

Volume 13, Issue 2-2016; February 2016

NW NATIVE PLANT JOURNAL

A Monthly Web Magazine

**Not ordinary
perennials, p26**

Watering wisely, p28

Plant science:
The anatomy of
a leaf, p32

Saving Monarchs, p10

Contents

In Every Issue

About this Journal.....	3
Garden chores to do now.....	9
On the Cover.....	4
Staying in touch.....	5
This 'n That Notes from Jennifer.....	44
Wildlife Corner.....	6

The Wild Garden: Hansen's Northwest
Native Plant Database
www.nwplants.com
Editor: Jennifer Rehm, Webmaster



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Feature Articles

Anatomy of a Leaf, Part 2, A primer, continued..32

Poetic interlude.....23

**Rainy humor, You might be from
the northwest if you:..31**

Something different

Not ordinary perennials.....26



Water: Use it wisely

From Clean Water Connection..28

While in Mexico

Monarch's southernmost resting place....25



Steps to a rescue

**Monarch Butterfly (*Danaus
plexippus*)...10**



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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.).



On the Cover:

Fireweed, *Chamerion angustifolium* var. *canescens*

An extremely hardy perennial for smashing color in the garden, USDA zones 1-9.

The flower spikes open from the bottom up and can be subtle rose pink to vibrant magenta in color.

Give adequate sunlight and plenty of space to grow. Adding a handful of wood ash in the planting hole is a tradition among old time gardeners and the plants seem to thrive on it.

Fireweed is the floral emblem of the Yukon. A personal favorite.

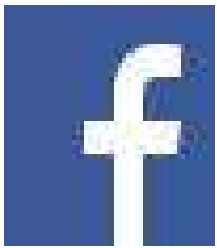


Staying in touch

The Wild Garden is on Facebook

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Send me an email anytime: nwplants@gmail.com



Wildlife Corner

Out back with the animals

Well, I never! Today, 2 of the resident squirrels were kind of cuddling together in one of the treat boxes affixed to a Paper Birch. I could see they weren't mating, but doing what? The one on top, a girl, was nuzzling the neck and back of the bottom squirrel. Then the girl climbed higher up, draped herself over his back, gave him a little love behind his ear, and climbed down. He took his turn nuzzling around on her back.

They continued this action for several minutes before scampering off together.

Maybe, just maybe, they are a real mating pair who will be adding two or three little squirrels to the neighborhood!

If that happens, the new babies will be named Phil, Bert and, if it's triplets, the third one's name will be Hazel in honor of the filberts we got from a co-op of hazelnut farmers. Those little nuts have raised the diets of squirrels and other wild things to an extremely high level.

This grooming/mating behaviour is the real deal. Look it up! I googled 'squirrels grooming' and got a video, blogs, and some expert opinions. Interesting. For sure, there will be no squirrels in my house. There's inside cute and outside cute. These are definitely outies.

Our supply of corn was running low, a quick trip to the feed store. Their prices for larger quantities are very fair compared to grocers and even pet stores. The quality is excellent and earth friendly as well. A new bag of songbird seed mix and corn acquired, back to the homestead.

[⇒More⇒](#)



Wildlife Corner, cont'd

All the same, I'm looking for a new provider for the corn. I know that hog farmers feed their pigs corn so I'm investigating that route. Every little savings is appreciated. The discovery of the filbert source was a godsend. The price range was \$25 for two pounds to a 50 pound box for \$25.

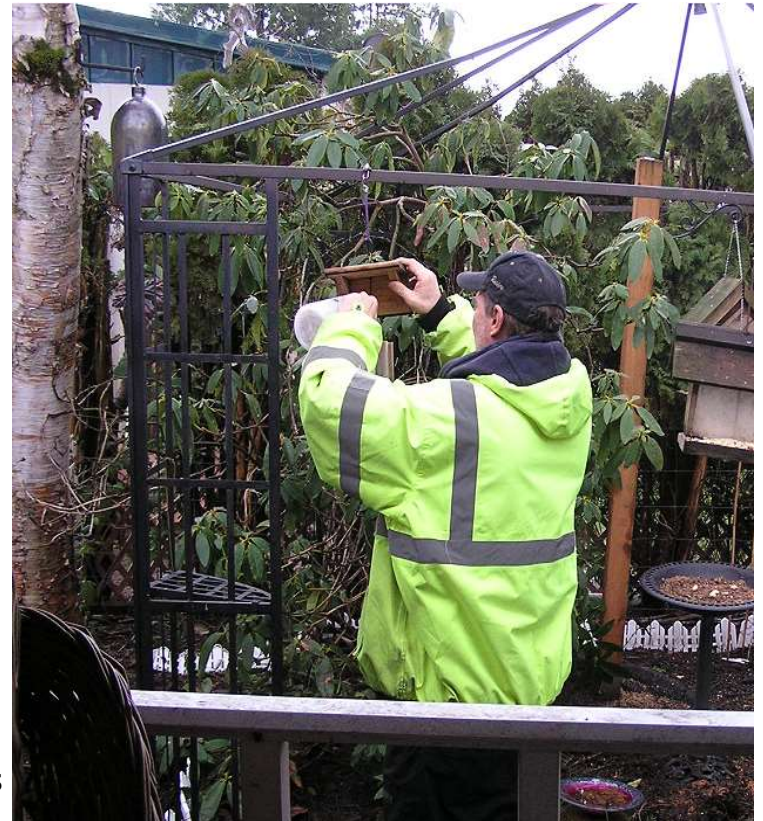
Every day when Jeff replenishes provisions in the bodega, Western Gray Squirrels and birds of many sorts all gather round on alert for spilled bites to jump on immediately. Mostly, everybody sits at a respectful distance, usually talking amongst themselves as they wait. As he scoops from each bag in the metal cans, every eye is on the man who feeds them daily, not a peep out of a single one. When he moves to another feeder, they feast.

Jeff is paying his chosen penance for having killed a number of wild things with his bb gun as a kid, so he gives loving care to all our friends who live in the neighborhood or stop by for a visit. He also spreads the word about how much the wildlife do for us all if only we'd just let them.



I read recently that opossums do good work in the garden. It's a mixed good/bad scene in my opinion. 'Possums does eat some plant-eating bugs and slugs. But they also eat birds, eggs and berries. This article mentioned that, because they eat berries, they are useful as seed dispersers. For me, there are lots more negatives than positives. They are welcome in the wilderness area behind my house but not in my garden.

