity –which still touches the heart one hundred years later.

I rediscovered the magic of trilliums 11 years ago, here in Oregon. One day I was exploring a nearby deep gulch with a small stream. Growth was very dense and in late March, among the tall firs and the lower vine maples, my passage was nearly impossible. I struggled under and over and through the intricate vine maples. The dense overhead leaves created a twilight zone. Suddenly I caught a glimpse of a flash of white ahead. Curious, I crawled toward this “white” object and suddenly came upon a huge Western Trillium – beautiful, perfect glossy green slightly mottled leaves and stunning white petals. Such a striking, beautiful symbol of Spring and Beauty and Renewal – a composite feeling of all that is good and worthwhile and joyful and eternal. To me, the Trillium is the true Easter Lily for those of us in the Northwest or even in the Northern Hemisphere (no trilliums in the Southern Hemisphere). These have been called the Trinity Lily, of special meaning to those of the Christian Faith. But all Faiths share in the joy of Spring and renewal – the Trillium is a universal symbol.

(Note – I grow Trilliums and you can come to the nursery during the Spring and get plants. Trilliums in full growth are too fragile to ship. I ship in the late summer and fall as bare root rhizomes.)

Lifecycle of a trillium: After producing the typical three leaves, the trillium focuses on flowering. Some 8 years (or even longer), the first flower will bloom.

[⇒More⇒](#)



Some Thoughts On Trilliums - Wally

**First to break free of Winter's Grasp!
Awake from months of slumber
And hint at warmer days to come!**

**Three leaves, three petals, three sepals!
To those of Christian Faith - The Trinity Lily.
To all Faiths, a ritual of Spring Renewal !**

**For brief days, your pure white petals,
Glossy green leaves, delightful form,
Brighten and please and awaken!**

**Your prim, proper, starched white habits
Of some ancient forest order,
Soon give way to faded red,
A touch of bitter-sweet melancholy.**

**Plump , pregnant seed pods follow
For future generations - beauty and delight!
Live on, sweet Trillium! Live on Forever!**

Favorite Research Tools

How I find answers and learn more about native plants

Every article I write begins with a basic outline of the points I want to cover. Then the research starts to find details and additional information beyond what I already know.

From my modest botanical library, the work of favorite authors is close at hand. But to get the latest data I usually turn to the internet. Books are a snapshot of what was current the day the writer handed it to the publisher. From my books I write down what I know to be true, and add from the internet whatever is not already in my notes. After that, I go to each author's website or blog for their latest opinion.

Here then, is what's on my desk desktop right now.

Book: *Trilliums* by Frederick W. Case, Jr. and his wife, Roberta B. Case. (Ordered, not yet arrived.)

PLANTS Database: <http://plants.usda.gov>

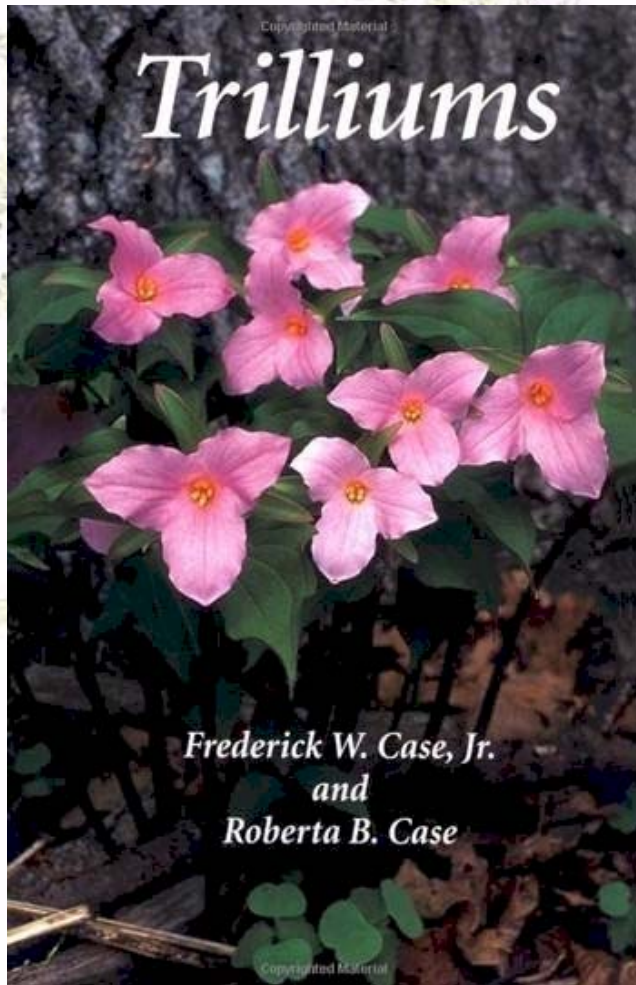
ICBN documentation: Demystifying plant names. Identifying plants correctly is a daunting prospect, but with the incredibly complex ICBN it becomes far easier. Every 6 years, a gigantic meeting called the International Botanical Congress is held to review the current data and make changes or additions. Each plant name is reviewed, necessary proposals to modify the ICBN. A proposal is ratified if approved by a 60% majority of the Congress. Through adoption of the ICBN, every single plant that has been identified as unique has a botanical, or generic, name.

