Garden Bugs & Insects of the SOUTH & SOUTHEAST

Jaret C. Daniels

Adventure Quick Guides

IDENTIFY POLLINATORS, PESTS, AND OTHER GARDEN VISITORS

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How many times have you seen a bug in your garden and wondered, "What in the world is that?" This Adventure Quick Guide provides an easy and fun way to identify common garden pollinators, pests, and aesthetically pleasing visitors. It features more than 120 insects and arthropods commonly seen in gardens of the southern and southeastern United States.

This guide will help you learn to differentiate between pest species and beneficial insects, such as pollinators and those that can keep pests in check. The guide also includes a general introduction to basic pest control, as well as tips on how to make your garden and wider landscape a healthy, welcoming place for insects, arthropods, and other beneficial wildlife.

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KEY

- Species marked with this icon are pollinators.
- Species marked with this icon P are pests.
- Species marked with these icons V or B are either an aesthetic garden visitor or a beneficial predator of pest species.
- Species marked with this icon D spread plant disease.

GARDEN BUGS OF THE SOUTH & SOUTHEAST

In everyday language, we commonly refer to insects, spiders, and other creepy-crawly organisms, such as centipedes, as bugs. They, or signs of their presence, are routinely encountered in gardens and yards. Within this diverse mix are a wide variety of "bad" bugs, regularly referred to as pests, and "good" bugs, which are often considered beneficial. Most garden pest species cause damage by directly feeding on plants, transmitting disease to plants in the process, or by indirectly damaging or disturbing plants by their activities. The resulting damage can be simply aesthetic or can lead to poor plant performance, deformed growth, reduced yield, or even death. Other pests can cause damage to structures or present a nuisance by their presence.

Beneficial species are a gardener's best friends. They provide natural pest control by feeding on or parasitizing undesirable garden and landscape bugs, helping to keep their populations in check. Others deliver key services such as decomposition, nutrient recycling, or pollination. Many are also entertaining or attractive and add to the overall enjoyment of the garden.

Controlling Pests

It's temping to want to reach for a container of pesticide at the first sign of a pest problem. This strategy, however, can often be counterproductive. Many commonly available pesticides can be harmful to humans, other wildlife, and the environment, especially if overused or applied inappropriately. Beneficial insects, such as monarchs and bees, are particularly susceptible. Harming these "good" bugs depletes your garden's natural pest control measures.

A better and more sustainable approach is to use integrated pest management, referred to as IPM. IPM focuses on long-term prevention, not just short-term control. Monitoring is the first step. This is best done by regularly getting out into your garden or landscape and looking around. Do you see any obvious signs

of pest presence or plant problems? If you do, take a closer look and try to identify the culprit. Use this guide as an aid. You can then take a sample to a local extension agent or nursery professional for confirmation. Next, it's important to assess the scope of the problem. Is it limited to a particular branch or plant, or is it impacting a larger area or number of plants? No matter what, regular monitoring is always a great strategy, as it helps you identify pest issues before they become problems. Remember, most large pest outbreaks start out small.

Now that you have identified the pest and level of infestation, you can develop a plan to control it or decide that control is not required at this particular time. IPM employs a management approach that typically involves a combination of mechanical, biological, and chemical controls to specifically target the pest of concern.

Removing small numbers of Japanese beetles by hand is a mechanical control option.

Mechanical control can include physically removing pests from plants, using traps or barriers, or otherwise making a less suitable or desirable environment for the pest.

Biological control uses known natural enemies against the pest. This can be a predator, parasitoid, or even a pathogen. A classic example is using ladybugs to help control aphids.

Ladybugs are a popular biological control option.

Chemical control, especially broad-spectrum insecticides, should be a last resort.

Chemical control makes use of pesticides. Pesticides should only be used when necessary. Less-toxic alternatives such as horticultural oils or insecticidal soaps are often used first, and treatments are always applied only to the infected plant to minimize nontarget impacts. Remember, when using chemicals, always carefully follow the label directions for application rates and safety precautions.

Healthy & Diverse Landscapes

Healthy plants are more resistant to attack from pests and disease. Therefore, regular garden care and maintenance, along with a little TLC, is a great way to help prevent problems. Healthy plants also look and perform better, produce more flowers, and offer higher quality resources for pollinators.

Healthy plants, like this bee balm, will welcome beneficial insects and resist pests more effectively.

Landscapes with higher levels of plant diversity, particularly flowering plants, tend to attract and maintain a higher abundance and wider range of beneficial insects. Collectively, such basic methods are easy to implement and offer a strong first line of defense.

A wide variety of flowering plants invites more beneficial pollinators to your yard.