Filberts ready for the picking



Jeff filling feeders in the bodega

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Wildlife Corner, cont'd

Help birds stay warm this winter

In winter, birds can succumb to storms, frigid temperatures and poor food supplies in winter. To help them out:

- Quality high fat food

- Keep feeders full

- Shelter

- Water--as important in winter as in summer

How to Make a Brush Shelter

Quick, easy, low-cost and fun, this sturdy structure of logs and branches provides shelter while allowing enough spaces inside for animals to move around.

Use large logs to make a strong base. Lay them out in a rectangle or diagonally like a teepee to serve as a base for the shelter. Large tree stumps, big rocks, even pallets do well here--

nothing painted or varnished. Incorporate tree tops, limbs, leaves, discarded holiday trees, whatever you can find to fill in empty spaces. Weave sticks and twigs, shrubbery trimmings and what-have-you in smaller diameters to tighten up the outside of the pile.

You'll want openings no larger than 8-10 inches into the pile at ground-level and spaces inside at different levels and sizes where the wild things can take safe refuge off the ground from elements and predators.

The average shelter is about 10 feet in diameter and 5-6 feet tall, but smaller sized shelters will work. I like to make a haven that discourages cats. A few noisy items such as bells, baby rattles, etc. can sound an alarm when predators approach.



Garden chores to do now

Pearly bits of wisdom & just plain common sense

Every garden has its own unique qualities, and each one deserves its favorite care.

In my wildlife garden, it is too soon to pick up the spent flowerheads and stems from the summer. Until spring, these are providing sustenance for the wild things. It looks a little messy but not disreputable. Removing the stalks after the first frost deprives birds of a source of winter sustenance but also disposes some of next year's pollinators and other beneficial insects that fertilize native plants and food crops and help keep garden pests in check.

Come spring, there will be a whole lot of cleaning and trimming and tidying up. But before that we'll be pruning the fairy rose and the hybrids in the rose garden.

I'm fond of broadcasting wildflower seeds in several areas of my garden in late fall and again in the winter months. A lot are eaten by birds or just spread around, but many do take hold and grow. In a few days I'll put out the rest of the seeds for coneflowers, aquilegia, monkeyflower and whatever else is left. At the very least, the seeded places will be poked and prodded, dug into and have holes scratched among them as the wild things take rightful possession. Fun to watch--always surprises in my garden.

Bare-root trees and shrubs will be coming available now. Pick a spot and plant them. Watch closely for distress from wind, snow or fallout from surrounding plants. Soon as the newbies take hold, half the battle will be won.

Now is a good time to check over outdoor rooms. Note any furniture that's looking tired. Plan for painting, repair, new covers for cushions. Get containers ready for planting in a month or two. Wind chimes and other garden art will need a lookover as well.

If you've got early flowering shrubs, consider trimming some for forcing indoors. They'll breathe springtime into your home.



Steps to a rescue

Monarch Butterfly (*Danaus plexippus*)

There are concerns currently about the monarchs, much discussion about their possible demise. Is this an unrequired lamenting, or is it a justified cry for help? I'm convinced it's the real deal.

"In the last 20 years, the monarch butterfly population has dropped by 90%. In humanp-population terms, that's the equivalent of losing every living person in the U.S. except for those in Florida and Ohio." National Aquarium's Waterblog, http://aqua.org/blog/2014/november/monarchs-ultimate-race?gclid=CMnVypqOjMoCFRSRfgodU_gFvQ



Photo credit: Didier Descouens

There are 4 major threat factors for this particular case, all are bonafide:

Global Warming - Climate change alters the timing of migration and rainfall patterns in their forest habitat.

Habitat Loss - In the United States and Mexico. Many migratory resting sites are being logged or damaged by people. When the damage is severe, the monarchs don't have a place to stay. Development, especially urban sprawl takes over the fields of wildflowers on which butterflies depend.

Forest Fragmentation

Pesticides/Herbicides - Chemicals meant to kill some insects that attack crops, also kill other insects, including butterflies. Herbicides, used to kill milkweed and other wild plant species, reduce the plants and flowers available to feed the butterflies and caterpillars.

It is predicted that one of the many effects of climate change will be wetter and colder winters. If they are dry, monarchs can survive below freezing temperatures, but if they get wet and

the temperatures drop they will freeze to death. Because hundreds of millions of monarchs are located in such a small area in the Sierra Nevada of Mexico winter, a cold snap there could be devastating.

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Steps to a rescue, cont'd

The Fall of Monarchs

Monarch butterflies have been beautifying backyards across North America for centuries, their brilliant orange and black wings swooping in for snacks and delighting all who catch a glimpse. In the past 20 years, however, these seasonal visitors have become much more difficult to spot. The species is facing a 90 percent population decline, prompting at least three major conservation groups to call for its designation as threatened.

Part of the problem lies in the lack of milkweed. A perennial flowering plant, milkweed is critical to the butterflies' survival. It provides nectar along the migration route and is the only plant on which these insects can lay their eggs. However, it's quickly disappearing from the Midwest as farmers cultivate more land for agricultural use.

Individuals can help by promoting protective legislation through online petitions, such as the one at biologicaldiversity.org. Equally easy: Plant milkweed and other nectar plants to create a "monarch way station" around your own home-or recommend the planting of these monarch food

sources in other areas of the community. Your contribution can help ensure the preservation of the species and the continuation of the incredible insect's migration throughout North America.

<https://www.nwf.org/Wildlife/Wildlife-Library/Invertebrates/Monarch-Butterfly.aspx>



Photo credit: Kenneth Dwain Harrelson

Monarch butterflies cannot fly if their body temperature is less than 86 degrees. They will sit in the sun or "shiver" their wings to warm up.

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Steps to a rescue, cont'd

Reasons for hope

IUCN (International Union for Conservation of Nature) has designated the monarch migration a threatened phenomenon. In 1986, the Mexican government created the Monarch Butterfly Biosphere Reserve which protects 62 square miles of forests in the Sierra Madres where hundreds of million of monarchs spend each winter. The Biosphere Reserve was expanded to include 217 square miles in 2000. Local organizations are also working to stop the illegal harvesting of trees on the reserve to protect wintering habitat.