With the proper identification, we know the exact characteristics, native origin, status, growing conditions, what it may have been used for through the centuries and by whom, any part of the plant that may cause ill effects or that could be beneficial. Common names for plants are interesting colloquially, but unappreciated when expected to give true information about a particular plant.

For example, the shrubs Creek Dogwood and Red-Osier Dogwood look remarkably alike--so much so that they are often mistaken for each other. However, Creek Dogwood (*Cornus sericea* ssp. *occidentalis*) does not spread by underground runners, or stolons, while the Red-Osier Dogwood (*Cornus sericea* ssp. *stolonifera*) does spread. So, if you want a shrub to stabilize a hillside you pick *Cornus sericea* ssp. *stolonifera*. If you want a nice shrub to feature in your yard, you need *Cornus sericea* ssp. *occidentalis*.

➡ More ➡

Research, continued



Recommended Reading: Trilliums!

Probably the most highly regarded book on trilliums right now is titled simply "Trilliums" by authors Frederick W. Case, Jr. and Roberta B. Case.

Frederick W. Case, Jr., and his late wife, Roberta, were partners in delightful plant adventures for some four decades. Hardy explorers, they trekked through swamps and woodlands to see and photograph each of the North American Trillium species in the wild. They also grew all the American Trillium species and three of the Asiatic species in their experimental gardens in Saginaw, Michigan.

[More](#)

Research, continued

Online Plant Information

If you have not yet visited the PLANTS Database, here is a little introduction. Provided by the **U**(nited) **S**(tates) **D**(epartment) of **A**(griculture)'s **N**(atural) **R**(esources) **C**(onservation) **S**(ervice) at <http://plants.usda.gov/>, this is one of my favorite research tools.

On the front page (shown here), you can search for particular plants by common or scientific name. In fact, the 'search' bar on the left side of the screen is available on most pages making navigation of this info-packed tool a joy to use.

To further refine your search criteria, select a state for plants native to that location.

Or try your hand at formulating a more advanced search criteria. If the search does not bring back what you're looking for, change the search slightly.

Help for searching is right there beneath the 'Advanced Search' link.

USDA United States Department of Agriculture
Natural Resources Conservation Service

PLANTS Database

Home About PLANTS Team Partners What's New NPDC Help Contact Us

You are here: Home/

Search
Name Search
trillium
Scientific Name Go

State Search
Advanced Search
Search Help

PLANTS Topics
Alternative Crops
Characteristics
Classification
Culturally Significant

Please Note: The National Plants Data Center is undergoing both staffing and electronic transitions at the moment. We anticipate being unable to respond to questions and comments in the interim. We apologize for the inconvenience.

The PLANTS Database provides standardized information about the vascular plants, mosses, liverworts, hornworts, and lichens of the U.S. and its territories.

