POLLINATOR PLANTS Maritime Northwest Region





The Maritime Northwest is a diverse geographic region, encompassing the coastline and coastal range of southern Vancouver Island, Washington, Oregon, and northern California; the grasslands of the Puget Trough and Willamette Valley; and ending on the eastern side of the Cascade Mountains. Large elevation and rainfall changes throughout this region have created diverse plant communities, ranging from the temperate rainforests of the Olympic Peninsula, the oak savannah grasslands of the Valleys, and the evergreen forests and subalpine meadows of the Cascade range.

Corresponding to this striking diversity of plant communities is an equally remarkable range of pollinators, including the once prominent Western bumble bee (*Bombus occidentalis*). Imperiled butterflies, including the Oregon silverspot (*Speyeria zerene hippolyta*), Taylor's checkerspot (*Euphydryas editha taylori*), Fender's blue (*Icaricia icarioides fenderi*), and Puget blue (*I. i. blackmorei*) butterflies also inhabit this region. As a group, these and other pollinators maintain healthy, productive plant communities, provide food that sustains wildlife, and play an essential role in crop production.

Providing wildflower-rich habitat is the most significant action you can take to support pollinators. Adult bees, butterflies, and other pollinators require nectar as their primary food source. Female bees also collect pollen as food for their offspring. Native plants, which are adapted to local soils and climates, are usually the best sources of nectar and pollen for native pollinators. Incorporating native wildflowers,

Nootka rose, coyotebrush, and Pacific ninebark

shrubs, and trees into any landscape promotes local biological diversity by providing shelter and food for wildlife. Native plants are better adapted to regional climate cycles, do not need fertilizers, and are less likely to become weedy.

This guide features regional native plants that are highly attractive to pollinators and are well-suited for small-scale plantings in gardens, on business and school campuses, in urban greenspaces, and in farm field borders. In addition to supporting native bees and honey bees, many of these plants attract nectar-seeking butterflies, moths, and hummingbirds, and some are host plants for butterfly and moth caterpillars. With few exceptions, these species occur broadly across the region and can be purchased as seed or transplants. Please consult regional Floras, the Biota of North America's North American Plant Atlas (<u>http://bonap.net/napa</u>), or the USDA's PLANTS database (<u>http://plants.usda.gov</u>) for details on species's distributions in your area.

- Our **Bring Back the Pollinators** campaign is based on four principles:
- 1. Grow a variety of pollinator-friendly flowers;
- 2. Protect and provide bee nest sites and caterpillar host plants;
- 3. Avoid using pesticides, especially insecticides: and
- 4. Spread the word!

You can participate by taking the **Pollinator Protection Pledge** and registering your habitat on our nationwide map at:

www.bringbackthepollinators.org.







Bloom Period	Common Name	Scientific Name	Life Cycle*	Flower Color	Max. Height⁺	Water Needs
	Forbs				(Feet)	L: low; M: medium; H: high
	Bigleaf lupine	Lupinus polyphyllus	Р	blue	3–5	М
Early 2	Common camas	Camassia quamash	Р	blue	1–3	Н
3	Riverbank lupine	Lupinus rivularis	A, B, P	blue	4	М
4 Early–Mid 5 6	Douglas meadowfoam	Limnanthes douglasii	А	white/ yellow	1	M-H
	Meadow checkermallow	Sidalcea campestris	Р	pink	2-6	М
	Slender clarkia	Clarkia gracilis	А	purple	1.5	L
7	Large-flowered collomia	Collomia grandiflora	А	pink	1–3	L-M
Mid ⁸	Selfheal	Prunella vulgaris ssp. lanceolata	Р	purple	1.5	М
9	Showy milkweed	Asclepias speciosa	Р	pink	1.5–5	М
10 11 Late 12 13	Canada goldenrod	Solidago canadensis	Р	yellow	3-6	М
	Douglas aster	Symphyotrichum subspicatum	Р	purple	4	М
	Hall's aster	Symphyotrichum hallii	Р	purple	3	М
	Puget Sound gumweed	Grindelia integrifolia	Р	yellow	3.5	М
	Shrubs and Trees					
14 Early–Mid 15	Oregon grape	Berberis aquifolium	Р	yellow	4-8	М
	Oregon vine maple	Acer circinatum	Р	yellow	20	М
16 Early–Mid 17	Blueblossom	Ceanothus thyrsiflorus	Р	blue	3-18	L
	Cascara buckthorn	Rhamnus purshiana	Р	white	5-35	М
18 19 Mid 20 21	Nootka rose	Rosa nutkana	Р	pink	2-10	L–H
	Pacific ninebark	Physocarpus capitatus	Р	white	3-8	L-M
	Salal	Gaultheria shallon	Р	white/ pink	1-4	M-H
	Buckbrush	Ceanothus cuneatus	Р	white	3.5-11.5	L-M
22	Douglas spiraea	Spiraea douglasii	Р	purple	2–7	M-H
23 Late 24	Ocean spray	Holodiscus discolor	Р	white	6-20	M-H
	Coyotebrush	Baccharis pilularis	Р	yellow	4-8	L