<http://www.randomscripts.com/milkweed/milkindex.htm>

The Center for Biological Diversity

In March 2015, the Petition for Protecting the Monarch Butterfly under the Endangered Species Act was now in the hands of the U.S. Fish and Wildlife Service. The Public Comment period closed March 2015, giving F/W 9 months to determine what comes next. That 9-month period ended December 2015.

https://www.biologicaldiversity.org/news/press_releases/2015/monarch-butterfly-03-02-2015.html

Climate change may disrupt the chemistry of milkweeds; gardeners can help monarchs by planting more of these critical host plants

Monarch nectaring on Black Huckleberry, *Gaylussacia baccata*, native to eastern United States and Canada

Photo credit: -2012 Photo Contest Seney Natural History Association



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Steps to a rescue, cont'd

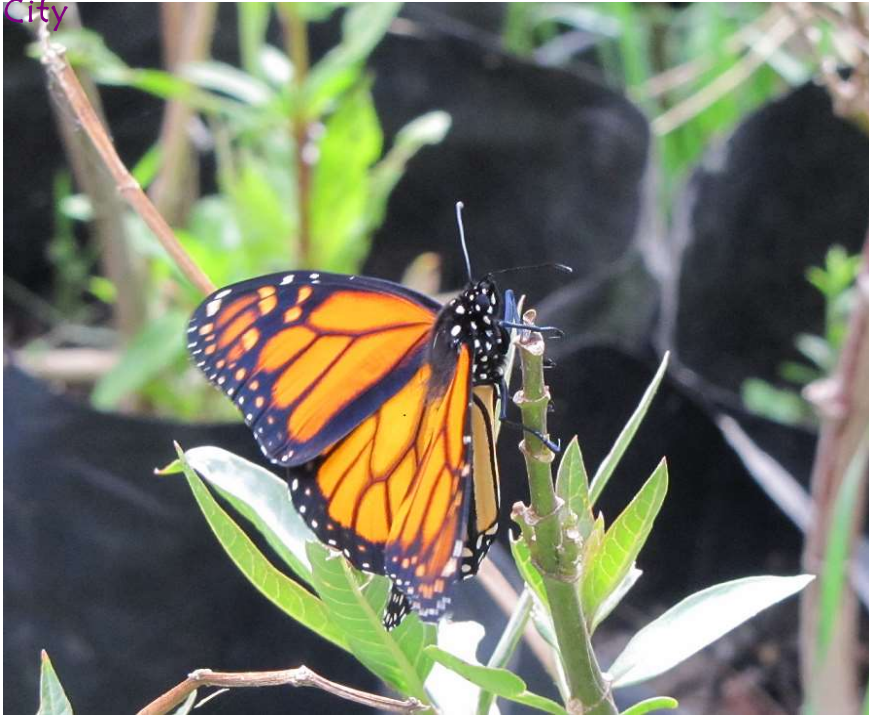
One man's experiment

Tom Landis of Central Point, Oregon, planted a patch of milkweed the size of a card table last spring with seeds he collected himself, hoping his if-you-plant-it-they-will-come project could mean regular visits from rare monarch butterflies, perhaps as early as next year.

But the retired Forest Service nursery expert peeled back the fuzz last week to find a tiger-striped, green-and-white monarch caterpillar munching away on his heavenly smorgasbord. This pile of weeds is gold to its royal denizens.

"You literally can make a difference," Landis says. "There you are. It's cool."

Photo credit: Angélica Martínez,
MonterreyInstituteofTechnologyandHigherEducationMexico
City



Butterfly rush in Michoacán, Mexico
Photo credit: Scott Clark

[⇒More⇒](#)

Steps to a rescue, cont'd

John Hergenrather at Good News Gardening urges:

"PLANT MILKWEED!"

"Raise plants, collect seed, give them away, and encourage others to plant them."

But only plant milkweeds native to your region. Here in the Pacific northwest, the two species native to the Mid-Columbia: One is the narrowleaf milkweed (*Asclepias fascicularis*) which likes drier conditions. The other is showy milkweed (*Asclepias speciosa*). It likes moderate garden moisture.

After the first year, showy milkweed will flower every year in June and July, followed by biggish seed pods that start ripening in September.

In the Pacific northwest, plant seeds outdoors in fall, or refridgerate for spring or summer planting. If planted outdoors in fall, they'll germinate in April or May when the soil warms up.

The seeds can be started inside in spring where the warmth will encourage germination and growth. Plant them out 1-2 feet apart in a sunny location.

See more about growing milkweed at <http://www.creationencounter.com/monarch/>.