Plant of the Week
Gray alder
Alnus incana (L.) Moench

I Want To...
See a list of the plants in my state
Learn about the wetland plants in my region
Learn about all the endangered plants of the U.S.
Learn about noxious and invasive plants
Search for and view images of plants
Read and print abstracts about important conservation plants

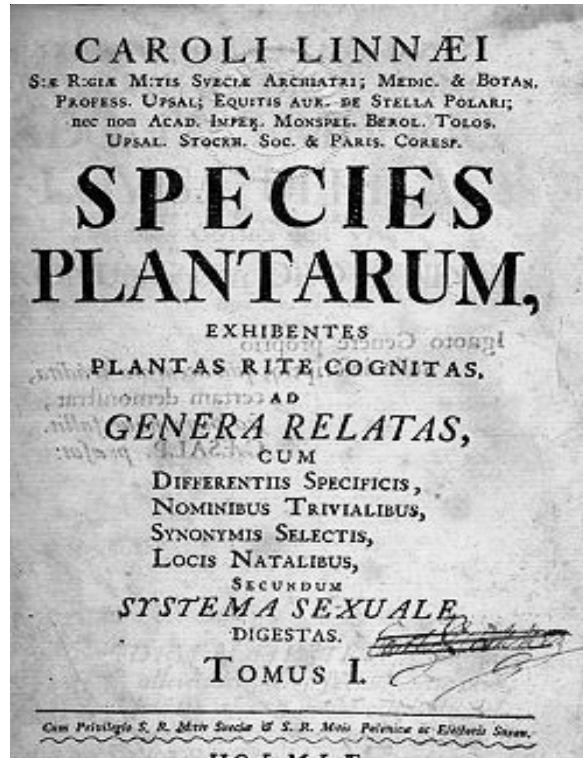
Here's the front page of the Database. Note the list at the left side of the page. These shortcuts make searching quicker and easier.

⇒ More ⇒

Research, continued

Roadmap to botanical names

The ***International Code of Botanical Nomenclature (ICBN)*** is the set of rules and recommendations dealing with the formal botanical names that are given to plants. Its intent is that each taxonomic group ("taxon", plural "taxa")

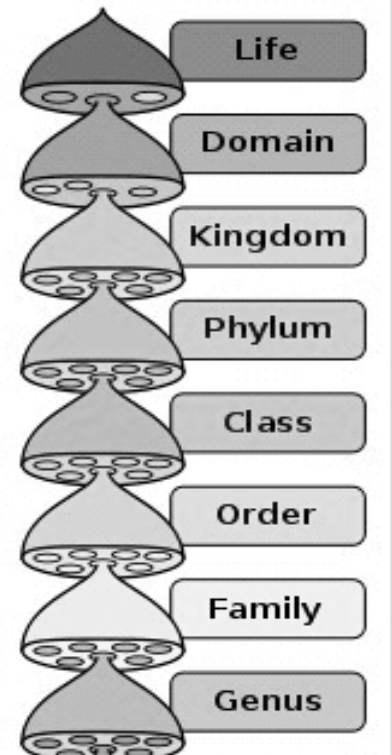


of plants has only one correct name that is accepted worldwide. The value of a scientific name is that it is an identifier; it is not necessarily of descriptive value, or even accurate.

- The guiding principle in botanical nomenclature is priority. The ICBN sets the formal starting date of plant nomenclature at 1 May 1753, the publication of *Species Plantarum* by Linnaeus (or at later dates for specified groups and ranks).

- A botanical name is fixed to a taxon by a type. This is almost invariably dried plant material and is usually deposited and preserved in a herbarium, though it may also be an image. Some type collections can be viewed online at the websites of the herbaria in question.

Both these principles are regulated and limited. To avoid undesirable effects of priority, conservation of a name is possible. Above the taxonomic rank of family very few hard rules apply (e.g. see descriptive botanical names).



Above, at left--Title page of *Species Plantarum*, 1753
At right is the 'family tree' structure of botanical names.

⇒ More ⇒

Research, continued

The ICBN can only be changed by an International Botanical Congress (IBC), with the International Association for Plant Taxonomy providing the supporting infrastructure. The present edition is the Vienna Code (2006), based on the decisions of the XVII IBC at Vienna 2005. This was preceded by the St Louis Code (2000) and the Tokyo Code (1994), both available online. Each new edition supersedes the earlier editions and is retroactive back to 1753, except where expressly limited.



