A vibrant field of yellow wildflowers and tall, reddish-brown grasses on a hillside. The flowers are in full bloom, and the grasses are reaching their peak. In the background, a dense forest of tall evergreen trees is visible under a clear blue sky.

NATIVE POLLINATOR PLANTS
For Southern Oregon

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Layout and Design: David Steinfeld - Native Restoration Consulting

Cover Photo - A mixture of native grasses, such as squirreltail (*Elymus elymoides*) and forbs, such as Oregon sunshine (*Eriophyllum lanatum*) provide excellent pollinator habitat along roadsides. This roadside in southern Oregon was established after a road construction project by hydroseeding native seeds. Photo: David Steinfeld

EXTINCT?



Photo: Robbin Thorp

Franklin's bumble bee was known to have the most restricted range of any bumble bee in the world, living mainly in the Klamath-Siskiyou Ecoregion of northern California and southern Oregon, with some occurrences in the southern Cascades. Since 1998 the population of the Franklin's bumble bee has dramatically declined. World-renowned native bee specialist, Dr. Robbin Thorp, U.C. Davis emeritus professor of entomology, believes the main reason for this decline is due to the introduction of exotic disease from commercial trafficking of this species from Europe. Yearly surveys performed by Dr. Thorp in the 1990s showed that the Franklin's bumble bee was readily found; however, it has not been found since 2006 and is believed to be in imminent danger of extinction, if it is not extinct already. The Xerces Society also lists the following threats to the Franklin's bumble bee: habitat loss due to destruction, degradation and conversion, as well as pesticides and pollution. We can only hope that the Franklin's bumble bee is still out there pollinating native wildflowers.

CONTENTS

1 Basic botanical concepts and the importance of pollinators	5
1.1 What is a pollinator plant?	5
1.2 Characteristics of desirable pollinator plants	6
1.3 Pollinators in decline	8
2 Early-Season Flowering Plants	10
2.1 Camas	11
2.2 Horse mint	12
2.3 Red flowering currant	13
2.4 Oregon grape	14
2.5 Mountain lilac	15
2.6 Lewis' mockorange	16
3 Mid-Season Flowering Plants	17
3.1 Narrowleaf milkweed	18
3.2 Showy milkweed	19
3.3 Fireweed	20
3.4 Oregon sunshine	21
3.5 Coyote mint	22
3.6 Oceanspray	23
4 Late-Season Flowering Plants	24
4.1 Asters	25
4.2 Buckwheats	26
4.3 Hummingbird trumpet	27
4.4 Coneflowers	28
4.5 Goldenrod	29
4.6 Rubber rabbitbrush	30
5 References	31

Basic botanical concepts and the importance of pollinators

What is a pollinator plant?

Pollinators have rightfully been getting more attention and recognition lately, but what exactly is a pollinator and what do they do? Some plants, like most grasses and conifers, are wind pollinated, while aquatic plants may be pollinated by water; however, most flowering plants have evolved with the pollination assistance of insects and other animals. There is a growing awareness that pollination is an essential ecosystem service. It is estimated that three-fourths of the world’s flowering plants and about 35 percent of the world’s food crops depend on insects and other animal pollinators (NRCS 2015).

A pollinator is the biotic agent, or vector, (e.g. bee, butterfly, etc.) that transports pollen from the male anthers of a flower to the female stigma of a flower to accomplish fertilization (Fægri and van der Pijl, 1979). Bees are the most prolific and well-known pollinators, but butterflies, beetles, ants, flies, wasps, hummingbirds, bats, as well as many larger animals are also known to pollinate flowers. In fact, the color and shape of flowers have evolved to attract pollinators and facilitate fertilization.

While all plants have pollen, some do not produce nectar (Table 1) and would not be visited by butterflies, hummingbirds and other pollinators than cannot use pollen for food. Examples of southern Oregon native plants that do not produce nectar include California poppy (*Eschscholizia californica*) (Figure 1), lupines (*Lupinus* spp.), and sagebrush (*Artemesia* spp.) (Root and Root 1919).

So, for the purposes of creating habitat (food, shelter, and water) for butterfly pollinators, including the monarch (*Danaus plexippus*), it’s critical to know which native plants are nectar

	Pollen	Nectar
Definition	A fine powdery substance, typically yellow, consisting of microscopic grains discharged from the male part of a flower or from a male cone. Each grain contains a male gamete that can fertilize the female ovule.	A sugary fluid secreted by plants, especially within flowers to encourage pollination by insects and other animals.
Food Source	Pollen provides vital protein and fats.	Sugar is metabolized for energy or stored as fats.
Used By	Bees use pollen to make a stored food known as bee food, that is fed to their larvae.	Most pollinators: bees, butterflies, moths, flies, beetles, hummingbirds, and bats.
Bottom Line	All flower plants have pollen.	Only some plants produce nectar.

Table 1. Comparison of pollinator terms

producers. Although some plants, like lupines and sagebrush, don't produce nectar, they may still be a larval host plant for butterflies in Oregon, making them crucial for the butterfly's lifecycle.

Characteristics of desirable pollinator plants

Ideas to consider when choosing which plants to include in your pollinator garden:

Perennials vs. annuals - Annual plants must regenerate from seeds each season, whereas perennial plants will grow for more than one year, typically going dormant each winter and emerging again in the spring. Many annuals are good nectar and pollinator plants, establishing quickly and providing a burst of flowers, followed by abundant seeds that may readily self-sow and spread on their own. Be sure to site them accordingly, as annuals can become weedy in irrigated gardens. Self-sowing can also be a very desirable trait, depending on your objectives. Perennial plants will "stay in place" and flower for many years, and if they self-sow, will do so at a slower pace than annuals.

Bloom times - Native plants have a definite flowering period which vary considerably in timing and duration, influenced by factors such as elevation, aspect, and culture, especially irrigation and fertilization. The objective of a functional and attractive pollinator garden is to use a palette of species that will bloom throughout the growing season. Use at least three different species from within each of the following bloom times: early season, mid-season, and late season (Pendergrass and others 2008). This will provide a variety of pollen and nectar sources, supporting efficient pollination and a wide range of pollinators. The CalFlora (<http://www.calflora.org/>) and OregonFlora (<http://www.oregonflora.org>) websites cover most native plant species found in our area, and CalFlora features handy pie charts that show each species' bloom time by month (Figure 2).