MONARCH



VICEROY

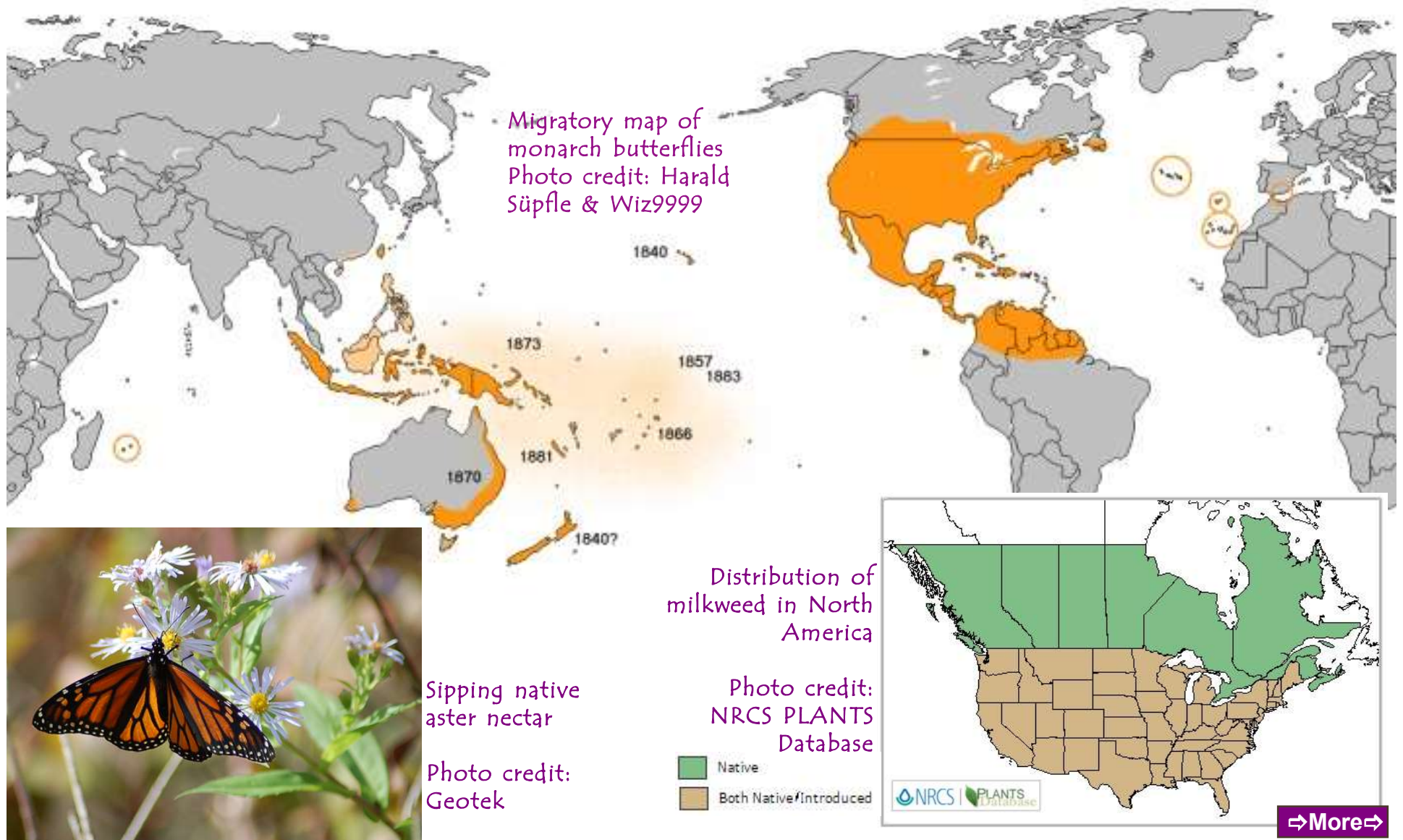
MONARCH MIMIC

*The poisonous Monarch is mimicked by the non-poisonous North American Viceroy butterfly (*Limenitis archippus*), which has a similar shape, coloration and patterns. Predators who have learned to avoid the Monarch will also avoid the similar-looking Viceroy.*

Photo credits: Viceroy, Piccolo; Monarch, Derek Ramsey

⇒More⇒

Steps to a rescue, cont'd



Steps to a rescue, cont'd



Photo credit: glmory

Mexican Whorled Milkweed, *Asclepias fascicularis*

Northwest native flowering perennial sending up many thin, erect stems and bearing distinctive long pointed leaves which are very narrow and often whorled about the stem, giving the plant its common names.

It blooms in clusters of lavender, pale pink, purple, white, to greenish shades of flowers. They have five reflexed lobes that extend down away from the blossom.

The fruit pods are the smooth milkweed type, which split open to spill seeds along with plentiful silky hairs. Blooms from late Spring to late Summer.

--Wikipedia

Photo
credit:
Curtis Clark



Seed pod-
seeds are
gone, the
pod's
cloak is
rendered
by the sun

Photo
credit: The
Marmot,
USA



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Steps to a rescue, cont'd

Showy Milkweed, *Asclepias speciosa*

Milky-sapped perennial plant in the Dogbane Family (Apocynaceae), known commonly as the showy milkweed. It is native to the western half of North America. This flowering plant is a hairy, erect perennial.



Photo credit: Dcrjsr

The large, pointed, elongate, simple, entire leaves are arranged oppositely on stalks.

The eye-catching, hirsute, pale pink through pinkish-purple flowers occur in dense umbellate cymes. Their corollas are reflexed and the central flower parts, five hoods with prominent hooks, form a star shape. The fruit is a large, rough follicle filled with many flat oval seeds, each with silky hairs.

This species flowers from May through September.

Native Americans used fiber in the stems for rope, basketry, and nets. Some Native Americans believed the milky sap had medicinal qualities, however, most species of milkweed are toxic.

--Wikipedia

Photo credit: Matt Lavin,
Bozeman, Montana



Exploding seedpod

As Mork from Ork said, "Fly! Be free!"

Photo credit: Public domain



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Steps to a rescue, cont'd



The other milkweeds native to the Pacific northwest

***Asclepias cordifolia*, Heartleaf Milkweed**

Heart-leaf milkweed grows 1 to 2 ft, with dark red-purple flowers, large opposite heart-shaped leaves, in open or shaded woodland, rocky slopes and in mixed coniferous forest. It blooms from May to July.

Photo
credit:
First
Light

Photo credit:
publicdomain



[⇒More⇒](#)

Steps to a rescue, cont'd

***Asclepias cryptoceras*, Pallid Milkweed**

This milkweed grows in many habitats, especially dry areas. Low growing against the ground or drooping. Thick leaves are round to heart-shaped arranged oppositely on the short stem. A cluster of small flowers with centers of bright to dull pink hoods are surrounded by pale corollas.

Photo credit: Mary Winter



Photo credit: Jim Morefield



[⇒More⇒](#)

Steps to a rescue, cont'd

Common Milkweed, *Asclepias syriaca*

Found in sandy soils and other kinds of soils in sunny areas. Leaves are opposite or sometimes whorled with velvety undersides. Fragrant flowers.

Photo
credit: H
Zell



Photo credit: Jason Hollinger



Photo credit: Peter Gordon

[⇒More⇒](#)

Steps to a rescue, cont'd

If you're of a mind to step into this fight for the monarchs, just do this:

- ▶ Select your milkweeds from those species that are native where you live (or where you want to plant--it doesn't have to be your garden, it could be anywhere but more fun at your home, I think)
- ▶ Pick out a spot in your garden that has the type of soil, moisture, and amount of sunshine your chosen milkweed requires. Make this choice one that would be where the milkweed lives in the wild. It will be easy for you and the plants. It can be a container you can move around for best exposure or can be admired best.
- ▶ Prepare the spot for optimum plant health, and put in the milkweeds.

A word of encouragement: There may be ants coming to suck up some nectar. They will come, and then they will go. They are dedicated to this task. Please do not interfere, this is part of the grand plan for our world.



