Pollinator Partnership Spotlight

Plant Profile: Pussy Willow (Salix discolor)

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When our earliest pollinators start to emerge in spring, there are scant food resources available. However, the Pussy Willow (Salix discolor, named for its similarity to a cat's paw), is a critical source of pollen when most fruit trees and early spring ephemerals are

not yet blooming. Willow flowering structures (catkins) are visited by many native bees, flies, and honeybees. Since it is one of the earliest food sources for honeybees, apiarists will often encourage this important shrub, allowing it to spread and form thickets. Willow is most often found as a

Salix catkins attract many pollinators, being one of their first food sources in early spring, photo credit Amber Barnes, *Pollinator Partnership*

multi-stemmed deciduous shrub that prefers full sun and moist or wet soils on shorelines, swamps, marshes, seeps and ditches.

One of the first sure signs of spring is the fuzzy gray tufts expanding from split winter buds on the stems of male pussy willow, before any leaves even emerge. Because this willow is dioecious (Latin for 'two-house'), the male and female flower parts are strictly associated with male and female plants. Each developing bud develops into a specialized flower type referred to as a catkin. In male plants, the catkins provide a sizable amount of yellow-pollen on their anthers and



female plants form catkins with reproductive structures called stigmas on the spikes of female catkins. Early spring sightings of pussy willow catkins are more likely to be the male plants, as they emerge first. Leaves are green on the surface



and a very light green on its underside, ovate to lanceolate in shape and climb alternately up the stem. *Salix* are notoriously difficult to ID to the species-level, and often keying to the genus level may be sufficient.

Beyond being a vital spring pollen source, Salix d. serves as a larval host to many species of butterflies and moths during the season, including the Morning cloak (Nymphalis antiopa) and Viceroy (Limenitis archippus) butterflies. The morning cloak butterfly is one of the first butterflies to emerge in spring. Morning cloaks can use several different species as their host plant, but they commonly use Salix spp. to lay their eggs. For more amazing pictures of pollinators on pussy willow, check out BugLady's blog post at the UWM Field Station (along with all her other weekly posts on bugs and



native plants): https://uwm.edu/field-station/pussy-willow-pollinators/

The requirements of wildlife are central to establishing a successful new native habitat or enhancing existing habitat. Aside from the benefits to pollinators, Pussy willow is also used as a food source by many vertebrate animals and is good nesting habitat for some bird species. When restoring wet ground, it is not uncommon for land managers to clear or manage against willows, as willows sometimes have a tendency to become monotypic in the right soil. However, retaining willows will help to safeguard wildlife habitat and an extremely important food source for pollinators. Retaining some amount of willow is often a good prescription. Pussy willows are commercially available and can also be propagated quite easily through cuttings.

References:

Lady Bird Johnson Wildflower Center: https://www.wildflower.org/plants/result.php?id plant=sadi Illinois Wildflowers: https://www.millinoiswildflowers.info/trees/plants/pussy-willow.htm Minnesota Wildflowers: https://www.minnesotawildflowers.info/shrub/pussy-willow Natural History Museum: https://www.nhm.ac.uk/