

Volume 2, Issue 6, 2004

June 2004

# Northwest Native Plant Journal

A Monthly Web Magazine

(formerly NW Native Plant Newsletter)



Horticulturist Wilbur Bluhm  
On NW Native Penstemons

**Lewisia:**  
The Rest of the Story  
(Photos by Don Eastman)

**Plus--**An exciting new  
project you can do in  
your own yard

Published by The Wild Garden: Hansen's Northwest Native Plant Database

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Jennifer Rehm, Editor, author, webmaster for  
The Wild Garden: Hansen's Northwest Native Plant Database  
website: [www.nwplants.com](http://www.nwplants.com); e-Mail: [chillipepper6@comcast.net](mailto:chillipepper6@comcast.net)

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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:

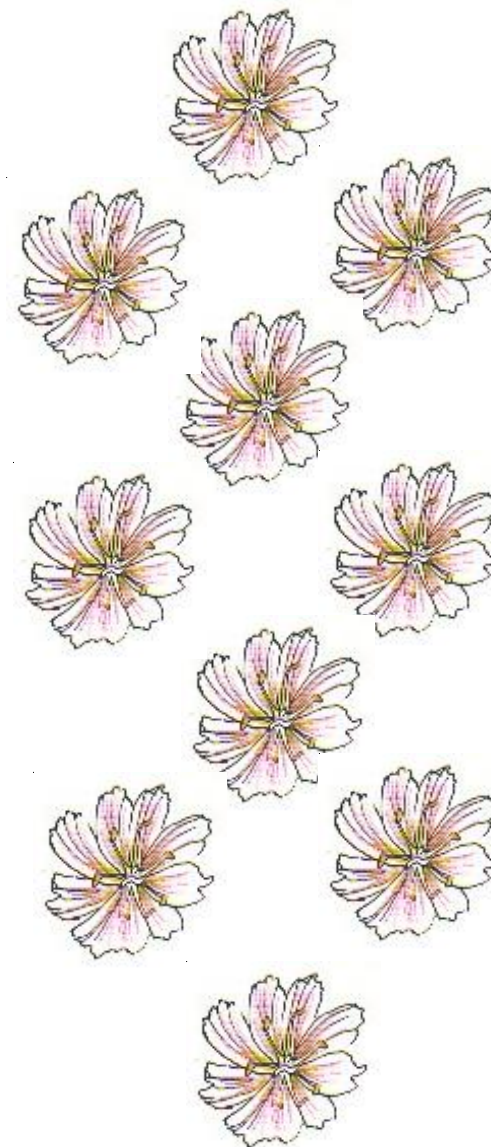
A — To generate interest, even passion, concerning the magnificent Native Plants of the Pacific Northwest.

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

## Northwest Native *Lewisia*

The photo on our cover is not a water lily, though it does resemble them. It's a perennial that is native to the Northwestern United States, *Lewisia rediviva*, commonly known as Bitterroot. Not only is this a beautiful plant, Original Peoples have relied on it for centuries as a food staple.



*Lewisia columbiana* var. *columbiana*  
Watercolor © Heidi Hansen



Another *Lewisia*,  
*L. columbiana* var. *rupicola* (Rosy *Lewisia*)  
Photograph © Donald C. Eastman



# Do you know this rare plant?

Correctly identify this plant and win a small prize!



Photograph © Donald C. Eastman

Each month in our Journal we show a photo of a “mystery” plant. If you can identify it correctly, send an email to Wally at [plants@nwplants.com](mailto:plants@nwplants.com) with the botanical name and we'll send you a high quality print of a Heidi Hansen original botanical watercolor! We must receive your answer by June 30.

Here is a special clue about this month's puzzler:

*“I don't like the ‘flat-lands’ --  
I like the tall, cold cliffs and gravel beds,  
the higher the better!”*

If you know this plant, send me an email by June 30 with the correct botanical name. Winners will receive a high quality print of one of Heidi Hansen's beautiful paintings!

Good luck!  
*Wally*  
[plants@nwplants.com](mailto:plants@nwplants.com)

Check this spot in our next issue for the answer.

*Our May Journal mystery plant was Cypripedium montanum, the Mountain Lady's Slipper. Congratulations to all who identified this beautiful native!*



# To Do List for Native Plants

## Caring for your NW Native Plant Garden

### Seed Collection

Watch now for early seed formation in your gardens and along country roads and ditches and ask friends to help. Each species matures in it's own schedule--ideally harvest just before fully ripe. Sometimes birds get there before that--pick somewhat green if you have to and let mature on their small stems at home until until they harden. If you wish seeds from public lands, always ask first with a possible exception of rural roads. Most of these are periodically attacked with mechanized and powerful ditch brush cutters--no ethical consideration if you are just ahead of one of these monsters. In general when you collect wild seed with proper approval and ethics, only take a small amount of seed--leave at least 90% of the seed for survival of the species and the myriad wildlife that live on these seeds.

### Mulch New Plantings

If you made new plantings this Spring, you need to water from time to time over the first summer--give the roots one season to go deep. After you water, renew the deep mulch around the stem but scrape away the mulch that may be higher than the natural soil/air level on the stem. Too much water higher on the stem may cause disease.

### Early Summer Cuttings

Watch for new growth wood as it starts to harden. Many cuttings can be rooted at this time of the year.