Figure 1. While all plants produce pollen, not all produce nectar, including the California poppy (*Eschscholzia californica*). Photo: Klamath-Siskiyou Native Seeds

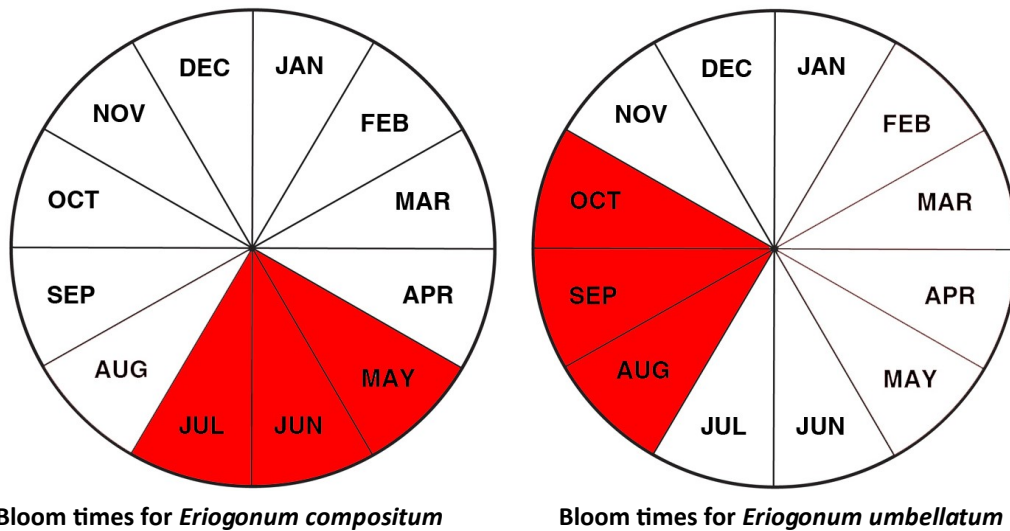


Figure 2. Use plants that flower at different times in the growing season to ensure that something is always in flower. Some species within the same genus, such as wild buckwheats (*Eriogonum* spp.), flower at different times.

Natives vs. cultivars - What is a native plant? The answer to this question is much more complicated than it might seem. In one of the first issues of the Native Plants Journal, commonly used definitions were compared and discussed (Smith and Winslow 2001). For our purposes, we'll define native plants as those plants that were originally found in an area and were not introduced either directly or indirectly by humans. We define our area as southern Oregon and the plants we have selected are found locally, although some are more common than others.

If you decide to use plant cultivars (cultivated varieties) instead of native plants for pollinators, it is important to select plants that have been the least hybridized by plant breeders. Many times pollen and nectar have been sacrificed for a showier flower. This is especially true for "double" flowers, where a bee may spend precious energy trying to enter a flower with no pollinator value.

Garden use vs. wild planting - The species in this publication have been highlighted to encourage the use of native plants for pollinator conservation in a garden setting. Although each species is native to southern Oregon, some are only found in specific areas and may not be appropriate for outplanting in a natural forest, woodland, or meadow setting. Be sure the species already occurs on or nearby a natural area on your land before planting. The PLANTS database (www.plants.usda.gov) shows plant species range maps by county to state for all native plants. If you are unsure you can consult a local botanist associated

with the Siskiyou Chapter Native Plant Society, the BLM or Forest Service. Be mindful that native plant species can have multiple subspecies or varieties, so it is important to use plants originating in your local geographical area to ensure the conservation of local plant genetics and regional adaptation.

Pollinators in Decline

Butterflies. Several native butterflies are fighting extinction in Oregon, while the populations of many others have been steadily declining. The most recognizable butterfly in decline, the monarch butterfly, has a geographically distinct population west of the Rockies that mainly overwinter along the California coast. The western population of monarch butterflies, which migrate through southern Oregon, has seen a 90 percent decline in its population since 1997. The efforts of Southern Oregon Monarch Advocates (SOMA) are helping turn this trend around, by advocating for improved monarch butterfly habitat in southern Oregon. SOMA provides education and participates in planting monarch “waystations,” native plantings that incorporate the exclusive larval host plant for monarchs, native milkweed (*Asclepias* spp.), as well as nectar plants to help refuel monarchs for its epic migration.

Bees. The Xerces Society for Invertebrate Conservation keeps a “red list” of native bee species that are in peril. Oregon alone has fifteen species on that list, including the western bumble bee (*Bombus occidentalis*), listed as imperiled, and the Franklin’s bumble bee (*Bombus franklini*), listed as critically imperiled or possibly extinct. Both of these species used to be common in southern Oregon, however, the Franklin’s bumble bee hasn’t been seen in the Siskiyou Mountains since 2006, and the western bumblebee is now rarely seen in southern Oregon. Pesticides are known to have a devastating effect on wild pollinators. Pollinator Project Rogue Valley (www.pollinatorprojectrogu山谷) is advocating that pesticides be dramatically scaled back in southern Oregon by pushing for policy reforms on a local level.

Unlike the non-native, social honeybee, the majority of native bees are solitary. Seventy percent of our native bees nest in the ground, making it important to leave bare areas in a pollinator garden, without heavy mulch, where female bees can build their nests.



Figure 3. Since 1998, the western bumble bee (*Bombus occidentalis*) has undergone a dramatic decline. Once common and widespread throughout the western United States and western Canada, the western bumble bee has largely disappeared from its former range, including southern Oregon, where it is now rarely found. Photo Stephen Ausmus, USDA ARS

Early-Season Flowering Plants

Camas: common camas (*Camassia quamash*), great camas (*Camassia leichtlinii*)

Historically a staple root crop for Native American tribes throughout its range, camas is also regarded as an attractive and easy-to-grow pollinator plant. Camas loves moisture in winter and spring, but also needs summer drought to allow bulbs to cure. Plant bulbs in the fall as you would other ornamental bulbs, and you will be delighted with gorgeous spring flowers.