Newborn Monarch released from the chrysalis
Photo credit: Andy Reago and Chrissy McClarren

Here's where you might find some seeds:

Save Our Monarchs, <http://www.saveourmonarchs.org>

Live Monarch, <https://www.livemonarch.com/free-milkweed-seeds.htm>

Monarch Butterfly Garden, <https://monarchbutterflygarden.net/milkweed-plant-seed-resources/>

Xerces Society, <http://www.xerces.org/milkweed-seed-finder/>

Monarch Watch Milkweed Market, <http://monarchwatch.org/milkweed/market/>

And especially see The Oregon Milkweed Project's facebook page at <https://www.facebook.com/oregonmilkweed>

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Steps to a rescue, cont'd

ONLINE RESOURCES

The Oregon Milkweed Project at <http://www.randomscripts.com/milkweed/milkindex.htm>, begins:

*"The Oregon Milkweed Project consists of one person collecting and distributing seed of 2 native Oregon milkweeds (*Asclepias speciosa* and *A. fascicularis*) for the express purpose of recreating habitat for Monarch Butterflies. There are no governmental agencies, corporations or non-profit organizations involved."*

It goes on to give the basics of the plan as envisioned by the author, Richard Harding. This old site is now superseded by this facebook page: <http://www.facebook.com/oregonmilkweed>.

Friend Harding has taken on a heroic endeavour. I urge you to support him in this. It is a forward step to putting monarchs back together. Check him out. Easy steps we all can do.

The Butterfly Website, A really interesting site devoted to butterfly gardening, with lots of links to butterfly gardening resources. <http://www.butterflywebsite.com/>

Capital Press, Milkweed 'gardens' attract monarch butterflies, <http://www.capitalpress.com/Oregon/20140923/milkweed-gardens-attract-monarch-butterflies>

The Center for Biological Diversity, https://www.biologicaldiversity.org/news/press_releases/2015/monarch-butterfly-03-02-2015.html

Defenders of Wildlife's fact sheet on monarchs, <http://www.defenders.org/monarch-butterfly/basic-facts>

EnchantedLearning.com is a user-supported site for teaching on a plethora of topics. This article was intended for 1st and 2nd graders; however, it is an excellent introduction to the monarch butterfly. <http://www.enchantedlearning.com/subjects/butterfly/species/Monarch.shtml>

Monarch Watch: Education, Conservation, Research. <http://www.monarchwatch.org/>

National Aquarium's Waterblog, presents "The Ultimate Relay Race," published October 29, 2014, the story of monarch migration in an interesting way. http://aqua.org/blog/2014/november/monarchs-ultimate-race?gclid=CMnVypqOjMoCFRSRfgodU_gFvQ

Xerces Society, A large, international organization based in Portland which promotes education about butterflies and other invertebrates. <http://www.xerces.org/>



Poetic interlude

An Ode to Milkweed

Milkweed growing oh so strong,
welcoming Monarchs with your fragrant song!

Leaves so tasty, green and bright,
filling caterpillars with certain delight!

Life will grow on leaf and stem,
then flutter off to begin again.

Milkweed, milkweed growing strong,
thank you for bringing Monarchs along!

by Nicole Hamilton

Milkweed Babies

Dainty milkweed babies, wrapped in cradles green,
Rocked by Mother Nature, fed by hands unseen.
Brown coats have the darlings, slips of milky white,
And wings--but that's a secret,--they're folded out of sight

The cradles grow so narrow, what will the babies do?
They'll only grow the faster, and look up toward the blue.
And now they've found the secret, they're flying through the
They've left the cradles empty,--do milkweed babies care?

--Eleanor Smith's Songs for Little Children, No. 2



[⇒More⇒](#)

Poetic interlude, cont'd

Migration midpoint: what we can see from here

- David Williams

We can't see the warm,
rising spirals of air
these monarch butterflies ride,

or their caterpillar selves filled up
with leaves of silk-thread milkweed
way back in New Brunswick,

or the dense, silk drapes
their gathering will make
in the firs of Michoacan.

From here, we can see
their wind-torn, stubborn
lines joined by one desire—

to fulfill the journey
and set out fresh,
as they have since

long before we scratched
our claims on sky and earth.
Fragile, essential, monarchs pass

reflected in your fresh eyes.
We hear wings in your voice
when you whisper

Look!

Photo credit: Lisafern



While in Mexico

Monarch's southernmost resting place

Sacred Fir or, in Nahuatl, Oyamel, *Abies religiosa*



A fir native to the mountains of central and southern Mexico (Eje Volcánico Transversal, Sierra Madre del Sur) and western Guatemala. It grows at high altitudes of 2,100–4,100 metres (6,900–13,500 ft) in cloud forest with high rainfall and cool, humid summers and dry winters in most of its habitat regime but in the state of Veracruz to the east it grows with precipitation all year long. Regular winter snowfalls occur on the highest populations.

Photo credit: Tim & Annette



Arrival! Photo credit: hspauldi



Something different

Not ordinary perennials

Purple Chinese Houses or Innocence, *Collinsia heterophylla* (syn. *Collinsia bicolor*)

A flowering plant native to California and the Peninsular Ranges in northern Baja California.

Collinsia heterophylla is an annual plant growing in shady places, 4–20 in height. It can be found in most of California (other than desert regions) below about 3,300 ft.

It blooms from mid spring to early summer. Like other species in the genus *Collinsia*, which also includes the Blue-eyed Marys, it gets its name from its towers of inflorescences of decreasing diameter, which give the plants in full flower a certain resemblance to a pagoda.



Of the same family is Spring Blue-eyed Mary, *Collinsia verna*.

Photo credit: Steven Faucette



Photo credit: Stickpen

[⇒More⇒](#)

Something, cont'd

Franciscan Wallflower, *Erysimum franciscanum*

Endemic to northern California coast, a member of the wallflower genus in the mustard family, the Brassicaceae.

The plant is a biennial or short-lived perennial. Flowers are cream-colored to yellow, with four sepals and four petals arranged in a cross shape, a characteristic of the Brassicaceae. It flowers from late winter to late spring.



Prefers open scrubby areas with a fair amount of sunlight, but can flourish on a range of soils including disintegrating serpentine, gravelly and sandy soils. It is fairly easily cultivated in gardens.