Foxglove (*Digitalis purpurea*)

**This is not a native  
plant!**

**DO NOT COLLECT SEEDS  
OF INVASIVE ALIENS!**





# Lewisia – Historic Plants of the Northwest

By Wallace W. Hansen



## Conclusion of Wally's article on Northwest Native Lewisia

This issue, we bring you more photographs and information about Meriweather Lewis' 1806 botanical find, the unusual and totally delightful Lewia.

It is a fair assumption to say that this plant was pointed out to Lewis by the native peoples who generously shared their customs, beliefs and menus with the Expedition led by Captains Lewis and Clark. It was (and in many cases still is) a staple in the diet of many members of the first nations, an important part of their lives.

Called Bitterroot today, long ago named thlee-tahn by Nez Perce, other nations call this herb by different names that all have similar meanings and all refer to Lewisia. The legends describing the first people's introduction to this plant also differ. For today's gardener, it is important to remember that Bitterroot has been honored for beauty as well as survival for as long as there have been people to pay it homage.

Original Watercolor © Heidi Hansen  
Based on Botanical Painting Circa 1853

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# Lewisia, continued

## LEWISIA IN WALLY'S GARDENS & NURSERY

### Lewisia columbiana, var. wallowensis (Wallowa Lewisia)

It is no surprise that this tiny 4-10" Lewisia is found in the Wallowa Mountains of Oregon as well as in Idaho and Montana (USDA 3-8). It is distinguished from other Lewisias by its thin leaves that are olive-colored and sometimes have a red tip. The leaves are also sparser than in other Lewisias and curl upwards. The flowers are small and striped pink on white. Like its relatives, Wallowa Lewisia does well in acidic rock gardens, particularly when grown on a slope.



Photo taken by Wally at our nursery

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# Lewisia, continued

## **Lewisia oppositifolia**

### **Opposite – leafed Lewisia**

Found at high elevations and moist soil, in the Siskiyou Mtns in SW Oregon. Two to ten inches tall. Blooms March to May. Flowers are few and have 10 white to pink petals about  $\frac{1}{2}$  -  $\frac{3}{4}$ " long.

Photographed by Donald Eastman.

**Note - Wally needs plants or seeds or cuttings of this species.**

**If you can help, send email to  
[plants@nwplants.com](mailto:plants@nwplants.com) or  
call 503-581-2638**



Photograph © Donald C. Eastman

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# Lewisia, continued

## Lewisia pygmaea

### Dwarf Lewisia

The “pygmy” Lewisia is found only in the mountains of the Western part of North America, above the tree line. A perennial, flower is small and white with dark pink veins in the petals. Leaves are succulent and rather prostrate. It grows to be 4 - 6 inches tall and spreads about 8 inches wide. It blooms mid-summer, dies down and then begins growth again in the autumn.

Prefers open, gravelly soil with some moisture but must have good drainage.



Photograph © Donald C. Eastman

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# Lewisia, continued

## Lewisia rediviva

### Bitterroot

Lewisia rediviva is deciduous, growing in sub-alpine to alpine elevations in the Pacific Northwest. It also grows at lower elevations throughout the Great Basin. It prefers dry climates and will sow its seeds readily wherever it finds suitable conditions.

The pink, satiny blooms are about 2-3" across on very short stems in May and early June as the foliage is dying. Drainage is critically important for this Lewisia's survival and will rot if this is not provided. Trials in cultivation have shown that all watering should be stopped at the end of bloom cycle and withheld during the dormant period until the new growth begins again in September. Thereafter, light watering has produced good results while the plants push the major part of their yearly growth in the fall.



Photograph © Donald C. Eastman

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# Lewisia, continued

## Lewisia triphylla

### Three - leaved Lewisia

This little Lewisia has from one to many stems rising from its basal rosette of 2-3 narrow leaves, up to 2 1/2 inches long, which are whorled. The rounded corm can be up to 4 inches deep.

There may be up to 20 flowers in panicles or in an umbel-like cluster at the end of the stems. Each flower has 2 oval sepals 1-2 inches long. The number of petals ranges from 5 to 10, white with pink veins, usually with 5 stamens.

Lewisia triphylla grows in moist, sandy to heavy soils which dry out in summer. Usually these are open areas or along side sagebrush, in open ponderosa pine forests or in subalpine areas.

The main difference between *L. triphylla* and *pygmaea* is that *pygmaea* is fibrous rooted instead of the corm of *triphylla*.



Photograph © Donald C. Eastman

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# Lewisia, continued

## Lewisia nevadensis

### Nevada Lewisia

Lewisia nevadensis grows best in moist scree, as do many of the Lewisias. It's white flowers are sometimes veined with green. Leaves are similar to *L. pygmaea* but Nevada is a larger plant.

Overall height of this plant is to 2 1/2 inches with spread of 4 inches. The deep green leaves are up to 3 inches long in the typical Lewisia rosette on which the flower stems tend to recline.



Photograph © Donald C. Eastman

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# Lewisia, continued



Photograph © Jennifer Rehm  
Lewisia in rock garden

## TIPS ON PROPAGATING LEWISIA

**Seed Propagation** - Lewisia have a winter dormancy which must be broken. You might place seed harvested in the Fall, in a plastic bag with damp sand. Leave in the refrigerator for about 3 – 4 weeks and check frequently for swelling. Remove when swelling occurs or after four weeks. Plant out in pots or directly into seed beds. Water sparingly – too much water may rot the seeds.