Great camas



Photo: Klamath-Siskiyou Native Seeds

Great camas with sphinx moth nectaring at dusk



Photo: Klamath-Siskiyou Native Seeds

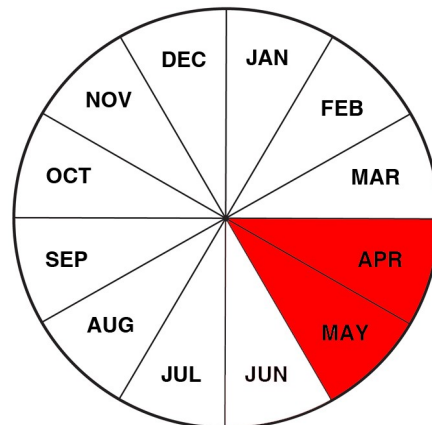
Plant Form: Perennial herbs

Nectar: Bees, butterflies, hummingbirds, and moths. One of the best early nectar plants used by many species of butterflies.

Host Plant: No

Propagated by: Seeds and bulbs

Bloom Time



References:

Cascadia prairie-oak partnership. 2014. *Camassia quamash*, common camas. Website: <http://www.cascadiaprairieoak.org/documents/PAD08PROFILESdblpages.pdf> (Accessed December 18, 2015)

Stark, EM. 2014. Real gardens grow natives. Seattle, WA: Skipstone. 317 p.

Horse mint (*Agastache urticifolia*)

This aromatic plant in the mint family provides nectar for many species of native bees and butterflies in southern Oregon. Drought tolerant, low maintenance and deer resistant, horse mint adapts easily to a garden setting, making it ideal for beginner native plant gardeners. Several showy cultivars, including “Blue fortune” are available from garden centers, and will bloom much longer under cultivation.

Horse mint (*Agastache urticifolia*)



Photo: Klamath-Siskiyou Native Seeds

Phoebus Apollo butterfly (*Parnassius phoebus*)
nectaring on horse mint



Photo: Klamath-Siskiyou Native Seeds

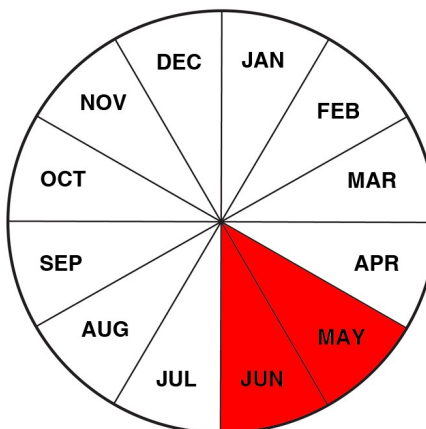
Plant Form: Perennial herb

Nectar: Bees and butterflies

Host Plant: No

Propagated by: Seeds

Bloom Time



References:

Las Pilitas Nursery. 2016. *Agastache urticifolia*, horse mint and licorice Mint.

Website: <http://www.laspilitas.com/nature-of-california/plants/21--agastache-urticifolia> (Accessed February 3, 2016).

Plants for a Future. 2016. *Agastache urticifolia*. Giant hyssop, nettleleaf giant hyssop.

Website: <http://www.pfaf.org/user/Plant.aspx?LatinName=Agastache+urticifolia> (Accessed February 3, 2016).

Red-flowering currant (*Ribes sanguineum*)

Red-flowering currant is just one of this genus of brightly colored and scented flowers which bejewel pollinator gardens in the early spring. Once established currants are undemanding and easy to grow, providing pollen and nectar for pollinators and abundant summer berries for birds. Several cultivars are available of these hardy native plants.

The showy flowers of red-flowering currant are a harbinger of spring



Photo: Thomas D. Landis

Native bee on red-flowering currant



Photo: Klamath-Siskiyou Native Seeds

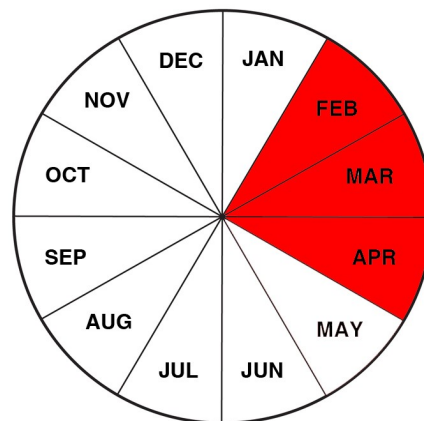
Plant Form: Woody shrub

Nectar: Bees, butterflies, and hummingbirds

Host Plant: Yes. More than two-dozen species of moths and butterflies, including the hoary comma (*Polygonia gracilis*)

Propagated by: Seeds, cuttings, and layering

Bloom Time



References:

Gonzalves P, Darris D. Plant Fact Sheet, red-flowering currant, (*Ribes sanguineum*).

Website: http://plants.usda.gov/factsheet/pdf/fs_risa.pdf (Accessed February 3, 2016).

Oregon grape (*Berberis aquifolium*)

The state flower of Oregon, this undemanding evergreen shrub with shiny, holly-like leaves is a versatile addition to a pollinator garden. Dark blue berries follow the bright, golden-yellow flowers of spring. Oregon grape is a favorite nectar source for bees early in the season.

Oregon grape



Photo: Klamath-Siskiyou Native Seeds

Honeybee foraging on Oregon grape flowers



Photo: <http://solarbeez.com/>

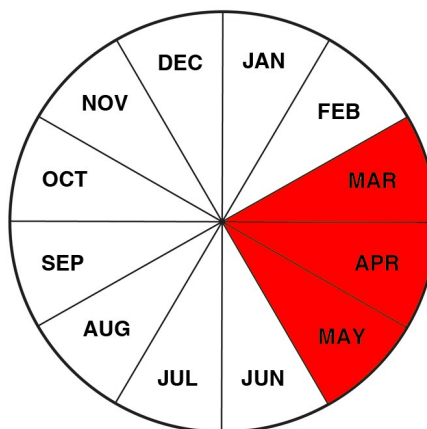
Plant Form: Woody shrub

Nectar: Bees, butterflies, hummingbirds, and moths

Host Plant: No

Propagated by: Seeds and cuttings

Bloom Time



References:

Wildlife Plants:: Oregon-grape - The Metropolitan Field Guide. Website: <http://www.metrofieldguide.com/wildlife-plants-oregon-grape/>

Rose, R., Chachulski, C., and Haase, D. 1998. *Propagation of Pacific Northwest Native Plants*. Corvallis: Oregon State University Press.

