

Managing for Pollinators in and around your Woodlot – Gary Casabona, NRCS Biologist

Much of the technical information about creation and enhancement of pollinator habitat focuses on the seeding of herbaceous plants. Milkweeds, bee balm (Monarda), Lupine, Aster, and wild mint species are some of the important herbaceous plants. However, there are a number of trees and shrubs that are highly valuable for pollinators and other wildlife. These species produce pollen and nectar for insects, and some also produce fruit (soft mast) that is needed by migratory songbirds and their fledglings as they "fuel up" for migration in autumn.

Any willow or maple species that is native to Rhode Island is a good choice for pollinators. The reason for this is that willows and maples are among the earliest plants to produce pollen in the springtime. Bumblebee colonies die off each fall, with the new bumblebee queens "going to ground" in the soil and leaf litter. They remain dormant throughout the winter, and this "hibernation" is called diapause. When the queens emerge from diapause, the pollen supplied by maples and willows is available to sustain them as they establish new colonies for the growing season. Keep in mind that willows, such as pussy willow and black willow, are easy to establish from cuttings. Iowa State Agricultural Extension Service has a good article on propagation of willows and grapes here:

<http://www.extension.iastate.edu/article/yard-and-garden-grape-vine-and-willow-propagation-forcing-spring-blooms>

Of course, when you are under (or near) the forest canopy, shade might be an issue. The following shade-tolerant trees and shrubs also have value for pollinators: Boxelder, Sugar maple, Basswood, Red maple, Clethra (Sweet pepperbush), Lowbush blueberry, Spicebush, and Swamp azalea. Some of these species may already be found on your property. Blueberry and Spicebush produce fruits eaten by migratory songbirds, and Spicebush is a host plant for the Spicebush swallowtail butterfly. Butterflies lay their eggs on the leaves of specific host plants, and the instars (caterpillars) consume the plant when they emerge.

Keep in mind that native bees will not travel very deeply into shaded forested areas – they prefer more open areas with at least some dappled sunlight. So, planting pollinator-friendly trees and shrubs at the edge of your forest is probably the best approach. With sufficient sunlight, you can also consider planting Meadowsweet, Sourwood (*Oxydendrum arboretum*) and Red Osier dogwood. Meadowsweet is an especially good choice, because it blooms very late in the season.

Our native Black Cherry (*Prunus serotina*) is a good choice for pollinators and it also produces fruit that is attractive to birds. However, cherry should not be planted near orchards because it can carry diseases that affect our commercial fruit trees. Black cherry is also toxic to livestock if they consume a sufficient amount of the plant.

Don't forget that "cane fruits" like Blackberry and Raspberry are also valuable for pollinators. The flowers are attractive to insects, and tunnel nesting bees will burrow into the canes to lay their eggs. If you have areas of your property that are a classic mix of Greenbriar or Bull briar, along with Blackberry and Raspberry -- don't cut these areas ! They may look a little unkempt and wild, but they have high value for both vertebrates and invertebrates.

Elderberry is also a good choice for pollinator nesting habitat, and it provides fruits for songbirds. Elderberry likes "wet feet" so don't plant it in drier areas.

Although they are not a favorite of gardeners, Sumac species are highly attractive to pollinators. The seeds and fruits are eaten by many species of upland gamebirds and songbirds. The bark and twigs are eaten by rabbits, especially in winter.

One more thing to remember as you manage your woodlot for pollinators and wildlife: leave dead and dying trees (snags) standing unless they pose a risk of falling on your house or creating a safety hazard. Dead and dying trees provide habitat for many prey insects, such as beetles and ants, which are an important food source for woodpeckers.

Female bats use snags as "maternity roosts" where they give birth to pups and nurse them. Raccoons and owls also use snags for denning or nesting.

One final thing to remember -- your goal should be to have at least 3 species (woody or herbaceous) blooming on your property during each of the 3 blooming periods: early, middle, and late.

A wealth of additional information on pollinators can be found on the website of the Xerces Society for Invertebrate Conservation at www.xerces.org