





Top to bottom: American Goldfinch, Downy Woodpecker, Song Sparrow Opposite page: Ruby-throated Hummingbird

| Key | |
|--------|----------------------------|
| Υ | Year round residents |
| \vee | Winter resident |
| S | Summer (breeding) resident |
| Μ | Migrants |
| * | Non-native species |
| Shaded | Common feeder birds |

The Common Birds of Southeastern Pennsylvania's woodlands, parks, and backyards

More than 300 species of birds can be seen in the Delaware Valley, many of which can be attracted to your yard with the addition of native plants, feeders, a water feature, and the elimination of turf grass and lawn pesticides. Native plants provide familiar cover and natural food in the form of seeds, nuts, and

| | 5 () | |
|---------------------------|--------------|----------|
| BIRD | Res/migrant | √ |
| Canada Goose | Y | |
| Mallard | Y | |
| Cooper's Hawk | Y | |
| Red-tailed Hawk | Y | |
| Wild Turkey | Υ | |
| Mourning Dove | Υ | |
| Rock Dove/Pigeon | Υ | |
| Eastern Screech-Owl | Υ | |
| Great Homed Owl | Υ | |
| Chimney Swift | M,S | |
| Ruby-throated Hummingbird | M,S | |
| Red-bellied Woodpecker | Y | |
| Downy Woodpecker | Y | |
| Northern Flicker | Y | |
| Eastern Phoebe | M,S | |
| Red-eyed Vireo | M,S | |
| Blue Jay | Y | |
| American Crow | Y | |
| Tree Swallow | M,S | |
| Barn Swallow | M,S | |
| Carolina Chickadee | Y | |
| Tufted Titmouse | Y | |
| White-breasted Nuthatch | Y | |
| Carolina Wren | Y | |
| House Wren | M,S | |
| Eastern Bluebird | Y | |
| Wood Thrush | M,S | |
| American Robin | Υ | |
| Gray Catbird | M,S | |
| | | |

fruits, and serve as a primary source of insects. Birds on this list that are likely to visit feeders will do so to supplement their diet of preferred natural foods. Specialized nectar or fruit feeders will attract birds such as Baltimore Orioles and Ruby-throated Hummingbirds.

| BIRD | Res/migrant | √ |
|------------------------------|-------------|----------|
| Northern Mockingbird | Y | |
| European Starling* | Υ | |
| Cedar Waxwing | Υ | |
| Yellow Warbler | M,S | |
| Yellow-rumped Warbler | M,W | |
| Black-throated Green Warbler | М | |
| Black-and-white Warbler | М | |
| American Redstart | М | |
| Ovenbird | M,S | |
| Common Yellowthroat | M,S | |
| Scarlet Tanager | M,S | |
| Eastern Towhee | M,S | |
| Chipping Sparrow | M,S | |
| White-throated Sparrow | M,W | |
| Song Sparrow | Υ | |
| Rose-breasted Grosbeak | M,S | |
| Indigo Bunting | M,S | |
| Dark-eyed Junco | M,W | |
| Northern Cardinal | Υ | |
| House Sparrow* | Υ | |
| Red-winged Blackbird | M,S | |
| Common Grackle | Υ | |
| Brown-headed Cowbird | Υ | |
| Baltimore Oriole | M,S | |
| House Finch | Y | |
| American Goldfinch | Y | |

Butterflies and Hummingbirds Our nectar-loving neighbors

More than 70 species of butterflies occur in southeastern Pennsylvania and many more species of moths. Butterflies have specific food and habitat needs; and while some occur within limited distribution, there are a number of species that will regularly visit backyards, urban parks, and public gardens.

A backyard with the right ingredients will attract butterflies. Whether a few plants are interspersed within an existing landscape or an entire butterfly garden is created, butterflies will, like magic, appear to feed. The ideal butterfly garden will include food plants and habitat for larvae (caterpillars) as well as nectar-producing plants. Willows,

legume species, and tulip poplars, as well as those listed below will serve as important host plants for caterpillars.

In addition, a shallow puddle surrounded by mud and placed in the open will provide valuable water and nutrients to butterflies.

Ruby-throated Hummingbirds can also be encouraged with a combination of plants and feeders. See the recipe on page 76 and hang the feeder near some key plants. Since both hummingbirds and butterflies favor many of the same plants, creating a dedicated, undisturbed plot of flowering plants that is free of pesticides is the best way to attract both.