Wallflowers come in a wide variety of colors--many on the same plant! Most have wonderful fragrance. This is "Chelsea Jacket," cultivar of *E. cheiri*. Photo credit: Ramin Nakisa

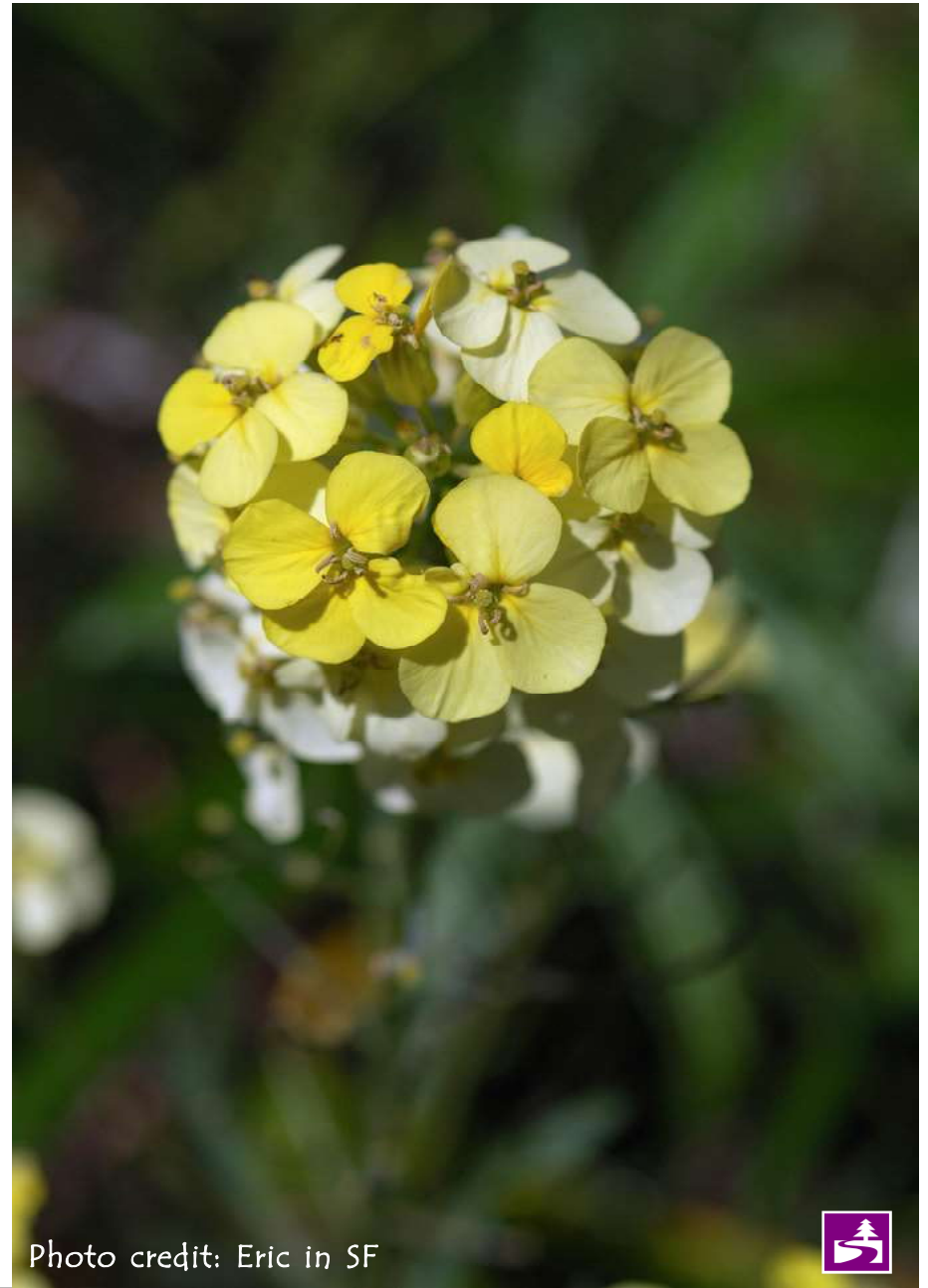


Photo credit: Eric in SF



Water: Use it wisely

From Clean Water Connection

The over-abundance of water coming out of the sky this winter may fool us into thinking last summer's drought was a fluke, that we have our old wet northwest back.

- *Put all types of wipes in the trash, not the toilet.*

Even though they may be marked as "flushable," don't.

Says CWS: "These products don't dissolve. They clog pipes and cause expensive and time consuming repairs for homeowners. These products also clog public sewer pipes and pump station equipment leading to sewer backups. Save yourself and your wastewater utility from a pain in the drain—put wipes, rags and towels in the trash, not the toilet!"

I might add, tampons and other feminine products of this type are also not safe to flush. Frank Zappa wrote a song about this.

- *Find ways to save water.*

CWS offers these 10 ways:

- 1. Let your dishwasher do the work. The average dishwasher uses about 10 gallons or less per load. Many kitchen faucets use the same amount of water by running for just four minutes. Let your dishwasher do the work!*
- 2. Thawing food? Use the microwave, a bowl of water, or place it in fridge overnight instead of running the tap. You'll save about two gallons of water for each minute the faucet does not run.*



[⇒More⇒](#)

Water: Use it wisely, cont'd

3. *Know where and how to turn off your home's water supply in case of emergencies. If a pipe bursts anywhere in the house this valve turns it off.*
4. *Want ice-cold h₂o? Chill a pitcher ahead of time rather than letting your faucet run until the water is cool. You will save more than two gallons of water for each minute the faucet does not run.*
5. *Wash only full loads. The dishwasher and clothes washer use about the same amount of energy and water regardless of the number of dishes or clothes inside, so run full loads whenever possible.*
6. *Regularly check for & repair water leaks. Even small leaks can waste hundreds to thousands of gallons of water a month. Many water leaks can be fixed by a do-it-yourself plumber, and repair parts are relatively inexpensive to purchase (\$5-20).*
7. *Done with your holiday baking? Use your leftover food coloring to check your toilet for leaks.*
8. *Freeze the grease instead pouring it down the drain. Keep your kitchen sink draining well by this holiday season by pouring all cooking grease into a can, freezing it, and then tossing the frozen contents into the trash.*
9. *Scrape instead of pre-rinsing. Save yourself up to 20 gallons of water by scraping food off your dishes instead of pre-rinsing them. ENERGYSTAR qualified dishwashers and today's detergents are designed to do the cleaning so you don't have to. If your dirty dishes sit overnight, use your dishwasher's rinse feature. It uses a fraction of the water needed to hand rinse.*
10. *Rain, ice, and snow can play havoc with water pipes. Avoid the expense and inconvenience of frozen pipes during an extended cold spell by winterizing your home.*



Water: Use it wisely, cont'd

- ▶ *Pick up after pets and throw waste in the trash.*

Did you know that our local rivers and streams have fecal bacteria that exceed clean water standards? According to a DNA study (335KB, PDF), dog waste alone accounts for almost 15% in some local streams. What can you do to help keep our water safe and clean? Follow these easy steps:

Pick up after your pet.

