Native Willows: Don't Overlook this Beautiful Pollinator "Superfood"

By Cathy Smith



The soft grey catkins of male pussy willows mature into an explosion of pollen-bearing stamens – a vital food source for early native bees. Female pussy willows produce smaller green catkins.

Photo: K. Lamb

Until I signed up for a willow basketry workshop several years ago, I more or less thought, "A willow is a willow is a willow." Mai, our Danish instructor and a willow grower, supplied the materials, which included willow wands in a rainbow of colors – yellow, aubergine, phosphorescent blue, chartreuse, grass green, tanager red. I asked her what kind of dyes she used, to which she replied, slightly amused, "Why, these aren't dyed at all! These are their natural colors." I was astounded that these colors were created by Mother Nature. But, of course, one should never underestimate her.

So began my fascination with willows – their varied sizes, colors, growth habits, and overall beauty. Although I am an infrequent basket maker at best, I am an avid gardener and native plant lover and willows, I have learned, deserve a place in almost any landscape. Native willows are not, however, a plant favored by most gardeners. But this is quite in contrast to their favored status amongst pollinators and other beneficial insects.

In fact, Doug Tallamy ranks willows (Salicaceae) as **the number two woody plant family** – after oaks (Fagaceae) – in their ability to support lepidoptera (butterflies and moths). However, the oak's number one status diminishes as you head further north.

In a recent article, "<u>Willow is the New Oak</u>", on Minnesota State Horticultural Society's website, Doug Tallamy advises that "Willows are your number one keystone species for supporting caterpillars in MN.... The farther north you go, the more oaks drop out."

I decided to email Dr. Tallamy to see if this pattern holds in the Northeast as well. In just over an hour, I had my answer. Yes. But even when they are number two or three they are pretty impressive hosts. "Willows are number 3 in Hartford County, CT supporting 371 caterpillar species but rise to number 1 in Portland Maine, supporting 439 species," explained Dr. Tallamy. "They are number 1 in Merrimack County, New Hampshire, supporting 408 species. And they are number 2 in Franklin County MA, supporting 393 species."

What's more, oaks are wind pollinated and therefore don't attract adult pollinating insects, which willows do in spades. Native willows are a critical plant for bees, notably early-to-emerge queen bumblebees and "specialist" bee species, which collect pollen and nectar from only one or a few plant species. Chief among these are a variety of mining bee species (Andrena spp.), which rely on willows for nourishment because they bloom well before most other spring blooming plants.

"While willows are ubiquitous in most damp environments, they are often overlooked as a pollinator plant since the flowers are inconspicuous and often out of reach," according to the <u>Vermont Center for Ecostudies</u>. "Binoculars and/or a telephoto lens are very useful to fully appreciate one of the first spring pollinator shows."

So get out your binoculars and start planning where you'll add a willow, or a few, to your yard! If you don't have space on your own property, encourage your local park or municipality to plant willows.

General Planting Guidelines

- Support your local wildlife and **choose native willows**, NOT non-natives such as Weeping and White Willows.
- They are not terribly picky about soil type but they do in general prefer moist conditions.
- Willows are sun lovers plant them where they will receive full sunshine, or at the very least part sun.
- Give them space willows are very "rooty" plants and they need room to spread. Although
 non-native willows Weeping, Corkscrew, Austree hybrids tend to be the worst culprits in
 this department, play it safe and plant any willow away from pipes, foundations, and
 hardscaping.
- **Willows are dioecious**, meaning male flowers and female flowers are on separate plants. While they both produce insect-attracting nectar, only the males make pollen and only the females bear seeds. For early pollinators, make sure you plant some males. Growers, however, rarely mark the sex of dioecious plants, making it hard to distinguish. Your best bet is to shop for them when they are in flower and to look for colorful, usually yellow to yellow-orange, pollen. That will be a male.
- Place a collar around young trees to protect them from wildlife. Deer particularly love them.
- Other than that, willows are low maintenance, relatively trouble-free additions to your garden.
- But do read your plant tags carefully to be sure about both growth habit and specific growing conditions of your chosen species.

How to Use Native Willows in a Landscape

With 97 willow species native to North America, they can fill a variety of roles in your garden. Your plant tag will help you determine how best to use your willows, but here are a few ideas:

- With their fine-textured foliage, many will make lovely small trees or specimen shrubs.
- Those with shrubby habits which is most of them make fine hedgerows and windbreaks and are
 great for forming thickets for wildlife food and cover.
- Use them as a transition planting between garden and woodlands, near wetlands, or in a backyard meadow.
- They are great for pond, creek and riverbank stabilization and erosion control, biofiltration and bioremediation.
- And as highlighted above, given their invaluable role in the life cycles of early bees and lepidoptera, among others, plant them to support pollinators, other insects and a wide variety of wildlife.

What Native Willow to Plant?

Given the afore-mentioned absence of willows in planted landscapes, you may find it challenging to source native willows. Your local native nursery will be your best bet. Here are a few suggestions, in no particular order, along with their Native Plant Trust link.

- Pussy Willow (Salix discolor) A deciduous shrub up to 15 feet tall. Prized for its furry tufts, it may
 be used in hedges and in rain gardens but can also be shaped into a small tree or a shrub with a
 central stem. Will tolerate somewhat drier soil conditions.
 https://gobotany.nativeplanttrust.org/species/salix/discolor/
- Prairie Willow (S. humilis) Prairie Willow has a shrubby growth habit, reaching 6-12 feet in height.
 It is more drought tolerant than other willows. Plant in hedgerows and windbreaks and for wildlife food and cover. https://gobotany.nativeplanttrust.org/species/salix/humilis/
- Dwarf Prairie Willow (S. occidentalis) More compact than S. humilis and with smaller leaves, in
 nature it is found in dry locations such as barrens, fields and woodlands. Typically growing to just 1 to
 3 feet tall, it is probably the most suitable of these willows for smaller to average-sized gardens.
 https://gobotany.nativeplanttrust.org/species/salix/occidentalis/
- Long-beaked Willow also Bebb or Grey Willow (S. bebbiana) A large shrub or small tree, growing to 20 to 30 feet tall, with a somewhat columnar growth habit. A rather short-lived pioneer species, it is often used for re-vegetation.
 https://gobotany.nativeplanttrust.org/species/salix/bebbiana/
- Heart-leaved Willow (S. eriocephala, also included under S. rigida) A narrow shrub or small tree up to 20 feet tall, S. eriocehala is a widespread species and one of the very earliest bloomers. A clone, 'American McKay', is often used for basket making.
- https://gobotanv.nativeplanttrust.org/species/salix/eriocephala/
- **Silky Willow** (*S. sericea*) A medium-sized shrub typically growing 6 to 12 feet tall, with lovely narrow, silvery leaves. It is a good alternative to the non-native invasive Russian olive (*Eleagnus angustifolia*). https://gobotany.nativeplanttrust.org/species/salix/sericea/
- Black Willow (S. nigra) This is the only willow on the list that grows into a large tree (up to 80 feet or more) generally too large for most gardens. If you decide to plant one, make sure you have ample space. They are also susceptible to breakage and like some of their non-native cousins have extensive shallow-spreading root systems which may seek out water/sewer pipes. "Black willow is generally not recommended for use as a specimen in residential landscapes," according to Missouri Botanical Garden and other sources. However, if you have a large property and are planting with biodiversity in mind, go for it! https://gobotany.nativeplanttrust.org/species/salix/nigra/