Butterfly and Hummingbird Plants

| Common name | Scientific name | Bloom time | Bloom color | Butterfly | Hummer | Soil | Sun |
|------------------------|-----------------------|------------|--------------|-----------|--------|------|--------|
| Wild columbine | Aquilegia canadensis | Apr–Jun | red w/yellow | | • | Μ | PS, Sh |
| Swamp milkweed | Asclepias incarnata | Jul-Aug | rose | • | | M,W | FS |
| Common milkweed | Asclepias syriaca | Jun-Aug | pink | • | | M,W | FS |
| Butterfly-weed | Asclepias tuberosa | May-Sep | orange | • | • | D | FS |
| New Jersey tea | Ceanothus americanus | May–Jul | white | • | • | D,M | FS, PS |
| Trumpet creeper | Campsis radicans | Jul-Aug | orange | | • | Μ | FS, PS |
| Turtlehead | Chelone glabra | Jul-Sep | whitish | | • | M,W | FS, PS |
| Sweet pepperbush | Clethra alnifolia | Jul-Aug | white | • | | Μ | FS, PS |
| Purple coneflower | Echinaca purpea | Jul-Sep | purple | • | | D,M | FS |
| Joe-pye weed | Eupatorium fistulosum | Aug-Sep | dusty rose | • | | M,W | FS, PS |
| Blue flag | Iris versicolor | May–Jun | blue | | • | M,W | FS, PS |
| Wood nettle | Laportea canadensis | Jul-Aug | white | | • | Μ | PS, Sh |
| Blazing star | Liatris spicata | Jul-Aug | purple | • | | Μ | FS |
| Cardinal flower | Lobelia cardinalis | Jul-Sep | scarlet | • | • | M,W | FS, PS |
| Great blue lobelia | Lobelia siphilitica | Jul-Oct | blue | • | • | M,W | FS, PS |
| Trumpet honeysuckle | Lonicera sempervirens | May-Oct | pink/fuchsia | | • | Μ | FS, PS |
| Bee-balm | Monarda didyma | Jul-Aug | red | • | • | Μ | FS |
| Phlox | Phlox divaricata | May–Jun | lilac | • | | Μ | PS, Sh |
| Phlox | Phlox maculata | Jun-Sep | purple | • | | Μ | PS, Sh |
| Phlox | Phlox paniculata | Jul-Oct | pink | • | | Μ | PS, Sh |
| Cutleaf coneflower | Rudbeckia lacianata | Jul-Sep | yellow | • | | Μ | FS |
| Wrinkle-leaf goldenrod | Solidago rugosa | Aug-Oct | yellow | • | | Μ | FS, PS |

NOTES

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Top to bottom: Monarch, Silverspotted Skipper, Eastern Tailed-Blue

Common Butterflies and Host Plants in your Garden

| Common Name | Scientific Name | Caterpillar host plant | Flight period |
|---------------------------|---------------------------|------------------------|---------------|
| Black Swallowtail | Papilio polyxenes | Carrot family | Apr-Oct |
| Eastern Tiger Swallowtail | Papilio glaucus | Tuliptree | Apr-Oct |
| Spicebush Swallowtail | Papilio troilus | Spicebush | Apr-Oct |
| Cabbage White | Pieris rapae | Cabbage family | Mar-Nov |
| Clouded Sulphur | Colias philodice | Clovers | Mar-Nov |
| Orange Sulphur | Colias eurytheme | Legume family | Mar–Nov |
| Eastern Tailed-Blue | Everes comyntas | Legume family | Arp-Oct |
| Spring Azure | Celastrina ladon | Shrub flowers | Mar-Sep |
| Question Mark | Polygonia interrogationis | Elms, nettles | Apr-Oct |
| Eastern Comma | Polygonia comma | Nettles | Apr-Oct |
| Mourning Cloak | Nymphalis antiopa | Willows | Feb-Nov |
| American Lady | Vanessa virginiensis | Pearly everlasting | May-Sep |
| Red Admiral | Vanessa atalanta | Nettles | May-Sep |
| Monarch | Danaus plexippus | Milkweeds | May-Sep |
| Silver-spotted Skipper | Epargyreus clarus | Black locust | May-Oct |
| Peck's Skipper | Polites peckius | Grasses | Jun-Sep |
| Red-banded Hairstreak | Calycopsis cecrops | Fallen leaves | Apr-Oct |
| Red-spotted Purple | Limenitis arthemis | Many trees | Apr-Oct |
| Pearl Crescent | Phyciodes tharos | Asters | Apr-Nov |



Spicebush Swallowtail caterpillar

Hummingbird Nectar Recipe

Combine one part sugar and four parts water in saucepan and bring to a boil. Remove from heat and let cool before filling the feeder. Do not add red food coloring — this can harm the birds. Store excess in refrigerator. Change the nectar frequently to discourage the growth of bacteria, especially in warmer months.