**Cutting propagation** - Best to take cuttings in early Spring by cutting off the offset rosettes. This material should be dried briefly and treated with a mild fungicide. Prepare a rooting medium of a mix of ground pumice and peat moss. This should be kept slightly damp, not soaked. Stick cuttings partially in mix and place the tray in a cool place with some light (not direct sunlight!) When good roots form, remove plants and plant outdoors or in pots. Don't over-water!





# Penstemons, Nature's Gift to Gardening

By Wilbur L. Bluhm, Professor emeritus, Oregon State University Extension Service, and Horticultural Consultant, Salem, Oregon

## An enlightening look at an often overlooked NW Native Perennial Wildflower

The Figwort family, Scrophulariaceae, includes many intriguing and brightly colored plants in the Western United States. Few are more interesting, colorful, and diverse than the penstemons.

Worldwide, there are 270 species of plants classified as penstemons. The 270 species, according to penstemon specialist Kenneth Lodewick of Eugene, Oregon, range from Alaska to New England and eastern Canada in the north to Guatemala in the south. Penstemons extend southward to where the North and South American tectonic plates meet, in Central America.

They are rather ancient plants. It is thought the penstemons existed in North America long ago while the two continents were “floating” independently in the sea, before the two continents met and became attached.

The 270 penstemon species likely developed over a long period of time. Their formation may, at least partially, be related to a number of geologic factors throughout North America. Uplifting of mountains is thought to have caused geographic isolation and separation of some penstemon species, resulting in formation of new ones.

Penstemon is the largest genus in the Figwort family, and the largest genus of plants native to North America. Penstemon is third largest genus of plants in the Intermountain area of Nevada, Utah, southeast Oregon, southern Idaho, southwest corner of Wyoming, and east edge of California. Only Astragalus (locoweed, milk vetch) and Eriogonum (buckwheat) are larger.

Penstemons are right at home in the West. More than 150 species grow naturally in the contiguous Western states. This does not include the many botanical varieties, naturally occurring hybrids, nor the numerous cultivars (horticultural varieties) of recent years.

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Penstemon davidsonii var. davidsonii  
Photograph © Donald C. Eastman

# Penstemons, continued



*Penstemon cardwellii*

Photograph © Donald C. Eastman

## First Naming of Penstemons

Swedish botanist Carolus Linnaeus first described the penstemons during the late 1700s. He named two eastern North America species, but he called them *Chelone*, not *Penstemon*. Both were later named *Penstemon* by John Mitchell, one of first botanists to study the penstemons.

Archibald Menzies described the first Western species, *Penstemon davidsonii* (Davidson's penstemon), a common penstemon in the Cascade Mountains of the Pacific Northwest. A Scottish physician, Menzies accompanied several explorers to North America. He found Davidson's penstemon while visiting the Nootka Indian tribe on Vancouver Island in 1787.

Today we know two varieties of this species. The variety, *Penstemon davidsonii* var. *menziesii* (Menzies penstemon), is found in the northern range of the species, and *Penstemon davidsonii* var. *davidsonii* (Davidson's penstemon) in its southern range, Oregon into California.

## Habitats

When growing penstemons in the garden it's helpful to know something of where they grow in nature.

Penstemon habitats are nearly as varied as their numbers. In nature, different species can be found from near sea level to mountain top, in forests and in dry deserts, among rocks and in quality soils. They inhabit varied terrains, including rocky inclines, ledges, high ridges, dry slopes of hills and mountains, deserts, woodlands, and meadows. Their climatic range is as great as the geographic range.

I have seen them growing in the Cascade Mountains in good but well-drained soils where annual precipitation may be 100 inches or more, much of which comes as snow. This may be in mountain forests or in more open sites. *Penstemon cardwellii* (Cardwell's penstemon), *P. procerus* (small flowered penstemon), and *P. serrulatus* (Cascade, or coast, penstemon) are examples.

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# Penstemons, continued

Some species grow on precipitous mountain rocky ledges, exposed to wind and low temperatures without benefit of snow cover. *Penstemon davidsonii* (Davidson's penstemon), *P. newberryi* (Newberry's penstemon), and *P. rupicola* (rock penstemon) can be found growing under these harsh conditions. The growing season is short in these places; the plants must flower and produce seed in a relatively short time.

I've also seen penstemons in dry and parched desert-like conditions. Annual precipitation may be no more than 10 inches, mostly during winter. Growth and flowering must be early in the season while limited moisture is still available. *Penstemon arenarius* (Nevada sand dune penstemon), *P. cinicola* (ash penstemon), *P. fruticosus* (shrubby penstemon), *P. gairdneri* (Gairdner's penstemon), *P. seorsus* (short lobed penstemon), and *P. speciosus* (showy penstemon) are examples of penstemons growing under these conditions.

As you might expect, the opposite is also true of a few species. *Penstemon rydbergii* (Rydberg's penstemon), found throughout much of the West, prefers moist, perhaps even boggy, meadows and streambanks in some of its range.

Penstemons reportedly avoid serpentine soils of California. However, *Penstemon anguineus* (tongue leaved penstemon), *P. azureus* (azure penstemon), and *P. laetus* (gay penstemon) are among those species in California and southwest Oregon that grow near if not in serpentine soils.

Most penstemons are cold hardy. A few coastal species, such as *Penstemon clevelandii* (Cleveland's penstemon) in southern California and Mexico, are more tender and sensitive to spring frosts in more northern areas of the penstemon ranges.