Botanical nomenclature is independent of zoological and bacteriological nomenclature, which are governed by their own Codes (see Nomenclature Codes).

The ICBN applies not only to plants, as they are now defined, but also to other organisms traditionally studied by botanists. This includes blue-green algae (Cyanobacteria); fungi, including chytrids, oomycetes, and slime moulds; photosynthetic protists and taxonomically related non-photosynthetic groups. There are special provisions in the ICBN for some of these groups, as there are for fossils.



Kinnikinnik,
Arctostaphylos
uva-ursi

For the naming of cultivated plants there is a separate code, the International Code of Nomenclature for Cultivated Plants. This gives supplementary rules and recommendations.

Using Generic Names

The scientific name of a genus may be called the generic name: it is always capitalized. It plays a pivotal role in binomial nomenclature, the system of biological nomenclature.

Binomial nomenclature

The rules for scientific names are laid down in the Nomenclature Codes; depending on the kind of organism and the Kingdom it belongs to, a different Code may apply, with different rules, laid down in a different terminology. The advantages of scientific over common names are that they are accepted by speakers of all languages, and that each species has only one name. This reduces the confusion that may arise from the use of a common name to designate different things in different places (example elk), or from the existence of several common names for a single species.

[⇒ More ⇒](#)

Research, continued

It is possible for a genus to be assigned to a kingdom governed by one particular Nomenclature Code by one taxonomist, while other taxonomists assign it to a kingdom governed by a different Code, but this is the exception, not the rule.

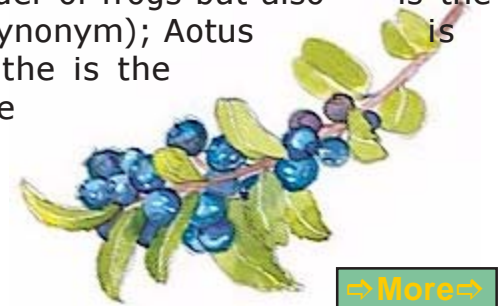
Pivotal in binomial nomenclature

The generic name often is a component of the names of taxa of lower rank. For example, *Canis lupus* is the scientific name of the Gray wolf, a species, with *Canis* the generic name for the dog and its close relatives, and with *lupus* particular (specific) for the wolf (*lupus* is written in lower case). Similarly, *Canis lupus familiaris* is the scientific name for the domestic dog.

Taxonomic units in higher ranks often have a name that is based on a generic name, such as the family name *Canidae*, which is based on *Canis*. However, not all names in higher ranks are necessarily based on the name of a genus: for example, *Carnivora* is the name for the order to which the dog belongs.

The problem of identical names used for different genera

A genus in one kingdom is allowed to bear a scientific name that is in use as a generic name (or the name of a taxon in another rank) in a kingdom that is governed by a different Nomenclature Code. Although this is discouraged by both the International Code of Zoological Nomenclature and the International Code of Botanical Nomenclature, there are some five thousand such names that are in use in more than one kingdom. For instance, *Anura* is the name of the order of frogs but also is the name of a genus of plants (although not current: it is a synonym); *Aotus* is the genus of golden peas and night monkeys; *Oenanth* is the genus of wheatears and water dropworts, *Prunella* is the genus of accentors and self-heal, and *Proboscidea* is the order of elephants and the genus of devil's claws.



[⇒ More ⇒](#)

Research, continued

Within the same kingdom one generic name can apply to only one genus. This explains why the platypus genus is named *Ornithorhynchus*—George Shaw named it *Platypus* in 1799, but the name *Platypus* had already been given to a group of ambrosia beetles by Johann Friedrich Wilhelm Herbst in 1793. Names with the same form but applying to different taxa are called homonyms. Since beetles and platypuses are both members of the kingdom Animalia, the name *Platypus* could not be used for both. Johann Friedrich Blumenbach published the replacement name *Ornithorhynchus* in 1800.

Types and genera

Because of the rules of scientific naming, or “binomial nomenclature”, each genus should have a designated type, although in practice there is a backlog of older names that may not yet have a type. In zoology this is the type species (see Type (zoology)); the generic name is permanently associated with the type specimen of its type species. Should this specimen turn out to be assignable to another genus, the generic name linked to it becomes a junior synonym, and the remaining taxa in the former genus need to be reassessed.