Notes

This list of pollinator plants for the Maritime Northwest Region Region was produced by the Xerces[®] Society. For more information about pollinator conservation, please visit <u>www.xerces.org</u>.



*Life Cycle abbreviations: A: annual; P: perennial; B: biennial. †Max. Height is an average, individual plants may vary.

Visited extensively by bumble bees and hummingbirds; prefers moist soils; a host plant for various blue (*Icaricia* spp.) butterflies
Slow to establish from seed; establishes better from bulb; prefers moist soil, drought-tolerant after bloom; bulbs attractive to wildlife
Short-lived and very aggressive; include at a low rate in seed mixes; frequently biennial; a host plant for various blue butterflies
Easy to establish from seed; highly attractive to syrphid flies, mining bees, and mason bees; color variable among subspecies
Hardy, long-lived plant; a host plant numerous butterflies and skippers, including west coast lady (*Vanessa annabella*)
Fast-growing; easy to establish from seed; highly variable with numerous subspecies; prefers open, well-drained sites
A very showy native that prefers partial shade and dry soils; bees collect bright blue pollen from the blossoms
Easy to establish from seed; fast-growing ground cover that will tolerate mowing or grazing; highly attractive to various pollinators
Slow to establish from seed; host plant for the monarch butterfly and a high-quality nectar source for a wide variety of floral visitors
Slow-growing, rhizomatous plant; significant resource for honey bees and late-season native bees, such as bumble bees (pictured)
Establishes better from transplant; drought-tolerant rhizomatous plant; one of the latest fall-blooming plants
Long-lasting flowers; blooms year-round in warm weather; tolerates poor soils; highly attractive to green metallic sweat bees (cover)

Evergreen; protect growth points at tips during pruning; attracts long-tongued bee species, such as mason and bumble bees Prefers shade; primarily attracts mason and bumble bees; a host plant for the western tiger swallowtail (*Papilio rutulus*) butterfly Fast-growing evergreen; prefers partial shade; establish from seed or cuttings; a host plant for the pale tiger swallowtail (*P. eurymedon*) Tall at maturity, but can be maintained as a shrub with pruning; prefers moist soils; drought- and shade-tolerant Thrives in wet or dry soils; expands by suckering; a source of nesting material for leafcutter bees; a host plant for numerous butterfly Establishes fairly well from cuttings; extensively visited by small bees; a host plant for the spring azure (*Celastrina ladon*) butterfly Evergreen; occurs north of southwestern Oregon; mostly visited by bumble bees; requires partial shade to prevent scorching Long-lived evergreen; establish from containers or cuttings; maintain live branch tips during pruning Expands by suckering; frequently visited by bumble bees; prefers partial shade and moist soils; tolerates occassional flooding Visited by a wide variety of bees, including bumble bees and tiny sweat bees; a host plant for the spring azure; tolerates shade Drought-tolerant dioecious evergreen; male plants provide critical late-season pollen source for honey bees and native bees

Planting for Success

Sun Exposure

Most pollinator-friendly plants prefer sites that receive full sun throughout most of the day and are mostly open, with few large trees. A southern exposure can provide the warmest habitat, but is not required.

