Planting for Pollinators

by Scott Aker

IN ADDITION to the benefits a garden provides us, it can serve as invaluable habitat for the creatures that share our planet—especially in urban and suburban areas where much native vegetation has been displaced by development. Pollinators—the animals that help many plants set seed and produce fruit by transferring pollen between flowers—play a vital role in the ecosystem, and declining numbers of some, such as our native bees and monarch butterflies, are legitimate causes for concern. It's important to remember that although bees and butterflies tend to get most of the attention, they aren't the only pollinators. Flies, beetles, wasps, hummingbirds, and even bats perform the same function. All have different life cycles and need pollen and nectar at different times and from different plants.

As gardeners, we can help sustain pollinators by including a wide variety of plants in our landscape. Even if your garden is already packed, there are usually marginal areas that will accommodate an additional pollinator plant or two. You can also scope out possible places in your neighborhood common areas and get permission from the authorities to establish pollinator plants there.

Butterflies are not the only important pollinators. A leafcutter bee, top, helps pollinate *Baptisia* 'Twilite' and a ruby-throated hummingbird, above, performs the same service for cardinal flower *(Lobelia cardinalis).*

PROVIDE A YEAR-ROUND FOOD SUPPLY

Certain pollinators may be active well before the main growing season, during warm days in late winter and early spring. Early-bloomers such as Japanese apricot *(Prunus mume)*, witch hazels *(Hamamelis* spp.), or redbuds *(Cercis* spp.) can provide a first meal for them. For the main season, look for plants that provide abundant pollen and nectar over a long period, and choose plants that flower at different times to provide food from spring through late fall. (See the sidebar for tips on flower selection.)

For nocturnal pollinators such as hawk moths, include plants that bloom late in the day, such as four-o-clocks *(Mirabilis jalapa)*, moonflower vine *(Ipomoea alba)*, and evening primrose *(Oenothera* spp.).

To attract migrating hummingbirds, skip the sugar-water-filled feeders and plant coral honeysuckle *(Lonicera sempervirens)*, cross vine *(Bignonia capreolata)*, cardinal flower *(Lobelia cardinalis)*, or beebalm *(Monarda* spp.).

SUPPORT ALL LIFE STAGES

Many pollinators, such as butterflies, have a juvenile stage that also needs food. Unlike the adults, most caterpillars are very limited in what they can consume, so do some research to find out what to grow to support different butterfly populations. Milkweed *(Asclepias* spp.), for instance, is the only food that the larvae of monarch butterfly eat, while those of black swallowtail eat parsley and dill. Plan on growing enough host plants to accommodate both their needs and your own.

TOP: BILL JOHNSON; BOTTOM: PRISCILLA MORRIS, COURTESY OF CORNELL LAB OF ORNITHOLOGY

TIPS FOR FLOWER SELECTION

Pollinators prefer flowers that provide a lot of pollen and nectar in a small area so they don't need as much energy to move around and gather it. Three plant groups provide especially pollinator-friendly choices for your garden:


Purple coneflower


Queen Anne's lace

The **aster or daisy family** (Asteraceae) includes chrysanthemums *(Dendranthemum* spp.), asters, and purple coneflowers *(Echinacea* spp.); flowerheads are made of numerous ray and disk florets.

The **parsley or carrot family** (Apiaceae) includes parsley *(Petroselinum* spp.) and Queen Anne's lace *(Daucus carota)*, and have flat to rounded umbels composed of hundreds of tiny flowers.

The **mint family** (Lamiaceae) includes hyssops *(Agastache* spp.) and false dragonheads *(Physostegia* spp.), which produce long spikes of nectar- and pollen-rich tubular flowers.

In general, double flowers bear little pollen and less nectar than their single counterparts. This is important to remember when selecting cultivars of aster family members such as chrysanthemum, purple coneflower, and Shasta daisy *(Leucanthemum ×superbum)*. —S.A.

TOP: COURTESY OF LYNN BRINKLEY. BOTTOM: COURTESY OF FOREST AND KIM STARR

Some important pollinators, such as syrphid flies, have carnivorous larvae. Syrphid fly larvae, which are small and sluglike, feed on aphids. You can help them out by tolerating some aphids in your garden.

CREATE A SAFE ENVIRONMENT

To truly assist pollinators, you must commit to providing them safe habitat. That means skipping toxic pesticides and accepting some plant damage from insects, mites, and diseases. If you have to use pesticides, opt for those with low toxicity and minimal residual action—such as horticultural oil and insecticidal soap. Avoid systemic pesticides, which remain in plants for long periods and may make their way into pollen and nectar; while these may not directly kill pollinators, they may weaken them and limit their reproductive capability.

Also avoid synthetic pyrethroids, which do not degrade quickly and are lethal for bees and wasps. Natural pyrethrum, which is considered an organic pesticide, is still very toxic to bees and wasps.

SHELTER IS IMPORTANT, TOO

In addition to food, pollinators need homes. Some native bees and wasps nest in the hollow canes of dead blackberry branches or the tubular stems of reeds. You can leave the branches or stems in place, or cut and tie foot-long segments into bundles and hang them in trees. And because many of our native bees nest in the ground, go easy on tilling and mulching.

By growing a wide range of plants, adopting safe maintenance practices, and offering places for shelter, we make our gardens welcome to a diversity of pollinators—and we help create a healthier, more bountiful community for all.

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Gardening Q&A with Scott Aker

IS LACK OF LIGHT CAUSING YELLOWING LEAVES?

I noticed this spring that some of the leaves of my houseplants are turning yellow. We live in a solar home that is flooded with sunlight in winter and receives only bright indirect light in summer. Could the plants be suffering from lack of adequate light?

Lack of light usually causes spindly growth with more distance between individual leaves along the stem, and the leaves are usually larger and thinner than those grown in brighter conditions. In your case, the yellowing is probably due to other factors. Some of the lower leaves of many tropical houseplants turn yellow and are shed just before a growth spurt. It's a good idea to hold off on fertilizer and water less often until new growth appears.

TOO MUCH SUN FOR BLEEDING HEART

I recently planted a couple of bleeding hearts in my garden. One is in a location that never gets sun and is doing well. The leaves of the other one, which is in a spot that gets a couple of hours of sun in the late afternoon, have dried up and fallen off. Is it getting too much light?

Bleeding heart *(Lamprocapnos spectabilis,* formerly *Dicentra spectabilis)* is an herbaceous perennial that tends to suspend its growth in areas with warm summers. The plant in the shadier spot has retained its foliage because it is growing in a cooler microclimate in your garden, while the plant exposed to the hot late afternoon sun is going dormant; there is no need to move it to a shady location. Both will sprout next spring if they are otherwise healthy. —S.A.

Send your gardening questions to Scott Aker at saker@ahsgardening.org (please include your city and state with submissions).