Mountain lilac or deer brush (*Ceanothus integerrimus*)

The genus *Ceanothus* contains many good native pollinator plants, and the attractive and fragrant flowers of mountain lilac range from white to light purple. This drought tolerant shrub has root nodules that fix atmospheric nitrogen. Being adapted to dry environments, these hardy shrubs do best when not overwatered and do not require fertilization.

Mountain lilac



Photo: Thomas D. Landis

Skipper butterfly nectaring on mountain lilac



Photo: Las Piltas Nursery

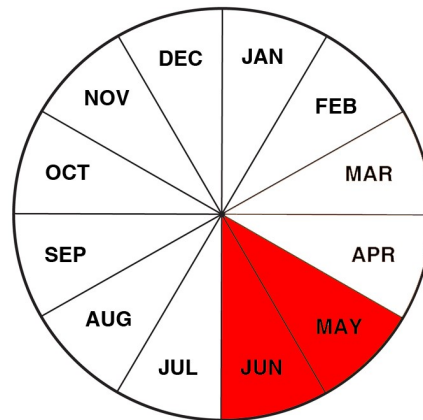
Plant Form: Woody shrub

Nectar: Bees, butterflies, and moths

Host Plant: Yes. Plants in the *Ceanothus* genus are host plants to several native butterflies: spring azure, echo blue, California tortoiseshell, pale swallowtail, and hedgerow hairstreak

Propagated by: Seeds

Bloom Time



References:

California native plant society. 2016. Deerbrush, *Ceanothus-integerrimus*

Website: <http://calscape.cnps.org/> (Accessed February 2, 2016).

Funston, N. 2011. Growing California Mountain Natives from Seed at Cornflower Farms. Website: www.ippswr.org/home/ippna/2011/Funston.pdf (Accessed February 2, 2016).

Lewis' mock orange (*Philadelphus lewisii*)

With large, showy and fragrant white flowers, mock orange has a lot to offer both gardeners and pollinators alike. An elegant, yet common shrub in the Pacific Northwest, mock orange will delight your senses and welcome all types of pollinators.

Mock orange



Photo: Tara Luna

Monarch butterfly nectaring on mock orange



Photo: Tanya Harvey

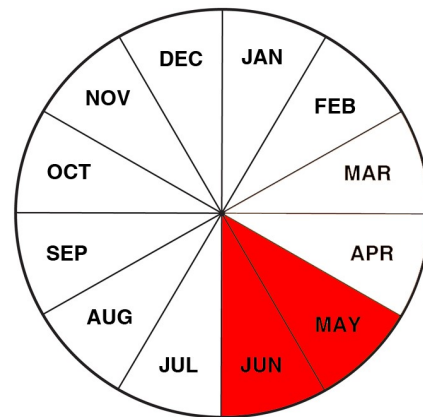
Plant Form: Woody shrub

Nectar: Bees, butterflies, and moths

Host Plant: No

Propagated by: Seeds, cuttings, layering, root suckers, and division

Bloom Time



References:

Darris D, Gonzalves P. 2009. Lewis mockorange Plant Fact Sheet. Corvallis, OR: USDA NRCS Plant Materials Center. Website: http://plants.usda.gov/factsheet/pdf/fs_phle4.pdf

Rose R, Chachulski CEC, Haase DL. 1998. Propagation of Pacific Northwest Native Plants. Corvallis, OR: Oregon State University Press. 248 p.

Mid-Season Flowering Plants

Narrowleaf milkweed (*Asclepias fascicularis*)

Narrowleaf milkweed is a host plant for monarch butterflies, but is also a great nectar source for bees and other pollinators. This adaptable milkweed is easy to grow on a variety of soil types, more drought tolerant than showy milkweed, and deer resistant. Pollinator advocates, such as the Xerces Society, recommend using only native milkweed for habitat restoration, monarch waystations and pollinator-friendly gardens.

Monarch butterfly on narrowleaf milkweed

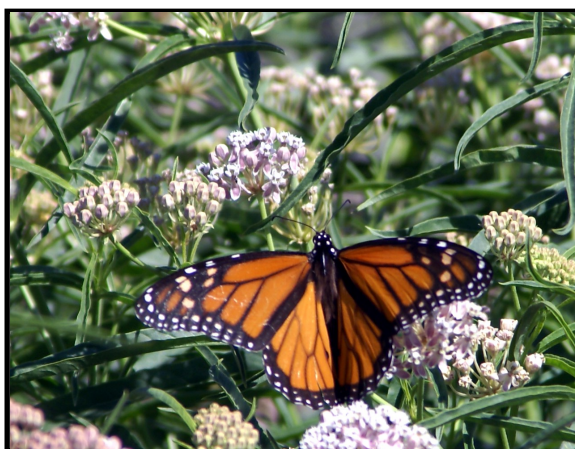


Photo: Thomas D. Landis

Narrowleaf milkweed is tolerant of drier sites, and grows on all soil types



Photo: Thomas D. Landis

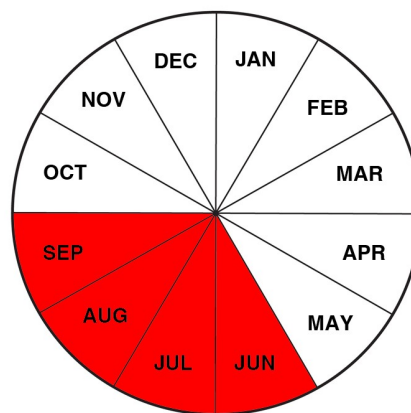
Plant Form: Perennial herb

Nectar: Bees, butterflies, and moths

Host Plant: Yes. Monarch butterfly

Propagated by: Seeds and rhizomes

Bloom Time



References:

Xerces Society. 2014. A guide to the native milkweeds of Oregon. Website: http://www.xerces.org/wp-content/uploads/2011/10/OR-milkweed-guide_XercesSoc2.pdf (Accessed Dec 11, 2015).