See scientific classification and Nomenclature Codes for more details of this system. Also see type genus.

Guidelines

There are no hard and fast rules that a taxonomist has to follow in deciding what does and what does not belong in a particular genus. This does not mean that there is no common ground among taxonomists in what constitutes a “good” genus. For instance, some rules-of-thumb for delimiting a genus are outlined in Gill.^[3] According to these, a genus should fulfill three criteria to be descriptively useful:

1. monophyly – all descendants of an ancestral taxon are grouped together;
2. reasonable compactness – a genus should not be expanded needlessly; and
3. distinctness – in regards of evolutionarily relevant criteria, i.e. ecology, morphology, or biogeography; note that DNA sequences are a consequence rather than a condition of diverging evolutionarily lineages except in cases where they directly inhibit gene flow (e.g. postzygotic barriers).



This & That

Notes from Jennifer

Daylight saving time--blessing or curse? An anomalie illustrating the whimsical picadillos of mankind.

So, what time is it? From March until September, this question is answered several ways, depending on where you are (or to whom you are reaching out). In Hawaii, American Samoa, Guam, Puerto Rico, the Virgin Islands, part of the states of Indiana and Arizona, the same clock tells time year round. The Navajo Nation participates in DSL in all three states included in its territory. In the 1950's and 1960's, each U.S. locality could start and end DSL whenever it pleased. According to the Daylight Savings Time website (<http://webexhibits.org/daylightsaving/>):

One year, 23 different pairs of DST start and end dates were used in Iowa alone. For exactly five weeks each year, Boston, New York, and Philadelphia were not on the same time as Washington D.C., Cleveland, or Baltimore--but Chicago was. And, on one Ohio to West Virginia bus route, passengers had to change their watches seven times in 35 miles! The situation led to millions of dollars in costs to several industries especially transportation and communications. Extra railroad timetables alone cost the today's equivalent of over \$12 million per year.

I will add to the industries listed some others: hospitals, fire and police (example: "the fire started at 2, 3, 4 or 5 pm").

Where did this time change idea come from? The Time and Date website (www.timeanddate.com/time/dst2010.html) has this to say:

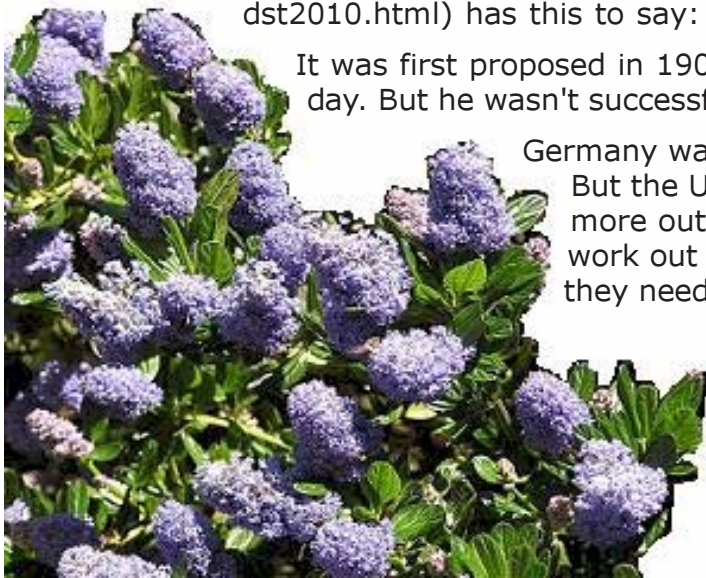
It was first proposed in 1905 by someone who thought that Londoners were missing out on most of the day. But he wasn't successful in getting it started in his country.

Germany was the first country to use it in 1916, and UK and France joined in, even Russia.

But the USA didn't start it until 1918. It was originally done to shift the time so there is more outdoor day use. Supposedly it reduces energy costs but it has never been found to work out that way in reality because people will turn on their lights and use power when they need it at either ends of the day. I think that's a myth.

DST continues to be a boon to computer programmers who devise ways to make some clocks, television stations, telephone companies, etc. reset themselves to keep up with this human intervention thought up to mess with nature.