Plant Diversity

Choosing a variety of plants with overlapping and sequential bloom periods will provide food for pollinators throughout the seasons.

Habitat Size and Shape

Habitat patches that are bigger and closer to other patches are generally better than those that are smaller and more isolated from one another. However, even a small container garden can attract and support pollinators!

Planting Layout

Flowers clustered into clumps of one species will attract more pollinators than individual plants scattered through a habitat patch. Where space allows, plant clumps of the same species within a few feet of one another.

Seeds or Transplants

It is usually cheaper to establish large habitat areas from seed; however, seeding native wildflowers on a large-scale is an art unto itself. For step-by-step instructions, see *Establishing Pollinator Meadows from Seed* and the Pollinator Habitat Installation Guides listed in the Additional Resources section. For smaller areas like gardens, transplants are usually easier to use and will bloom faster than plants started from seed.

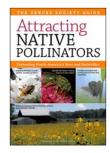
Protect Pollinators from Insecticides

Although dependent on timing, rate, and method of application, all insecticides have the potential to poison or kill pollinators. Systemic insecticides in particular have received significant attention for their potential role in pollinator declines (imidacloprid, dinotefuran, clothianidin, and thiamethoxam are examples of systemic insecticides now found in various farm and garden products). Because plants absorb systemic insecticides as they grow, the chemicals become distributed throughout plant tissues and are sometimes present in pollen and nectar. You can help protect pollinators by avoiding the use of these and other insecticides. Before purchasing plants from nurseries and garden centers, be sure to ask whether they have been treated with insecticides. To read more about threats to pollinators from pesticides, please visit: <u>www.xerces.org/pesticides</u>.

Additional Resources

Attracting Native Pollinators

Our best-selling book highlights the role of native pollinators in natural ecosystems, gardens, and farms. This comprehensive guide includes information about pollinator ecology, detailed profiles of over 30 common bee genera, and habitat designs for multiple landscapes with over 50 pages of fully illustrated regional plant lists. Available in bookstores everywhere, and through <u>www.xerces.org/books</u>.



The Xerces Pollinator Conservation Resource Center

Our Pollinator Conservation Resource Center includes regional information on pollinator plants, habitat conservation guides, nest management instructions, bee identification and monitoring resources, and directories of native pollinator plant nurseries. www.xerces.org/pollinator-resource-center

Lady Bird Johnson Wildflower Center

The Xerces Society has collaborated with the Lady Bird Johnson Wildflower Center to create lists of plants that are attractive to native bees, bumble bees, honey bees, and other beneficial insects, as well as plant lists with value as nesting materials for native bees. These lists can be narrowed down with additional criteria such as state, soil moisture, bloom time, and sunlight requirements. The Center's website also features image galleries, how-to articles on native plant gardening, and more.

www.wildflower.org/conservation_pollinators

Establishing Pollinator Meadows from Seed

These guidelines provide step-by-step instructions for establishing pollinator meadows from seed in areas that range in size from a small backyard garden up to an acre. Topics include: site selection, site preparation, plant selection, planting techniques, and ongoing management.

www.xerces.org/establishing-pollinator-meadows-from-seed

Pollinator Habitat Installation Guides

These regional guidelines, developed in collaboration with the USDA's Natural Resources Conservation Service, provide in-depth practical guidance on how to install nectar and pollen habitat for bees in the form of wildflower meadow plantings or linear rows of native flowering shrubs. Region-specific seed mixes and plant recommendations are included in the appendices of each guide. www.xerces.org/pollinator-habitat-installation-guides

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