It's precisely this diverse habitat range and adaptability among the many penstemons, along with their form and color, which makes using penstemons so attractive and practical.



*Penstemon davidsonii* var. *praeteritis*  
Photograph © Donald C. Eastman

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# Penstemons, continued



*Penstemon davidsonii* var. *davidsonii*  
Photograph © Donald C. Eastman

## Characteristics of Penstemons

What makes a penstemon a penstemon? Certain characteristics distinguish it from all other plants.

Penstemons are herbaceous perennials or shrubs, never annuals. Their leaves are usually opposite, rarely alternate, with or without teeth. Upper stem leaves are usually sessile while lower leaves have a short stem (petiole) connecting them to the stem.

For many of us the flowers may be the most distinctive penstemon feature. The five petals become separate (lobed) at the outer end of a rather long, more or less cylindric, tube. The flower is two lipped with two petal lobes above and three below the lip division.

Flower color varies. It is commonly pink or blue or purple in varying hues. But, some penstemons have red, yellow, or white flowers. There can even be a color range within a single penstemon species. I've seen blue, purple, rose, pink, light pink, and white in various hues in different *Penstemon cardwellii* plants. Salmon, peach, and lilac are but a few other colors found in penstemons. Plant breeders have made good use of these color ranges in producing new hybrids.

More technical features also figure into defining penstemons from all other plants. They have to do with such things as attachment and nature of flower parts, hairs or lack of them within the flower, and various other characteristics.

And where does the name penstemon come from? It alludes to the five (pen-t) stamens (thread), the pollen bearing organs of all penstemon flowers.

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# Penstemons, continued

## **Pollination**

A varied collection of insects and hummingbirds pollinate different penstemon species. An assortment of bees, flies, and wasps are penstemon pollinators. Although ten or more species of hummingbirds occur in Western North America, references to them as penstemon pollinators are usually more generic than specific. The attraction of penstemons to birds is the nectar, to insects both nectar and pollen.

Many species of bumblebees, with their long tongues, are major penstemon pollinators. They can reach where other insects cannot. Bee flies, also often with a long proboscis, are important penstemon pollinators, especially in the arid southwest. Less significant as pollinators are carpenter bees, leaf cutting bees, halicted bees, and masarid wasps. All of these insects are quite hairy, helping them to collect the flower's pollen that is periodically combed off and transported on special brushes of hairs.

Honey bees, which are relative newcomers to North America, not being native here, are insignificant as penstemon pollinators. However, penstemon flowers are also attractive to honey bees, and commercial beekeepers sometimes offer penstemon honey.

Hummingbirds with their long beaks are well suited to reaching deep into penstemon flowers for the nectar. While "messing around" within the flower, pollen attaches to the bird's beak and head and is carried to other flowers. Red-colored penstemon species are especially attractive to hummingbirds.

## **Natural Variation and Hybridization**

Cross-pollination between species results in variation and hybridization in penstemons. Because pollinators usually recognize only plants that provide them nectar and/or pollen, they commonly move from a plant of one species of penstemon to a plant of another species when the two are growing nearby.

However, pollination is not cause or explanation for all natural variations within *Penstemon* species. Neither can all variations be attributed to environmental conditions, such as soil fertility, availability of water, wind, light intensity, and other factors. Variations that cannot be attributed to any of these kinds of factors are believed to be due to genetic mutations within the plant itself.

Variation within a species may also be adaptations to pollinating insects, such as to attract a specific pollinator. Color variation within a species may allow insects to discriminate between different populations, or may appeal to pollinating insects in a seasonal sequence of plant flowering involving a number of different unrelated plant species.

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Leaves, *Penstemon davidsonii* var. *davidsonii*  
Photograph © Donald C. Eastman

# Penstemons, continued

An example of the latter is of two unrelated red flowering plants, *Penstemon barbatus* (bearded penstemon) and *Ipomopsis aggregata* (skyrocket, scarlet gilia), that tend to accommodate each other where their ranges overlap by flowering at different times. In some places bearded penstemon flowers earlier than skyrocket, and in other places later. The difference in flowering time is an apparent response to competition for the pollinators, avoiding a color change or pollinator change by either plant.

Penstemons with flowers in purple to red color range tend to show more color variation. The small flowered penstemon, *Penstemon procerus* var. *brachyanthus*, a blue-purple Pacific Northwest montane to alpine species, often has flowers of white and pink. *P. barbatus*, a red species of Arizona, New Mexico, and Colorado, also has yellow flowers, as does the red *P. pinifolius* (pineleaf penstemon) of that area. The red species, *P. rostriflorus* (beak flowered penstemon), of California, Arizona, New Mexico, and Colorado can be found in solid red, red with yellow on the petals, orange, and yellow.

Distinct color variations in penstemons, whether due to plant adaptation, mutation, or other causes, are often thought to be genetic. Environmental explanations are usually considered less plausible.

Flower color variation within a species may also relate to hybridization. One of the first introductions into the trade, the cultivar 'Flathead Lake,' is alleged to be a natural occurring hybrid penstemon from Flathead Lake area of Montana.

Penstemons in the section *Dasanthus* are said to exhibit considerable hybridization. This section includes the species *barrettiae*, *cardwellii*, *davidsonii*, *ellipticus*, *fruticosus*, *lyallii*, *montanus*, *newberryi*, and *rupicola*. All are Pacific Northwest species. The ranges of *davidsonii*, *newberryi*, and *rupicola* also extend into California. The anthers of all are densely long woolly pubescent, the pollen sacs opening just across the top rather than the full length, for whatever purposes. A penstemon population at Windy Point near McKenzie Pass in the Oregon Cascades is thought to be almost exclusively *P. davidsonii* X *P. fruticosus* hybrids.