Until next time,
Jennifer



Useful Native Plant Resources on the Web

Here is a good collection of web data bases and other gardening topics that will be useful to professional growers and all native plant gardeners. This list began from a flyer Lawyer Nursery published in 2002 grew from there. We wish to thank them for this public service.

American Bonsai Society

The bonsai organization for North America, including Mexico, the United States, and Canada.

www.absbonsai.org/

Birdchick

Hundreds of photos of birds, bees, butterflies and other friendlies. Sharon Stiteler shares the joys of birding as well as insights on rabbits. Read about her birding trip to Panama!

www.birdchick.com/

CalPhotos

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

www.elib.cs.berkeley.edu/photos/

Cornell University online grafting course

From the Dept. of Floriculture and Ornamental Horticulture College of Agriculture & Life Sciences at Cornell U. Kenneth W. Mudge, Associate Professor of Horticulture

www.instruct1.cit.cornell.edu/courses/hort494/graftage/hort494.index.html

E-Flora BC: Electronic Atlas of the Plants of British Columbia

Beautiful site, volunteer-driven. "A comprehensive picture of the plant and fungal biodiversity of British Columbia." Many thanks to Mary Sanseverino (aka Calypso Orchid) for suggesting this site be included in our list of botanical web resources. (See Mary's photos on Flickr and check out her website at www.webhome.csc.uvic.ca/~msanseve/)

www.geog.ubc.ca/biodiversity/eflora/

Fire effects on plant species

USDA, Forest Service site summarizes and synthesizes research about living organisms in the United States—their biology, ecology, and relationship to fire.

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



Rosa gymnocarpa (Bald-Hip Rose or Little Wild Rose). Photo by JoAnn Onstott

[⇒ More ⇒](#)

Useful Native Plant Resources, continued

Flora of North America Web Site

Taxonomic relationships, distributions, morphological characteristics of all plants native and naturalized found in North America.
www.hua.huh.harvard.edu/FNA/

Forest Types of the United States

Maps of the most common forest types.
www.forestry.about.com/library/tree/bltypdex.htm

Growit.com Rooting Database

"Extensive information on rooting cuttings of woody plants, organized by botanical name. Developed for commercial growers."
www.growit.com/Know/Rooting.htm

Julie's Backyard Journal

Blog by insightful gardener
www.backyardjournal.wordpress.com/

ModernBackyard

Landscape architecture provides exceptional, affordable landscape design online.
www.modernbackyard.com

The Native Plant Network

www.nativeplants.for.uidaho.edu/network/

Northwest Plants Database System

From Washington State University and WSU Clark County Extension PNW Plants, this database has 481 categorized plants and 1458 images.
www.pnwplants.wsu.edu

Noxious Weed Control

Search function, can be shown in text only
www.oregon.gov/ODA/PLANT/WEEDS/statelist2.shtml



Rosa pisocarpa (Clustered or Peafruit Rose). Photo by JoAnn Onstott

[⇒ More ⇒](#)

Useful Native Plant Resources, continued

Portland Bureau of Environmental Services

Information about caring for our earth. Download their Native Plant Poster, plant list and brochure on removing invasive plants.

www.portlandonline.com/bes/index.cfm?c=29323

River Corridor and Wetland Restoration

Environmental Protection Agency (EPA) site

www.epa.gov/owow/wetlands/restore/

Soil Science Society of America

Website for soil science professionals. Offers information and links.

www.soils.org/

Starflower Foundation

Founded in 1996 by Ann Lennart to assist with creation, rehabilitation, and stewardship of Pacific Northwest native plant communities in the Washington area.

www.wnps.org/landscaping/herbarium/#starflower

USDA PLANTS Database (Read more about this database on page 23)

Searchable for common or botanical name, shows origin, range and status

www.plants.usda.gov/

Washington Native Plant Society

Appreciate, conserve and study our native plants and habitats

www.wnps.org

Wildflower Trails of the San Francisco Bay Area

Excellent photography and trail guides.

www.westernwildflower.com/

Woody Plant Seed Manual

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.

www.nsl.fs.fed.us/wpsm/



Rosa woodsii (Wood's Rose).
Photo by Jennifer Rehm



ADVERTISEMENT

Wallace W Hansen Native Plants of the Northwest



Photo by JoAnn Instott

2158 Bower Court SE ~ Salem OR 97317-9216
Phone 503-581-2638 ~ FAX 503-549-8739

www.nwplants.com
eMail: nwplants@gmail.com

Red-Flowering Currant (*Ribes sanguineum*)

Brightly colored ornamental shrub grows quickly to 8 - 10 ft tall. Provides year-long interest, excellent wildlife habitat plant.