Bring back the monarchs. 2016. *Asclepias fascicularis*. Website: <http://monarchwatch.org/bring-back-the-monarchs/milkweed/milkweed-profiles/asclepias-fascicularis/> (Accessed February 5 2016).

Showy milkweed (*Asclepias speciosa*)

Showy milkweed is a tough, attractive, and easy-to-grow perennial that is a larval host for the monarch butterfly. A wide range of pollinators love this plant and it will provide a happy buzz of activity in your garden! The large, attractive flowers are also delightfully fragrant. Pollinator advocates, such as the Xerces Society, recommend using only native milkweed for habitat restoration, monarch waystations and pollinator-friendly gardens.

Showing milkweed features thick, leathery leaves



Photo: Thomas D. Landis

The fragrant flowers of showy milkweeds attract a wide variety of pollinators



Photo: Thomas D. Landis

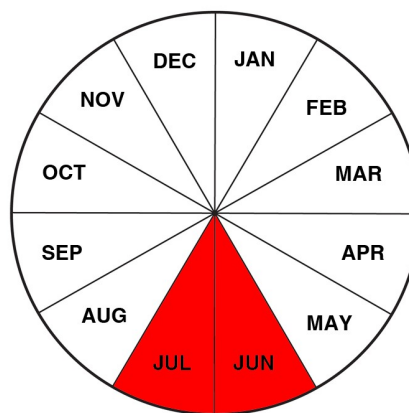
Plant Form: Perennial herb

Nectar: Bees, butterflies, moths, and hummingbirds

Host Plant: Yes. Monarch butterfly

Propagated by: Seeds and rhizomes

Bloom Time



References:

Xerces Society. 2014. A guide to the native milkweeds of Oregon. Website: http://www.xerces.org/wp-content/uploads/2011/10/OR-milkweed-guide_XercesSoc2.pdf (Accessed December 11, 2015).

Las Pilitas Nursery. 2016. *Asclepias speciosa*. Website: <http://www.laspilitas.com/nature-of-california/plants/101--asclepias-speciosa.pdf> (Accessed February 5, 2016).

Fireweed (*Chamerion angustifolium*)

Fireweed is a widespread species that produces abundant seeds, allowing it to quickly colonize a site after a wildfire, hence the common name. Attractive to pollinators, fireweed is a vibrant addition to a native plant garden, but it can spread aggressively by rhizome in a moist garden setting, so plant in an appropriate place.

Fireweed forms dense stands because it spreads by rhizomes



Photo: Klamath-Siskiyou Native Seeds

Fireweed is an excellent nectar plant



Photo: Don Johnston

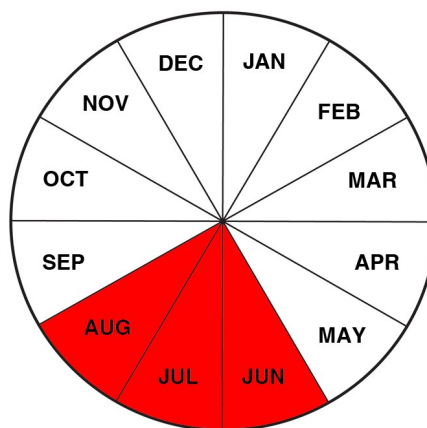
Plant Form: Perennial herb

Nectar: Bees, butterflies, moths, and hummingbirds

Host Plant: Yes. White-lined sphinx moth (*Hyles lineata*)

Propagated by: Seeds and rhizomes

Bloom Time



References:

Vizgirdas E. 2015. Fireweed (*Chamerion angustifolium*). USDA Forest Service, Plant of the Week. Website: http://www.fs.fed.us/wildflowers/plant-of-theweek/chamerion_angustifolium.shtml (Accessed December 13 2015).

WSU Clark County Extension. 2015. PNW Plants: fireweed. <http://www.pnwplants.wsu.edu/PlantDisplay.aspx?PlantID=>

Oregon sunshine (*Eriophyllum lanatum*)

Cheerful and easy-going, the common woolly sunflower or Oregon sunshine will brighten up a dry, sunny spot with good drainage in your garden, delighting pollinators without the need for summer irrigation.

Oregon sunshine is an easy-to-grow pollinator plant



Photo: Klamath-Siskiyou Native Seeds

Mylitta Crescent butterflies (*Phyciodes mylitta*) mating pair on Oregon sunshine

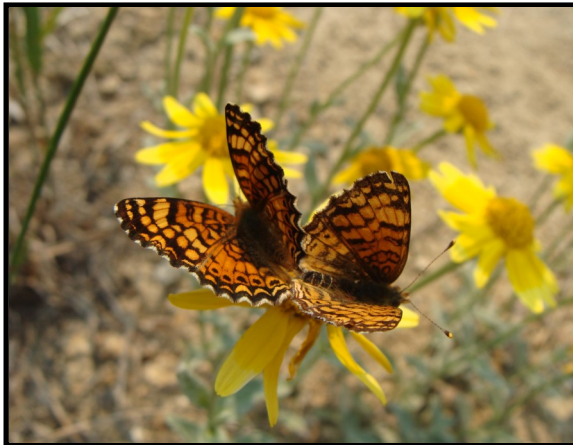


Photo: Linda Kappen

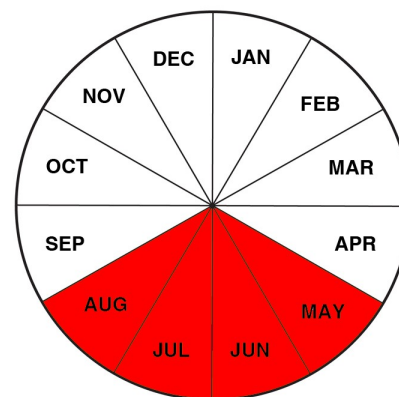
Plant Form: Perennial herb

Nectar: Bees, butterflies, and moths

Host Plant: Yes. Painted lady

Propagated by: Seeds

Bloom Time



References:

Pavek, P.L.S. 2011. Plant guide for common woolly sunflower (*Eriophyllum lanatum*). USDA-Natural Resources Conservation Service, Pullman Plant Materials Center. Pullman, WA. Website: http://plants.usda.gov/plantguide/pdf/pg_erla6.pdf (Accessed December 14 2015).