Considerable introgression, that is gene transfer from one plant to another, of *P. centranthifolius* genes into populations of *P. grinnellii* and *P. spectabilis*, have been found apparently without resulting hybridization. Hummingbirds are suspected as the transfer mode.

*Penstemon azureus*  
Photograph © Donald C. Eastman



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# Penstemons, continued

## Penstemons, A Useful Genus

Such technicalities need not bother our use and enjoyment of these fine, colorful plants. Wherever planted, in a garden, landscape, rock garden, or restoration project, penstemons readily adapt and satisfy the purpose for which used, if, of course, their cultural needs are met.

New selections, cultivars, and hybrids have greatly expanded the potential of penstemons. This has resulted in “new” colors and color combinations of both flowers and foliage, improved growth forms, longer flowering periods, and easier to grow selections.

At least 101 cultivars and 2 hybrids of native Oregon penstemons are being , or have been, offered in the horticultural trade. No penstemons, not native to Oregon, are included. Most of the cultivars of Oregon plants are of the penstemon species *cardwellii*, *davidsonii*, *fruticosus*, and *rupicola*. Few of these cultivars were developed in Oregon. Some came from as far as Europe. Selections were made with garden use in mind.

Though selection and breeding have resulted in new penstemon improvements, the many species continue to have considerable merit. The color range among the species is wide, and a number of them exhibit great adaptability to climatic and growing conditions.

Most penstemons are in the bright red to bright blue flower color range. However, among the species, selections, and cultivars you can find a broader color selection that includes white, light pink, salmon, peach, rose, magenta, lilac, purple, and yellow in varying hues.

Fortunately, penstemons are found in a range of sizes and forms. Some are upward to three feet or more. Others are much smaller, no more than 6 to 10 inches high. Some grow upright while others sprawl and can be used as groundcovers.

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*Penstemon davidsonii* var. *menzeisii*, Photograph © Donald C. Eastman

# Penstemons, continued

## Penstemon Species Present Many Use Opportunities

The 270 penstemon species offer numerous choices for use with many growing conditions and garden and landscape situations. Adaptability and versatility are characteristic of penstemons. The following species are but a few that present such opportunities.

Herbaceous penstemons, generally, are considered drought tolerant plants. A number of species and cultivars are quite cold hardy, others heat tolerant.

Penstemons are well adapted for use in the perennial border and elsewhere in the garden or landscape. They fit in well with many other plants. Some, especially some of the smaller growing species, such as *P. cardwellii*, *P. davidsonii*, *P. pinifolius*, *P. procerus*, and *P. rupicola*, are excellent rock garden subjects. All but *P. cardwellii* and *P. pinifolius* grow into California. The former's range is in Pacific Northwest, and the latter's in Arizona and New Mexico. Flowers of all but *P. pinifolius* and *P. rupicola*, which have red and rose colored flowers, respectively, are more or less blue in color.



*Penstemon procerus* var. *brachyanthus*  
Photograph © Donald C. Eastman

*Penstemon pinifolius* is perhaps the easiest of all penstemons to grow throughout the West. It has been called the “easiest going” and hardiest alpine in the entire genus.

Red flowered *Penstemon barbatus*, a somewhat sprawling 3 footer, often available in retail garden stores; *P. heterophyllus*, 1 to 2 feet high with rosy lavender to blue flowers, some of its selections quite common in retail outlets; and the spreading shrublet, a mere 8 to 10 inches high, red flowered *P. pinifolius* are all hardy and perform well throughout the West.

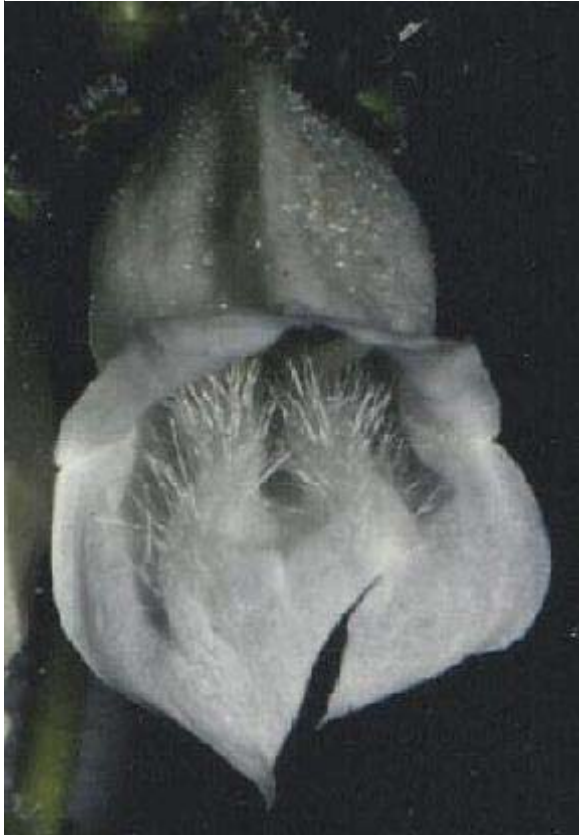
The red flowering, to 3 feet tall, *P. eatonii* (firecracker penstemon) is also adapted to a wide range of Western climates.