If you need plants native to the pacific northwest, please contact us. We CAN help you—any quantity, anytime, anywhere! We are flexible, and we have successfully responded quickly to emergency requests. And we ship throughout the USA, and beyond.

Wallace W Hansen

Native Plants of the Northwest



Photo by JoAnn Instott

Come visit us at the nursery! We have over 300 different plants in stock. Special orders welcome! Restoration, wildlife habitat, native plants for every garden.

See us online: www.nwplants.com

E-Mail: nwplants@gmail.com

**2158 Bower Court SE
Salem OR 97317-9216
Phone 503-581-2638
FAX 503-549-8739**

Golden Currant (*Ribes aureum* var. *aureum*)

Shorter sister of Red-Flowering Currant, Golden Currant is another star for your wildlife garden. The flowers and fruits are a main attraction for birds.

ADVERTISEMENT

WALLACE W HANSEN

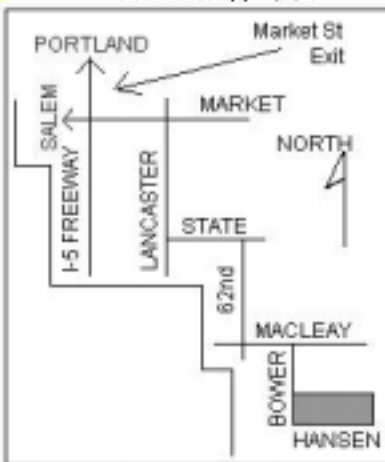
Grower – Pacific Northwest Native Plants

NATIVE PLANT NURSERY & GARDEN

TREES – SHRUBS – PERENNIALS

Over 200 Species Available Year-Round Including Wetland & Restoration Plants

A UNIQUE RESOURCE OF NATIVE PLANTS OF THE PACIFIC NORTHWEST



To drive to my Nursery,
Take I-5 to Salem, OR,
Get off at the Market Street
Exit & follow above map.

**ALL BUYERS WELCOME,
GREAT AND SMALL**

Home Gardeners, Landscape
Architects, Designers,
Contractors, Government
Agencies & Nurseries. Large
buyers request wholesale list.

I offer a unique resource – probably the largest collection of native plants in one location in the Northwest. Over 200 species in containers are available 12 months of the year, plus Bare-Root and “Balled & Burlapped” plants in the Fall & Winter. You can create a wonderful native plant garden on a small city lot or on a larger acreage. Use natives for specimen and demonstration gardens in parks and around schools and large buildings. Natives are tough, often drought resistant – this is their home – they love it here! Many have delicious fruit – many attract wildlife – animals, birds, and butterflies.

A NURSERY TRIP – WELL WORTHWHILE!

This delightful, peaceful Native Plant Nursery/Garden is located about five miles East of Salem, Oregon, on five acres of Doug Firs, Cedar, Pine, and ancient Garry Oaks. This central Willamette Valley location is an easy drive from anywhere in the Northwest. If you are interested in Natives, a tour of the Nursery/Gardens is well worthwhile (improve your plant identification skills). My nursery and gardens have often been referred to as an “Arboretum” of plants of the Pacific Northwest. You will be inspired and encouraged in your own gardening.

- VISA, MASTERCARD, CHECK ACCEPTED
- UPS SHIPPING
- PHONE & MAIL ORDERS OKAY
- SEE HOME PAGE FOR DAYS & HOURS OPEN

WALLACE W HANSEN

2158 Bower Ct, SE

Salem, OR 97317-9216

Phone: 503-581-2638

Fax: 503-549-8739

eMail: nwplants@gmail.com

Website: www.nwplants.com