Portland Nursery. 2016. Eriophyllum: Oregon Sunshine. Website: <http://portlandnursery.com/plants/natives/erriophyllum.shtml> (Accessed January 31 2015).

Coyote mint or mountain monardella (*Monardella odoratissima*)

The wonderful minty fragrance of monardella makes it a welcome addition to rock gardens, as it prefers drier sites with good drainage. Monardella is a butterfly magnet, attracting a wide variety of pollinators. In the Rogue Valley coyote mint extends its blooming period under cultivation as late as November.

Mountain monardella



Photo: Klamath-Siskiyou Native Seeds

Monarch butterfly on mountain monardella



Photo: Linda Kappen

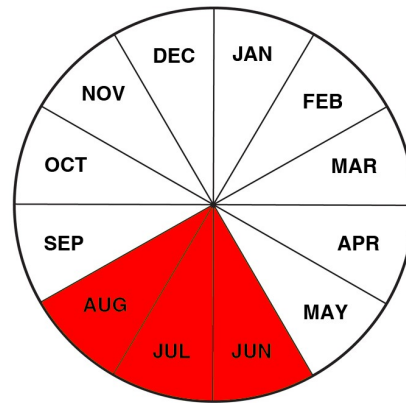
Plant Form: Perennial herb

Nectar: Bees, butterflies, and moths

Host Plant: No

Propagated by: Seeds, cuttings, and divisions

Bloom Time



References:

Slichter P. 2015 Coyote Mints, Mountain Balms and Monardellas: The Genus *Monardella* East the Cascade Mountains of Oregon and Washington Website: <http://science.halleyhosting.com/nature/basin/5petal/mint/monardella/odoratissima.htm> (Accessed December 14 2015).

Kratsch H, Hunter G, 2009. Mountain Beebalm in the Landscape. Website: https://extension.usu.edu/files/publications/publication/HG_Native_Plants_2009-04pr.pdf (Accessed December 29 2014).

Oceanspray (*Holodiscus discolor*)

As the name implies, the creamy-white flowers of this vibrant shrub are reminiscent of frothy ocean waves. Once established oceanspray is drought-tolerant, tough, versatile and fabulous for pollinators. Besides being an excellent nectar plant, oceanspray is host for at least four native species of native butterflies.

Oceanspray is both a host and a nectar plant



Photo: Tara Luna

Caterpillars of Behrs hairstreak (left) and Anicia checkerspot (right) feed on oceanspray



Photo: [www.bentler.us/eastern Washington shrubs](http://www.bentler.us/eastern-washington-shrubs)

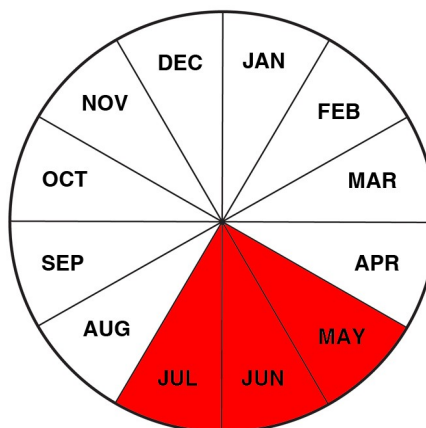
Plant Form: Woody shrub

Nectar: Bees, butterflies, hummingbirds, and moths

Host Plant: Yes. For butterflies—spring azure, pale swallowtail, Lorquin’s admiral, and gray hairstreak

Propagated by: Seeds and cuttings

Bloom Time



References:

Gonzalves P, Darris D. 2007. Plant Fact Sheet, Oceanspray, *Holodiscus discolor*. Website: http://plants.usda.gov/factsheet/pdf/fs_hodi.pdf (accessed December 14 2015).

Oceanspray bush. 2015. <http://bentler.us/eastern-washington/plants/shrubs/ocean-spray.aspx> (Accessed December 14 2015).

Late-Season Flowering Plants

Asters: Eaton’s aster (*Symphyotrichum bracteolatum*), Henderson’s aster (*Symphyotrichum hendersonii*), Oregon golden aster (*Heterotheca oregona*), roughleaf aster (*Eurybia radulina*), hoary aster (*Dieteria canescens*)

Asters used to be a single genus, but taxonomists split them up into other genera. These familiar flowers of late summer and early fall are easy to grow, and provide an important source of nectar for all types of pollinators. Cultivars of many asters are commercially available.

Hoary aster



Photo: Sally and Andy Wasowski

Many pollinators, including these buckeye butterflies are attracted to asters, such as Henderson’s aster



Photo: Klamath-Siskiyou Native Seeds

Plant Form: Annuals or perennial herbs

Nectar: Bees, butterflies, and moths

Host Plant: No

Propagated by: Seeds and rhizomes

Bloom Time

DEC	JAN	FEB
NOV	MAR	APR
OCT	MAY	JUN
SEP	JUL	
AUG		

References:

Tilley, D., D. Ogle, and L. St. John. 2014. Plant guide for hoary tansyaster (*Machaeranthera canescens*). USDA Natural Resources Conservation Service, Idaho Plant Materials Center. Aberdeen, ID. 83210.-

North American Butterfly Association. 2016. New England aster - *Aster novae-angliae*.

Website: http://www.nababutterfly.com/new_eng_aster.html (Accessed February 16, 2016).

Buckwheats: sulfur flower buckwheat (*Eriogonum umbellatum*), arrowleaf buckwheat (*E. compositum*), barestem buckwheat (*E. nudum*), tall woolly buckwheat (*E. elatum*)

Buckwheats are excellent nectar plants, with different species blooming throughout the summer and fall. Perfect for a rock garden or sunny, well-drained location, buckwheats put on a summer display that pollinators can't resist.