Throw pet waste into a garbage can.

- ▶ *Freeze the grease instead of clogging pipes by dumping it down your drain.*

Grease from cooking, gravy, cooking oil, and sauces may look harmless as a liquid, but when it cools it gets thick and sticky. That means if you pour grease down your drain, it sticks to pipes and eventually causes clogs and messy overflows.

Prevent backups in your home by pouring all bacon, fried chicken, and other cooking grease into a can, putting in the freezer, then tossing it in the trash.

- ▶ *Safely dispose of expired medications.*
- ▶ *Recycle paint instead of throwing it away.*
- ▶ *Get bills electronically to save paper.*
- ▶ *Put yard debris into your yard waste bin or compost to prevent neighborhood flooding.*

*Photo credit: Juni from
Kyoto Japan*



Rainy humor

You might be from the northwest if you:

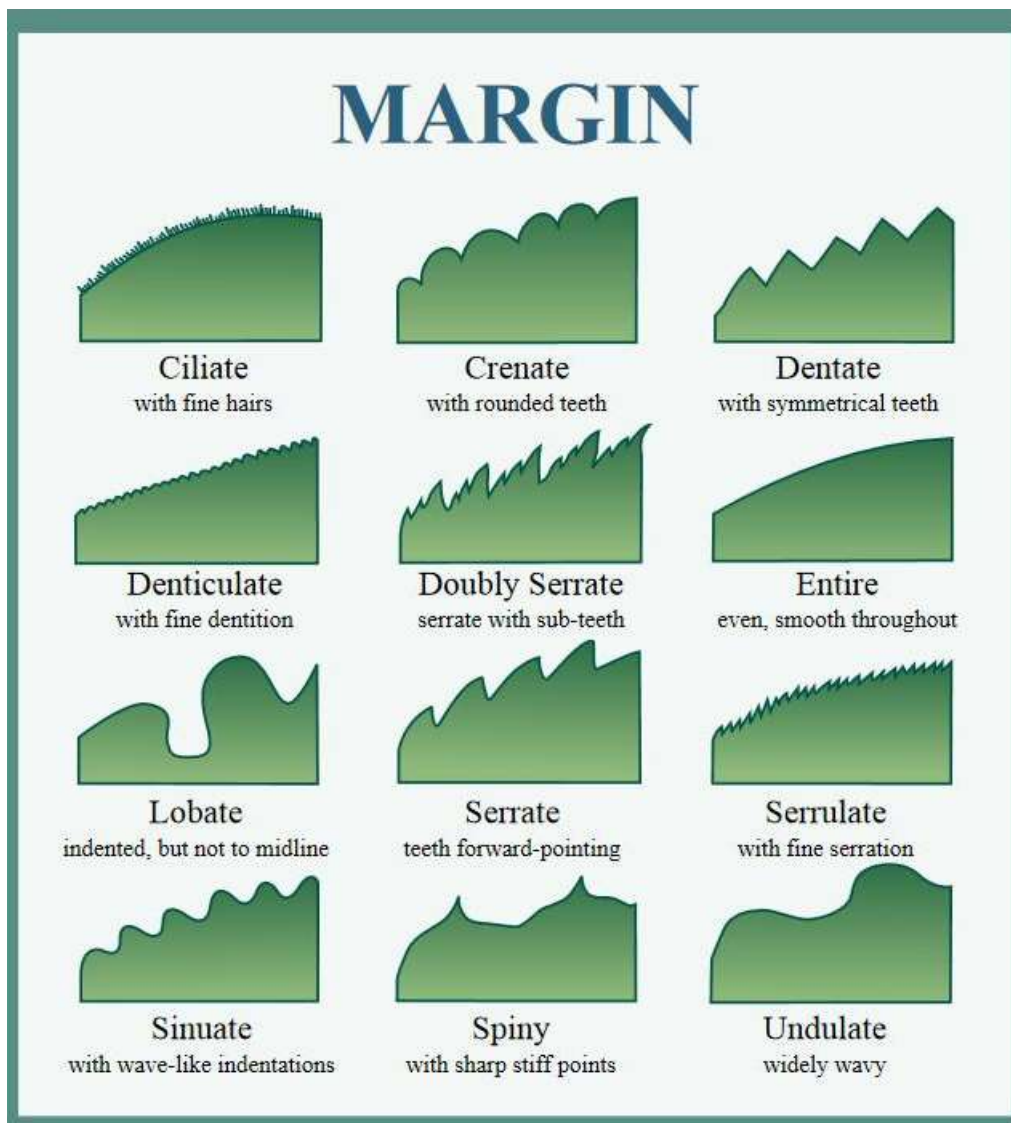
You feel guilty throwing aluminum cans or paper in the trash.
Use the statement "sun break" and know what it means.
Know more than 10 ways to order coffee.
Know more people who own boats than air conditioners.
Feel overdressed wearing a suit to a nice restaurant.
Stand on a deserted corner in the rain waiting for the "Walk" signal.
Can taste the difference between Starbucks, Seattle's Best, and Veneto's.
Know the difference between Chinook, Coho, and Sockeye salmon.
Know how to pronounce Sequim, Puyallup, Issaquah, Oregon and Willamette.
Consider swimming an indoor sport.
Never go camping without waterproof matches and a poncho.
Have no concept of humidity without precipitation.
You exclaim "the mountain is out" when it is a pretty day and you can actually see it.
Put on your shorts when the temperature gets above 50, but still wear your hiking boots and Gore-Tex coat.
Switch to your sandals when it gets about 60, but keep the socks on.
Have actually used your mountain bike on a mountain.
Think people who use umbrellas are either wimps or tourists.
You often switch from "heat" to "a/c" in the same day.
You use a down comforter in the summer.
You design your kid's Halloween costume to fit under a raincoat.
You think that the start of deer and elk season is a national holiday.
Pop is not only what you call your dad, but is the ONLY name for soda.

From Moving to Portland
<http://www.movingtoportland.net/oregon/humor/>

Photo credit: Tom W
Sulcer & Haley Sulcer



Anatomy of a Leaf, Part 2



A primer, continued

Last month we examined the shape and arrangements of leaves. In identifying plants, this is the first quality to be determined. For the most part, it's an easy one. Once you have familiarized yourself with the terms used to designate the leaves of each plant, you are ready for

Part 2: Margin

The margin of a leaf is simply the outside edge. You can see this with the naked eye. If you gently run the soft pad of a finger along the edge of the leaf, you can get a good picture in your mind of the more minute qualities that may be harder to determine with a glance. The ciliate leaf, for example, may be so fine they are virtually undetectable without magnification.