Good Plants for Beneficials

Beyond preying on pest species, many beneficial insects also feed on pollen and nectar. They are therefore attracted to landscapes with an ample supply of floral resources. While there is no shortage of wonderful blooming plants to choose from, there are some basic tried-and-true (and readily available) choices. These include many common bedding plants, wildflowers, and herbs.

Common herbs, such as this dill, attract many pollinators.

If allowed to flower, dill, fennel, borage, rosemary, thyme, mint, and basil are magnets for beneficial species.

Many daisy-like flowers (Asteraceae) such as zinnias, cosmos, Indian blanket, purple coneflower, coreopsis, goldenrod, and sunflowers are equally attractive.

Sunflowers and other profusefly flowering plants make your yard an insect magnet.

Dutch White Clover, while nonnative, is a great option to make a bare spot on a lawn or a garden more attractive to wildlife.

Lastly, clovers, partridge pea, dotted horsemint, buckwheat, and sweet alyssum are all fantastic. Whether planted alongside vegetables in the home garden, included more broadly in the larger landscape, or simply placed in a container or window box, they will not fail to provide color and attraction.

Silver-spotted Skipper V
(Epargyreus clarus)

wingspan up to 2.4 inches; stout body; wings brown with a prominent white patch on the hindwing below; larvae feed on various pea family plants, including *Wisteria* spp. and false indigo bush (*Amorpha fruticosa*); larvae make leaf shelters

Long-tailed Skipper V P
(Urbanus proteus)

wingspan up to 2 inches; wings brown with blue-green iridescence above; hindwing with long tail; larvae make leaf shelters on host plant; feeds on various wild legumes; can be minor pest of garden peas and beans

Horace's Duskywing V
(Erynnis horatius)

wingspan up to 2 inches; wings brown with small translucent spots on forewing; female has more contrasting darker brown markings and larger forewing spots; rests and feeds with wings open; avid flower visitor

Fiery Skipper V
(Hylephila phyleus)

wingspan up to 1.5 inches; wings above dark brown with orange markings in males; females with reduced orange markings; wings below yellow-orange with scattered small dark spots; short antennae; avid flower visitor; low, erratic flight; larvae feed on various lawn grasses, including St. Augustine grass but are not considered a pest

Whirlabout V
(Polites vibex)

wingspan up to 1.5 inches; wings above orange with dark brown borders in males; females dark brown with light spots; short antennae; avid flower visitor; low, erratic flight; larvae feed on various lawn grasses, including St. Augustine grass but not considered a pest

Brazilian Skipper V P
(Calpodes ethlius)

wingspan up to 2.45 inches; wings elongated; wings above dark brown with large translucent spots; hindwing below reddish-brown with translucent spots in the center; larvae feed on native and ornamental *Canna* species and can cause severe aesthetic damage; larvae make rolled leaf shelters

Polydamus Swallowtail V
(Battus polydamas)

wingspan up to 4.5 inches; wings black with broad yellow spot band along the outer margin; lacks hindwing tail; continuously flutters wings while feeding; larvae feed on pipevine; primarily limited to Florida peninsula and southern Texas

Black Swallowtail V
(Papilio polyxenes)

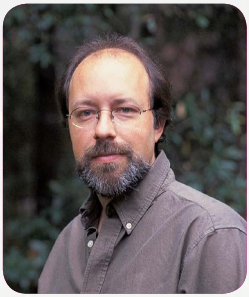
wingspan up to 4.25 inches; wings black with yellow spot band; female with reduced yellow bands and blue scaling on hindwing; hindwing with single tail; abdomen with yellow spots; larvae feed on carrot family plants, including dill, sweet fennel, and parsley

Black Swallowtail Larva V P
(Papilio polyxenes)

2 inches long; green with black bands containing yellow spots; feeds on carrot family plants, including dill, sweet fennel, and parsley and can be a minor garden pest

Eastern Tiger Swallowtail V
(Papilio glaucus)

wingspan up to 5.6 inches; wings yellow with bold black stripes in males; wings yellow or black in females; the females mimic toxic pipevine swallowtail; generally feeds with wings outstretched



JARET C. DANIELS, Ph.D., is a professional nature photographer, author, native plant enthusiast, and entomologist at the University of Florida, specializing in insect ecology and conservation. He has authored numerous scientific papers, popular articles, and books on gardening, wildlife conservation, insects, and butterflies, including butterfly field guides for Florida, Georgia, the Carolinas, Ohio, and Michigan. Jaret currently lives in Gainesville, Florida, with his wife, Stephanie.

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- Expert author is an entomologist and nature photographer

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