Checkerspot butterfly on sulfur flower buckwheat

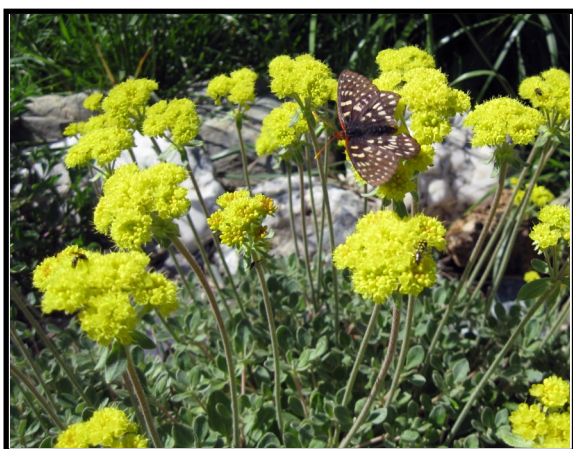


Photo: Klamath-Siskiyou Native Seeds

Arrowleaf buckwheat, *Eriogonum compositum*



Photo: Klamath-Siskiyou Native Seeds

Plant Form: Perennial herbs

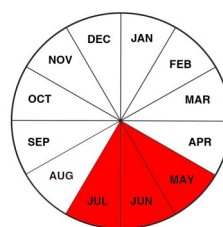
Nectar: Bees, butterflies, and moths

Host Plant: Buckwheat is the larval host for lupine butterfly (*Plebejus lupini*) and cythera metalmark butterfly (*Apodemia mormo cythera*)

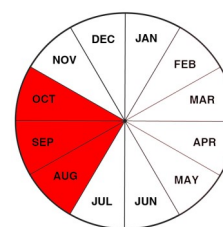
Propagated by: Seeds

Bloom Times

Eriogonum compositum



Eriogonum umbellatum



References:

Dyer, D., R. O'Beck, and A. Young-Mathews. 2011. Plant guide for sulphur-flower buckwheat (*Eriogonum umbellatum*). USDA-Natural Resources Conservation Service, California Plant Materials Center, Lockeford, CA. Website: http://plants.usda.gov/plantguide/pdf/pg_erum.pdf

Las Pilitas Nursery. 2015. California buckwheat plants. Website http://www.laspilitas.com/com/groups/buckwheat/california_buckwheat.html (Accessed March 15 2016).

Hummingbird trumpet or California fuchsia (*Epilobium canum*)

This knockout native plant provides late-season nectar, especially for hummingbirds, during the dry season when not much else is blooming. The bold color of hummingbird trumpet will brighten up a rock garden or dry sunny site with good drainage. Although more common in California, cultivars will do well in gardens throughout our region.

Hummingbird trumpet is an attractive and functional pollinator plant



Photo: Southern Nevada Water Authority

As the name suggests, the hummingbird trumpet is especially attractive to hummingbirds



Photo: Las Pilitas Nursery

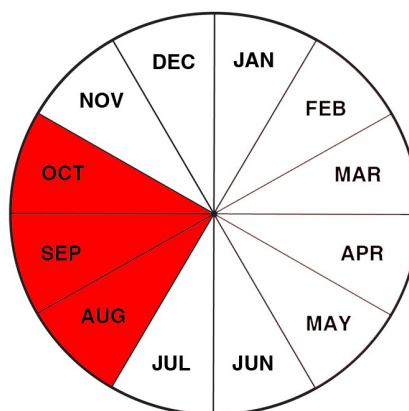
Plant Form: Perennial herb

Nectar: Hummingbirds, bees, and butterflies

Host Plant: Yes, white-line sphinx moth (*Hyles lineata*)

Propagated by: Seeds and cuttings

Bloom Time



References:

Gardening in Tucson, Phoenix, and Southern California. http://gardenoracle.com/images/epilobium_canum.html (Accessed December 16 2015).

Decker, Cheryl. 2003. Propagation protocol for production of Container (plug) *Epilobium canum* (Greene) plants D 40 containers; In: Native Plant Network. URL: <http://www.NativePlantNetwork.org> (Accessed December 16 2015).

Coneflowers: Western coneflower (*Rudbeckia occidentalis*), waxy coneflower (*R. glaucescens*), California coneflower (*R. californica*) Bigelow's sneezeweed (*Helenium bigelovii*)

Coneflowers are a group of composite flowers with large protruding disk flowers. The well-known purple coneflower, *Echinacea purpurea*, is not native to the western US, but could be used in backyard pollinator gardens. Coneflowers adapt well to irrigated garden settings, where they will provide summer flowers for many years.

Butterfly on sneezeweed (*Helenium bigelovii*)

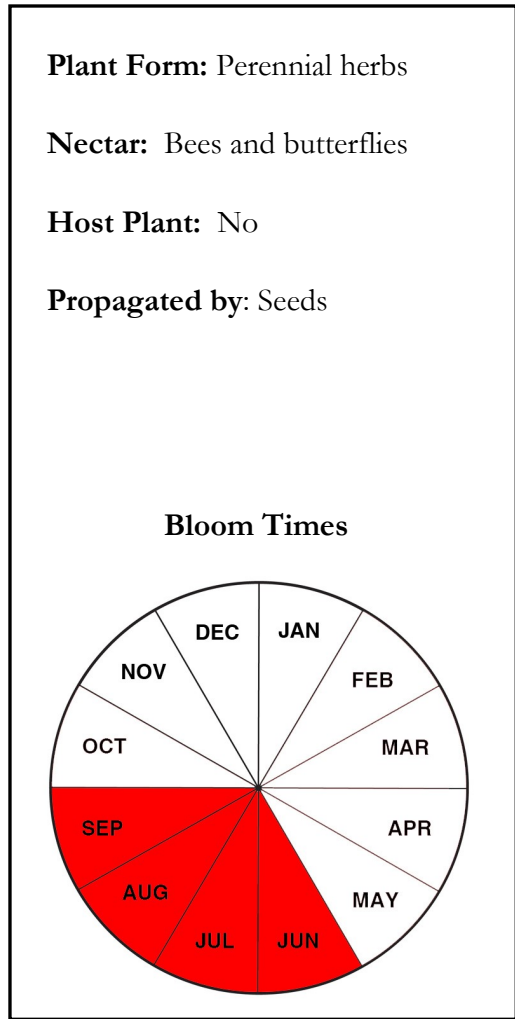


Photo: mck4824 on Summitpost.org

Monarch butterfly nectaring on western coneflower (*Rudbeckia occidentalis*)



Photo: Tanya Harvey



References:

Coneflower.com. 2008. Hot to propagate coneflower using seeds or division. Website: <http://www.coneflower.com/2008/10how-to-propagate-coneflower-using-seeds.html> (accessed March 15, 2016)

Helenium bigelovii: <http://www.pnwflowers.com/flower/helenium-bigelovii>

Rudbeckia glaucescens: <http://www.wildflowersearch.com/search?oldstate=gloc%3Az%3Bbloom%3AIgnore%3Bname%3ARudbeckia+glaucescens>

Rudbeckia occidentalis: <http://www.pnwflowers.com/flower/rudbeckia-occidentalis>

Goldenrods: West coast Canada goldenrod, (*Solidago elongata*), threenerve goldenrod (*S. velutina*)

Goldenrods are common native plants that provide excellent pollen and nectar for bees, butterflies and other pollinator insects in the late summer and fall. Both native and honey bees use pollen from goldenrods to provision their nests, and monarch butterflies use goldenrod nectar to build up their body fats for their long migrations and overwintering.