*Penstemon acuminatus*, *P. azureus*, *P. cyaneus*, *P. laetus*, *P. lyallii*, *P. newberryi*, *P. richardsonii*, *P. speciosus*, and *P. venustus* are attractive Pacific Northwest species that can be grown east of the Cascades, in southern and southwest Oregon, and into California. Most are plants of medium stature. Bright blue flowers are typical of *Penstemon acuminatus*, *P. cyaneus*, *P. speciosus* and *P. venustus*, and azure blue of *P. azureus*. *P. richardsonii* has bright rose to lavender flowers. The others are

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# Penstemons, continued



*Penstemon cardwellii*, closeup  
Photograph © Donald C. Eastman

deep blue violet, purple violet, or lavender. Richardson's penstemon, with attractive, coarsely toothed leaves, may be the only one in the genus that can be grown purely for its foliage.

*P. fruticosus* occurs naturally from the east slope of the Cascade Mountains to the Rocky Mountains. But, as with other penstemons not found west of the Cascades, it can be grown on the westside in a sunny, dry place with good drainage, or in a rock garden.

The magenta flowered *P. barrettiae* (Barrett's penstemon) and blue flowered *P. serrulatus* grow west of Cascades in the Northwest. Both are colorful herbaceous plants of considerable merit.

Another species group, more tender, are useful from southwest Oregon into California and Arizona. *Penstemon ambiguus* (prairie, or sand, penstemon) of southern Great Basin and south and east, *P. centranthifolius* of California, *P. pseudospectabilis* (desert beardtongue) of California and Arizona, and *P. spectabilis* (royal penstemon) are among those adapted here.

Seven species, plus two varieties, are often recommended for California. They include *P. azureus*, *P. centranthifolius*, *P. clevelandii* (Cleveland's penstemon), *P. gracilentus* (slender penstemon), *P. spectabilis*, and *P. heterophyllus* (foothill penstemon), its subspecies *purdyi* (blue bedder penstemon) and its variety *australis* (violet penstemon).

*Penstemon heterophyllus* 'Walker Ridge' (Walker Ridge chaparral penstemon) is touted as a groundcover for "all but high elevations."

*Penstemon palmeri* (Palmer's penstemon) of Utah and the Southwest, *P. parryi* of Arizona, and *P. strictus* of the Great Basin and the Southwest are useful species for New Mexico, Arizona, and southern California desert areas. *P. strictus* is cold hardy and can be grown in the coldest parts of the West.

## **Penstemon Culture**

Perhaps the greatest need of most penstemons is excellent, not just good, soil drainage. Some may tolerate less than perfect drainage, but poor drainage assures failure for most. Many benefit from a loose, sandy, or gravelly soil. Given this, they are neat, self-contained, free flowering and adaptable to garden culture.

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# Penstemons, continued

As a rule, penstemons prefer a sunny exposure, though those from a woodland habitat will tolerate some shade. With shade, expect more rank growth and reduced flowering.

Irrigation and fertilization must be done with discretion. Either too much water or too high fertility can be harmful. Some penstemons are rather intolerant of “rich” soils. Mildew may also be a concern with overhead irrigation and crowding of plants.

Plants from higher elevations may be especially sensitive to soil moisture, drainage, and exposure conditions. Judicious irrigation and some shading may be desirable. Plants growing on rock cliffs may require rock garden conditions.

And, occasionally, we see the exceptions. A few years ago, while walking down a neighboring street, a bright reddish plant in the distance stood out. Coming closer I recognized it as the rock penstemon, *Penstemon rupicola*, in flower. It was happily growing on a sunny foot-high mound of silt loam soil.

Penstemons are relatively easy to propagate. Cuttings from young basal shoots root well, as do pieces of root crown with attached leaf rosettes. Seed germination is also not difficult. Germination may be slow, up to a year after planting. Seed of many species germinate better if stratified for one to three months prior to sowing. Plant division is more likely to be difficult, especially with the woody species.

Penstemons are typically rather short lived plants, even with best of growing conditions, though I have seen some cultivars, such as ‘Scarlet Queen,’ live for more than ten years. Early English rock garden authority Reginald Farrer said, “Late summer....and autumn see the climateric of their blossom, which is brilliant in proportion as the life of the individual plant is inclined to be brief, Penstemons usually having but a lush constitution, preferring a crowded hour of glory rather than a longer existence of mere usefulness.”



*Penstemon venustus*

Photograph © Donald C. Eastman



# The Transformation of a Garden

By Jennifer Rehm

Once a common landscape in Salem, Oregon, a determined woman transforms her yard to a NW Native masterpiece (I hope).



It began one day last month. The grass/weed combination I called a lawn grew to the stage where it had to be cut or it would disgrace the neighborhood. The young man who kept the stuff cut for me in exchange for some pocket money was out there with his radio stuck in his ear, trudging back and forth behind my ancient electric mower. I was enjoying the smell of new-mown dandelions when suddenly all went still in the front yard. Occasional stops for radio adjustments are fairly common but this one lasted longer than usual. When I went to investigate, he had the mower turned upside down and was peering at the bottom of it with a combination of consternation and confusion on his face. The mower had simply stopped. No warning, no choking or smoke, just a dead stop. We unplugged and jiggled and spun the blade but nothing could coax that old timer to return to action. Hmmm, this was a real poser.

