Bountiful Native Pollinators in Your Yard

Pollinator Benefits

What do native pollinators provide or enhance?

- 1. Fruit and seed production for human consumption and future crops.
- 2. Increased crop yields.
- 3. By pollinating native plants, seed production ensures plant species can endure over time by reseeding. Plant communities are kept healthy and productive. Some plants rely on a single pollinator species for survival.
- 4. Plants reproduced by seed provide food and shelter for countless species of wildlife.
- 5. Enhance other ecosystems: soil stabilization and water conservation/purity.
- 6. The insects themselves are food for birds, small mammals, reptiles.

Pollinator Requirements

What do native pollinators need?

- 1. Nectar sources and plant diversity (some are very host specific though)
- 2. Nesting habitat: for bees, loose sandy soil, bee houses
- 3. Pesticide-free environment

Natural Predators: Parasitic Bees

- About 25% of all bee species are cleptoparasites and are often called cuckoo bees.
- Much like a cowbird or cuckoo, these bees lay eggs in the nests of other bees.
- The hatched larvae eat the pollen provisions and kill the existing egg or larvae.
- They are less hairy and have no scopa for carrying pollen.

Natural Predators: Bee Flies

- Bee Flies often resemble bees with plenty of fuzzy hair and striped bodies.
- They have many hosts including bees.
- Eggs are laid or dropped into a bee nest and the fly larvae eat the bee eggs/larvae/pollen stores.
- Adults eat flower nectar and are generally good pollinators.
- Their presence indicates healthy bee population.

Natural Predators: Wasps

- Several wasps hunt bees to feed their own larvae.
- Known as Beewolves.
- Adults eat flower nectar and are reasonably good pollinators. A lack of hair reduces their pollination ability.

All insects have the potential to be pollinators, some are better at it than others, depending on hairiness and type of mouthparts.

Bumble Bees also use "buzz pollination". They disengage their wings from the flight muscles, then use the muscles to shake their whole body with vibrations at a specific frequency (middle C) to dislodge and shake the pollen free.

Bees are apex pollinators

- followed by wasps, flies, butterflies and moths, and beetles.
- Approximately 4000 species of native bees in N.A.
- 90% of those bees lead solitary lives and the females construct and provision the nest/brood cells.
- Some may share a nesting site or entrance, but each female constructs brood cells for her own eggs.
- Only female bees (and a few wasps) purposely gather pollen to feed their offspring.
- Male bees and other pollinators "accidentally" transfer pollen while feeding on nectar.

Featured Plants to Attract Pollinators - native to Mid-Columbia region

- Goldenrod (Solidago)
- Globemallow (Sphaeralcea)
- Sneezeweed (Helenium)
- Hoary Tansyaster (Dieteria)
- Hairy False Goldenaster (Heterotheca)
- Snow Buckwheat (Eriogonum)
- Blanketflower (Gaillardia)

Other native wildflowers for pollinator gardens in the Mid-Columbia region

- Fleabane (*Erigeron*)
- Balsamroot (Balsamorrhiza)
- Buckwheat (Eriogonum)
- Cusick's Sunflower (Helianthus)
- Oregon Sunshine (Eriophyllum)
- Gumweed (*Grindelia*)

Other native wildflowers for pollinator gardens from other regions of the U.S.

- Purple Coneflower (Echinacea)
- Butterfly Weed (Aesclepias)
- Oregon Grape (*Mahonia*)
- Gayfeather (Liatris)
- Black-eyed Susan (Rudbeckia)
- Calico Aster (Symphyotrichum)
- Four-nerve Daisy (Tetraneuris)
- Beardtongue (Penstemon)

Non-native plants for pollinator gardens

- Must be non-invasive by seed or roots
- Supply nectar and/or pollen
- Moderate to low water requirement
- Lavender (Lavandula)
- Lavender Cotton (Santolina)
- Fern-leaf Yarrow (yellow) (Achillea)
- Hen-and-chicks (Sempervivum)

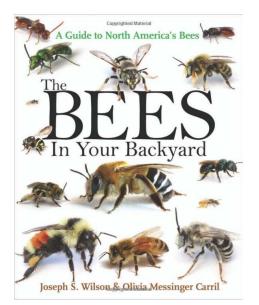
Looking for pollinators? Roadside weeds often host a wide variety of insects. Not recommended for pollinator gardens.

- Mustard False London Rocket
- Chicory
- Thistle
- White Sweetclover
- Tumbleweed
- Wild Carrot

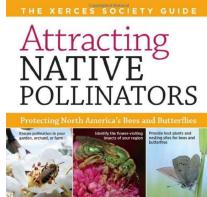
Resources

Tapteal Native Plants – West Richland





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