Mammals

When you have interactions with wild mammals in our region, it's often contentious: the rogue gray squirrel draining the bird feeder, the earthmoving mole reinventing the home landscape, the graceful white-tailed deer dodging a front bumper, and the pungent reminder of the striped skunk that couldn't.

For the most part, mammals, especially those that are small, lead a rather inconspicuous life. Many scurry about or fly under the cover of darkness, stealthily foraging for sustenance. Indeed, one would have to be fortunate to gain long looks at many of our native mammals (birdwatching is much more reliable!) yet they exist in great numbers, playing important roles as both predator and prey in local natural systems. Learning how to live in harmony with most of these mammals while safely deterring others requires an understanding of what's out there.

Taking note of tracks and other animals signs in your yard is perhaps the best way to discover what lives nearby. Look to muddy areas for "footprints" or strategically place a sand tray where an animal might cross in the night. Nibbled vegetation, scat (animal droppings) and damaged bark are just a few of the other animal signs you might encounter.

Here are a few of species encountered regularly in this area.



Red fox pup (above) and tracks (right).

Mammal species regularly encountered in this area

DEER

White-tailed deer

CANIDAE

Coyote Red fox

RACCOON AND OTHERS

Northern raccoon American opossum

Ctuin and algumble

Striped skunk

American beaver Longtail weasel

SQUIRRELS

Gray squirrel

Southern flying squirrel

Eastern chipmunk

MICE/RATS

White-footed mouse

Deer mouse

House mouse

Meadow vole

Norway rat

MOLES/SHREWS

Northern short-tailed shrew

Eastern mole

Starnose mole

OTHER RODENTS

Beaver

Woodchuck/Groundhog Eastern cottontail rabbit

astern cottontan

Muskrat

BATS

Little brown bat



NOTES

Reptiles and amphibians are monitored closely as indicators of ecosystem health.

Reptiles and Amphibians

At least 40 species of reptiles and amphibians occur in southeastern Pennsylvania. Individuals of this often reclusive group of animals require the support of an intact ecosystem and exist within limited ranges. Reptiles and amphibians are sensitive to even minor changes and amphibians, in particular, are considered the ecological "canaries in the mineshaft", and are monitored closely as indicators of ecosystem health. If your property is adjacent to undisturbed woods or fields, you're likely to encounter a few of the common species listed below, more if you incorporate a pond:

Northern two-lined salamander Red-backed salamander American toad Bullfrog Spring peeper

Green frog

Eastern box turtle

Common snapping turtle

Painted turtle

Spotted turtle

Northern fence lizard

5-lined skink

Eastern ringneck snake Eastern garter snake



Pickerel frog

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Top to bottom: American toad, Spring peeper.

Others species that have been documented in our region

| , | |
|---------------------------|-----------------------|
| Salamanders | Frogs/Toads |
| Spotted salamander | Fowler's toad |
| Marbled salamander | Gray treefrog |
| Northern dusky salamander | Pickerel frog |
| Long-tailed salamander | Southern leopard frog |
| Red-spotted newt | Wood frog |
| Slimy salamander | Northern cricket frog |
| Northern red salamander | |

| Northern red salamander | |
|--|---|
| Snakes | Turtles |
| Northern copperhead | Spiny softshell |
| Black racer | Red-bellied turtle |
| Black rat snake | Red-eared slider (introduced) |
| Eastern milksnake | Map turtle |
| Northern water snake | Common musk turtle |
| Northern brown snake | Bog turtle |
| | Wood turtle |
| Northern copperhead Black racer Black rat snake Eastern milksnake Northern water snake | Spiny softshell Red-bellied turtle Red-eared slider (introduced) Map turtle Common musk turtle Bog turtle |

Insects — Nature's Pest Remedy

The insect world is comprised of many crucial contributors to a healthy ecosystem. Though seemingly a paradox, the predation of insects on other insects and bugs to sustain an environment is the reason, for example, that the forests are not completely defoliated each year. These important interrelationships are found at every level of a forest or garden.

Nearly every plant in a natural environment will sustain some damage by insects...it is part of the natural balance. But insect pests don't overpopulate ecosystems — thanks to the presence of natural enemies. Predatory and parasitic wasps and

flies, ladybugs, lacewings, ground beetles, spiders, and others are key players in the biological control of insect pests. Since many require the supplemental food that nectar provides, planting a virtual juice bar of plants will encourage them to visit and stay. Even your vegetable garden will benefit by including some key plants for the garden patrol.

These insects are often tiny: some of the stingless wasp species are smaller than a grain of rice and so require small flowers from which to feed. Composite flowers (such as asters) are made up of many tiny flowers in a disk and are among the most important to bug hunters.