Photograph © Jennifer Rehm

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# The Transformation of a Garden, continued

What to do? The yard was exactly half mowed. I hadn't budgeted for a new lawnmower this year. The master plan for my garden called for the front yard to be converted from the detested alien grass that came with the place to easy-care, low maintenance and earth friendly native plants in three years. I could not just let the lawn go, I live in a nice neighborhood in the suburbs and we all take care to make our homes look good. This half cut/half uncut style was not on the accepted list of landscape styles. In truth, it was an eyesore.

Should I buy a new lawnmower that was not in the plan to keep up grass I did not want? Investigation was in order. We went off to the nearest hardware store to see what was available. I hoped I'd find one of those battery-powered robot mowers that magically mow in random patterns whenever they take the notion and recharge themselves in their little garages when they get low on power. There were none. All the mowers we found were big hotshot gas things with loads of features that I had no use for.

So right there in the middle of the lawnmower department I made a decision: change the plan! I suddenly saw this situation as a message to me to follow my heart instead of letting the circumstances push me into something I truly did not want to do.

We went to the paint section and bought heavy duty black plastic--lots of it. And some little u-shaped things sort of like croquet hoops only smaller to hold it down. We went straight home and covered the entire front yard with plastic. No more mowing! Ever! We left the beds surrounding the house as they were but all that grass was gone for good. (Or at least it will be soon.)



Photograph from the kerb  
© Jennifer Rehm

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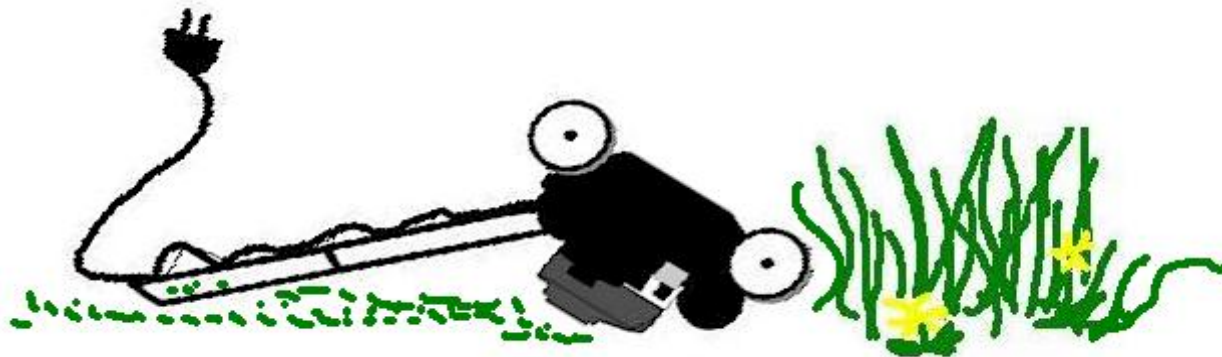
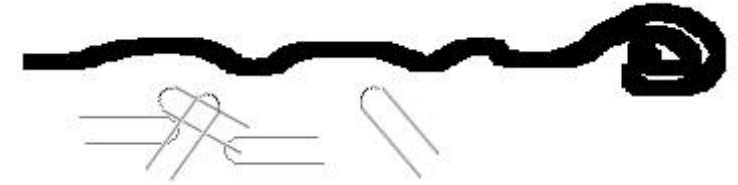


# The Transformation of a Garden, continued

The edges are pretty raggedy right now but the grass is browning up nicely under it's blanket of black. By the end of the summer it will be cooked to a fair-the-well and that's when the fun begins! I've got to poke some holes in the plastic so the rain will get through. That will prevent puddles and aid the composting (good compost must be moist to cook properly).

And I will trim the edges and tidy it up so it looks nicer and so those few greens poking out won't go to seed. But that's the only things I have to do for upkeep right now.

I'm considering making some special tools to perforate the plastic. I think a couple of foot-sized pieces of plywood with big nails pounded through them should do the trick. I can strap them on over my Dr. Scholls and take a walk on the plastic. Maybe that young man would like to earn some more pocket money . . .



One surprising thing I learned from this already: you can recycle lawnmowers in the scrap metal bin of the transfer station! A local man who repairs mowers shared this tidbit with me when I asked if he'd have any use for the old machine. Thought he could salvage some parts or something but he said it was too ancient.

Stay tuned. We'll report on this project each month as it progresses.



# 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*

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## **American Bonsai Society**

[http://www.absbonsai.org/abs\\_home.html](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.



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# 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.



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# 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**