Goldenrods are excellent late blooming nectar plants that are hardy and easy to grow



Photo: Klamath Siskiyou Native Seeds

Goldenrods are especially important for monarch butterflies as they migrate south in the fall



Photo: Bernadette Banville

Plant Form: Perennial herbs

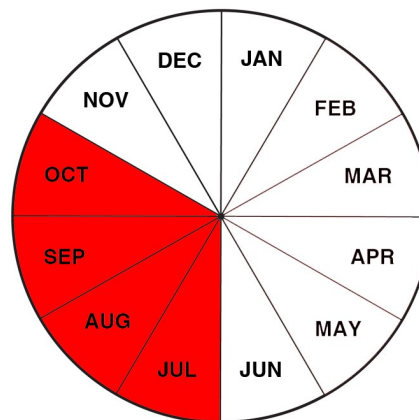
Nectar: Bees and butterflies

Host Plant: No

Propagated by: Seeds

Bloom Times

Solidago velutina



References:

Pavek, P.L.S. 2011. Plant guide for Canada goldenrod (*Solidago canadensis*). USDA-Natural Resources Conservation Service. Pullman, WA. Website: http://plants.usda.gov/plantguide/pdf/pg_soca6.pdf (Accessed December 18, 2015).

Mader E, Shepherd M, Vaughan M, Hoffman Black S, LeBuhn G. 2011. Attracting native pollinators. North Adams, MA: Storey Publishing. 371p.

Rubber rabbitbrush (*Ericameria nauseosa*)

Rubber rabbitbrush is a common shrub in drier areas of southern Oregon and attracts a wide array of native insects, including butterflies and small bees. It is a particularly important pollinator plant because it blooms throughout the late summer and fall when monarch butterflies are migrating south to their overwintering sites along the California coast.

Rubber rabbitbrush (*Ericameria nauseosa*)



Photo: Klamath-Siskiyou Native Seeds

Monarch butterfly nectaring on rubber rabbitbrush



Photo: Jakob Shockey

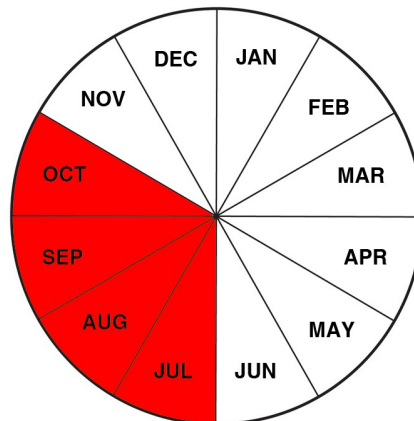
Plant Form: Woody shrub

Nectar: Bees and butterflies

Host Plant: Yes - Northern checkerspot butterfly

Propagated by: Seeds

Bloom Time



References:

Scheinost, P.L., J. Scianna, D.G. Ogle. 2010. Plant guide for rubber rabbitbrush (*Ericameria nauseosa*). USDA-Natural Resources Conservation Service, Pullman Plant Materials Center, Pullman, WA. Website: http://plants.usda.gov/plantguide/pdf/pg_erna10.pdf (Accessed December 17 2015).

Turner M. 2012. Thrifty, showy rabbitbrush. Website: <http://nativeplantwildlifegarden.com/thrifty-showy-rabbitbrush/> (Accessed December 17 2015).

References

Emmel, T.C. and J.F. Emmel, 1993. The Xerces Blue, *Glaucopsyche xerces* (Boisduval). in: T.R. New (ed.), *Conservation Biology of the Lycaenidae (Butterflies)*. Occasional Papers of the IUCN Species Survival Commission No. 8.

Fægri K, van der Pijl L. 1979. *The principles of pollination ecology*. Elmsford NY: Pergamon Press. 244 p.

NRCS 2015. Website: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/pollinate/>

Root, AI, Root ER. 1919. *The A B C and X Y Z of bee culture*. Medina, OH. THE A. I. Root Company. 836 p.

Pendergrass K, Vaughan M, Williams J. 2008. *Plants for pollinators in Oregon*. Technical Notes, Plant Materials No. 13. Portland, OR: US Department of Agriculture, Natural Resources Conservation Service. 26 p

Smith SE, Winslow SR. 2001. Comparing perceptions of native status. *Native Plants Journal* 2 (1): 5-11.

Xerces Society. 2015.

EXTINCT

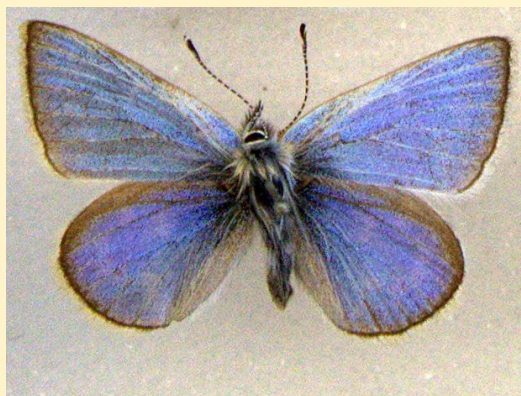


Photo: oceanbeachbulletin.com

The Xerces Blue butterfly (*Glaucopsyche xerces*) is the first butterfly in North America known to have become extinct due to human disturbance. This butterfly was native to sand dune communities around San Francisco until its habitat was almost entirely destroyed by urban development (Emmel and Emmer 1993).