Here are some common beneficial insects:

| Toro de Sorno common Soroncia moscas | | | |
|--|--|--|--|
| Helps Control | | | |
| Caterpillars, spider mites, flea beetles | | | |
| Aphids, mites, thrips, caterpillars | | | |
| Mosquitoes, other flying insects | | | |
| Generalist (feeds on many species) | | | |
| Aphids, snails, bark beetle larva | | | |
| Generalist | | | |
| Aphids, scales, mealybugs, leafhoppers, insect eggs | | | |
| Aphids, adelgids, whitefly, mites, and other soft-bodies bugs and eggs | | | |
| Aphids, spider mites | | | |
| Japanese beetle grub and other soft-bodies bugs and insects | | | |
| Aphids, caterpillars, wood boring insects, weevils, leafminers, Japanese and June beetle grub, true bugs, ants | | | |
| Generalist | | | |
| Generalist | | | |
| Cabbage looper, potato beetle, webworms | | | |
| Aphids, scales, caterpillars | | | |
| Caterpillars | | | |
| | | | |

Here are some native plants to consider:

| Common name | Scientific name | Bloom color | Soil | Sun |
|---------------------------|-------------------------|--------------|------|--------|
| White wood aster | Eurybia divaricata | White | M-D | PS, Sh |
| Eastern purple coneflower | Echinacea purpurea | Purple, pink | Μ | FS |
| Tall tickseed | Coreopsis tripteris | Yellow | M-D | FS |
| Goldenrod species | Solidago species | Yellow | M-D | FS |
| New York ironweed | Vernonia noveboracensis | Purple | Μ | PS, FS |
| Spotted Joe-pye weed | Eupotorium maculatum | Pink | W-M | PS, Sh |
| Sunflower species | Helianthus species | Yellow | All | FS, PS |
| Black-eyed Susan | Rudbeckia species | Yellow, gold | M-D | FS, PS |



NOTES



invasive species.

Invasives

As noted in the introduction, invasive plants are a significant threat to native habitats throughout the United States, including here in Pennsylvania. Those who enjoy the lush forest vegetation in our area might be disillusioned to discover that most of the plants that have evaded hungry deer are exotic

Exotic invasives are introduced plants that spread aggressively and often produce large numbers of seeds dispersed by wind, water, wildlife, and people. Some species, such as English ivy, butterfly bush, wisteria, and Japanese honeysuckle, are

purchased as landscape plants and escape into natural areas, displacing native species.

With their aggressive tendencies, it's not uncommon to find invasives sprouting up in backyards. Vigilance will go far to keep emerging plants in check, while considerably more elbow grease may be needed to remove long established stands.

Here are a few of the most common invasive plants in our region and their native alternatives. A comprehensive list, photographs, and an excellent booklet can be found on-line at the Mid Atlantic Exotic Plant Pest Council (www.ma-eppc.org):







Top to bottom: Butterflybush, Japanese barberry, Tree of Heaven, Wineberry

| Plant | Scientific name | Native alternatives |
|----------------------|-----------------------------|--|
| Herbaceous plants | | |
| Garlic mustard | Alliaria petiolata | Wild ginger, foam flower, creeping phlox |
| Japanese knotweed | Polygonum cuspidatum | Sweet pepperbush |
| Japanese stilt grass | Microstegium vimineum | Stiltgrass displaces a variety of low cover plants |
| Purple loosestrife | Lythrum salicaria | Joe-pye weed, cardinal flower, blazing star, New York ironweed |
| Shrubs | | |
| Japanese barberry | Berberis thunbergii | Spicebush, highbush blueberry, northern bayberry |
| Multiflora rose | Rosa multiflora | Common blackberry, swamp rose |
| Privets | Lingustrum species | Chokeberry, spicebush, inkberry |
| Wineberry | Rubus phoenicolasius | Chokeberry, common blackberry, winterberry |
| Butterflybush | Buddleja species | Butterfly-weed, New York ironweed, blazing star |
| Trees | | |
| Norway maple | Acer platanoides | Red maple, American beech, black gum |
| Tree of heaven | Ailanthus altissima | Box elder, white ash, sumac species |
| Vines | | |
| English ivy | Hedera helix | Virginia creeper, wild ginger, creeping phlox |
| Japanese honeysuckle | Lonicera japonica | Trumpet honeysuckle, Virginia creeper |
| Mile-a-minute | Polygonum perfoliatum | Native vegetation appropriate to site conditions |
| Porcelainberry | Ampelopsis brevipedunculata | Trumpet honeysuckle |
| Wisteria | Wisteria species | Trumpet honeysuckle, Dutchman's breeches |