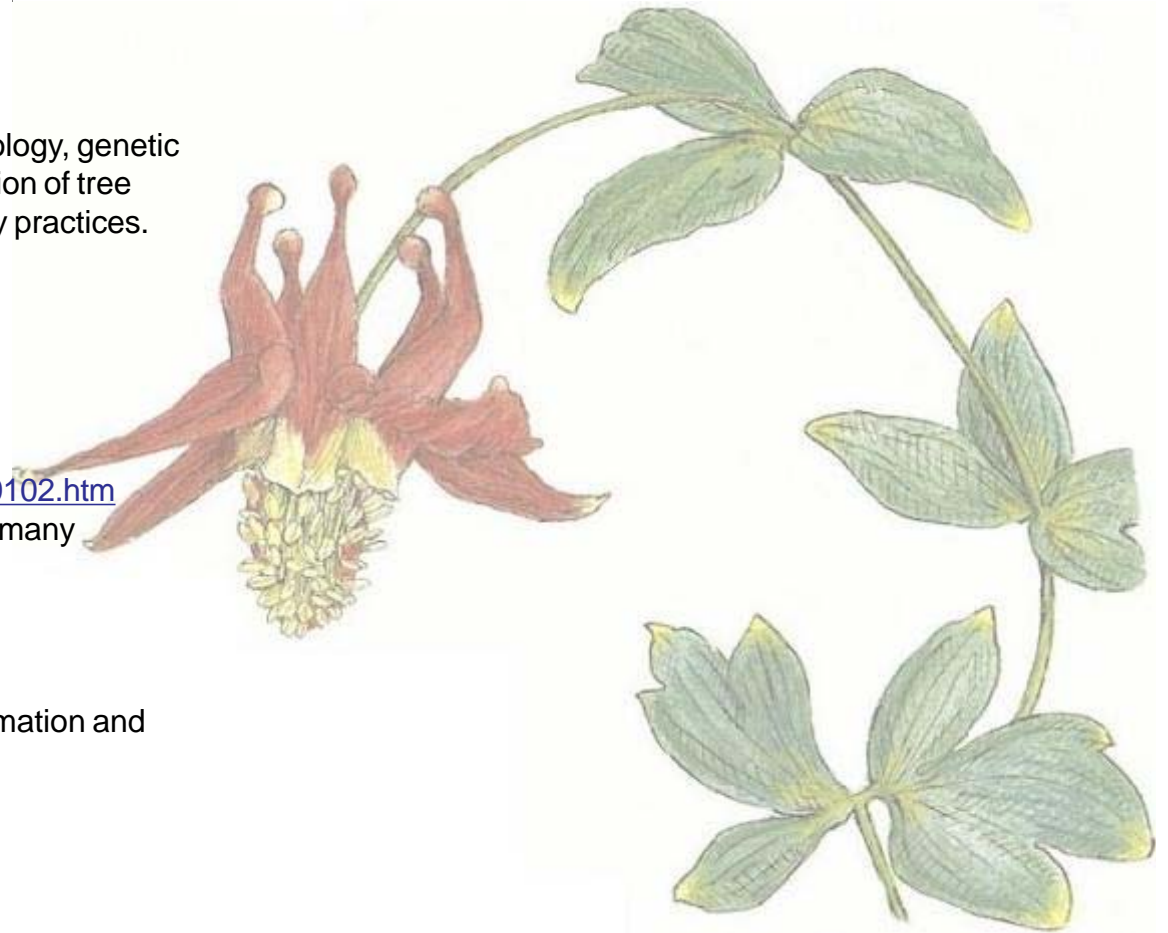
<http://homepages.which.net/~fred.moor/soil/links/10102.htm>

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.



# Coming next month:

## Summertime in the Northwest



Our big summer journal is in the works right now and it promises to be a real winner. This will be a combined issue for July and August. We'll return to monthly journals in September 2004.

~ Photos and original art are an important element in the Journal. We've got lots of visual treats to share.

~ Jennifer's garden transformation continues with tips for those of you who are thinking about a similar project.

~ Looking for natives--they're everywhere! Follow us through some scenic spots worth seeing.

Your ideas are always welcome. If you have photos or thoughts about native plants you'd like to share, please do! If you've got a nice way with words and would like to write an article for our Journal, please contact Wally at [plants@nwplants.com](mailto:plants@nwplants.com).

Art in a local garden: the blues and aquas of these pillars add a new dimension to the fresh green of the Star-flowered Solomon's Seal (*Smilacena stellata*)

Photograph © Jennifer Rehm





# Personal notes from Wally



Even an old tree stump can be a lovely  
native plant display.  
Julie created this serene vignette in our  
nursery  
Photo © Jennifer Rehm

## A Native Plant Garden

### Private Refuge In A troubled World

My “Native Plant Garden” is a nicely wooded area of about 5 acres. Our House and my Office are part of this “Garden,” about five miles East of Salem, Oregon. Myriad native plants in containers make up the Nursery, integrated seamlessly with thousands of growing native trees, shrubs and perennials as part of the garden. This garden is restful, calming—almost spiritual—a refuge in a world increasingly of danger and uncertainty.

If you do not have some garden that will provide a sanctuary for you, why not start planning now—this summer? There are many other advantages that may help you decide. Property with large trees often sells for 10–20% more than “no trees” property. Trees can keep your property cooler in the summer and warmer in the winter. My gardens are about 10 degrees cooler in the summer than downtown Salem, Oregon, about 8 miles away, during hot summer days. The air is fresh and clean. The trees want the carbon dioxide and give back pure oxygen—how nice!

Native plant gardens can be small—you do not need 5 acres or 1 acre—an average size lot will be a start! And no more summer watering, after you have the plantings well started!

Good Luck!!

*Wally*

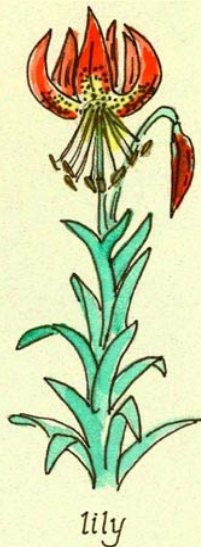




**NOTICE: NURSERY IS CLOSED**

**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.



Tigers! ~ Photograph © Rory

**[www.nwplants.com](http://www.nwplants.com)**

Our website, [www.nwplants.com](http://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!**