Mind, all leaves are not kind to tender fingers, i.e. the spiny margin. Even with the first touch barely skimming over the plant margin, the spines can really hurt. It might be prudent to turn a bright light on the specimen and utilize a powerful glass prior to touching. Aside from terribly sharp edges some leaves have a bit of poison that can cause dermatitis that is difficult to get rid of. Proceed with caution.

Photo credit: [Wikimedia Commons](#) [derivativework](#) [McSush](#)

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



SERATE LEAF MARGIN

***Amelanchier alnifolia*, Serviceberry**

A choice deciduous shrub that reaches 6 – 10' at maturity.

Extremely hardy, ranging from the Pacific coast to the prairies, USDA zones, 3-10.

This plant likes rocky, dry slopes and well-drained thickets in full sun. Given a generous layer of mulch it will require minimal attention.

Blue-green foliage, delicate 2" flower clusters and brilliant red/yellow fall color. Pea size purple fruits make fantastic pies and preserves. Great in the wildlife garden.

Fall color

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



CILIATE LEAF MARGIN

Bramble Leaf

(This is the best illustration I found of a ciliate leaf margin. The bramble is not identified.)

Photo credit: zephyris

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



DOUBLY SER- RATE LEAF MAR- GIN

***Alnus viridis* ssp.
sinuata, Sitka
Alder**

A beautiful shrubby tree grows to 15' tall and 10' wide.

It is found at high elevations along the coast from central Alaska to California and east across North America in USDA zones 2-8.

It grows quickly to form thickets that provide wildlife habitat.

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



DENTATE LEAF MARGIN

***Fragaria chiloensis*, Coastal Strawberry**

A superb evergreen ground cover, does well in sun or partial shade.

True to its name, this strawberry is native to beach areas and other inhospitable growing sites from Alaska to Chile and in Hawaii as well (USDA 7-10).

It spreads by runners to forms low, compact mats, 6 - 12" high.

The leaves are leathery with red tints in winter.

Large white flowers in the spring are followed by delectable berries that put store-bought berries to shame!

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



DENTICULATE LEAF MARGIN

Penstemon serrulatus, Cascade Penstemon

Moist low elevations along the coastal regions of Alaska, British Columbia, Washington, and Oregon call this perennial native's name.

Cascade Penstemon will develop into a cold hardy subshrub in UDSA zones 5-8.

The trumpet shaped flowers tend to be clustered atop the long stems and are blue to lavender sometimes with a yellow beard.

This penstemon thrives near the waters edge and the moist woodland setting so it will do well in a sunny garden situation that is given water.

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



ENTIRE LEAF MARGIN

Prunus emarginata, Bitter Cherry

This attractive tree is sure to bring the birds to your yard! It is native from BC, south to California, east to New Mexico and Montana, in USDA zones 4-8. It is found in riparian areas at low to middle elevations and also an important species to pioneer after logging.

Photo credit:
Rory Nichols

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



LOBATE LEAF MARGIN

***Quercus garryana* var. *garryana*, Garry Oak**

Found on dry hillsides along the coast from BC to California and inland to the Sierra Nevada in USDA zones 6-9, this old timer prefers full sun and tolerates drought and harsh winds.

Growing slowly to 90,' Garry Oaks can live for 500 years.

Their leathery dark green leaves, 3 - 6," turn brown in the fall. The leaves are very high in nutrients (especially phosphorous) and make exceptional mulch.

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



SERRULATE LEAF MARGIN

***Tilia cordata*,
Small-leaved
Lime**

This tree is not a northwest native, but is used to illustrate a serrulate leaf margin.

In Britain, *T. cordata* is considered an indicator of ancient woodland, and is becoming increasingly rare.

Photo credit:
Roger Griffith

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



SINUATE LEAF MARGIN

***Quercus sadleriana*, Sadler's Oak**

This shrubby evergreen oak is native to Oregon and California, but is hardy to USDA zone 5.

It grows to 5 - 10' with a spread of 3.'

Sadler's Oak is best planted in partial sun and watered only moderately until established. Do not fertilize.

This is an excellent variety for small gardens.

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



SPINY LEAF MARGIN

***Quercus vaccinifolia*, Huckleberry Oak**

A delightful, shrubby evergreen oak, very similar in appearance to the tree, Canyon Live Oak, but reaching only 4 - 5.'

Native to dry sites at high elevations in California, Nevada and Oregon, Huckleberry Oak is hardy in USDA zones 7-10.

In the wild, bears, deer and a variety of birds feed on the acorns.

[⇒More⇒](#)

Anatomy of a Leaf, Part 2, cont'd



UNDULATE LEAF MARGIN

Lewisia cotyledon var. heckneri, Heckner's Lewisia

This lewisia blooms from Mat - July. In the wild, it prefers lower coniferus forests.

It was among 178 species of plants that were first collected by Meriwether Lewis in the early 1800s, during his quest for the Northwest Passage.

The most critical requirement for successfully growing Lewisias is near-perfect drainage around the plant's crown to prevent rot during the winter months.

Plenty of fine gravel, coarse sand or granite grit should be mixed in with the soil at planting time.



This & That

Notes from Jennifer

Saw on a wildflower report the other day that Indian Biscuitroot, *Lomatium piperi*, was blooming around Horsetheif Butte. This native perennial is said to be edible, as are most of that family. It served as a staple in native American diets. That nice long stem may be suseptible to bouquets, I'm thinking.

There are wildflower reports posted as they occur on the website OregonWildflowers.org, a creation of native plant enthusiast, Greg Lief. Photos are regularly posted on the related facebook page at <https://www.facebook.com/groups/oregonwildflowers/>. You will find both resources to be both educational and inspirational.

Watching the rain in between sun breaks is so soothing. The air smells clean. The birds bask in the droplets, impromptu baths all around.

The little native clematis, Western Blue Virginsbower, *Clematis occidentalis*, has leaves sprouting already. It is a bit delicate, climbing on its own trellis that stands behind the Bhudda in my garden, but never fails to give a few blue flowers. Lovely plant. I've no idea how old it is--'twas here when I bought the place. An elegant gift.



Photo credit: Vernon Smith

Until next time,
Jennifer

