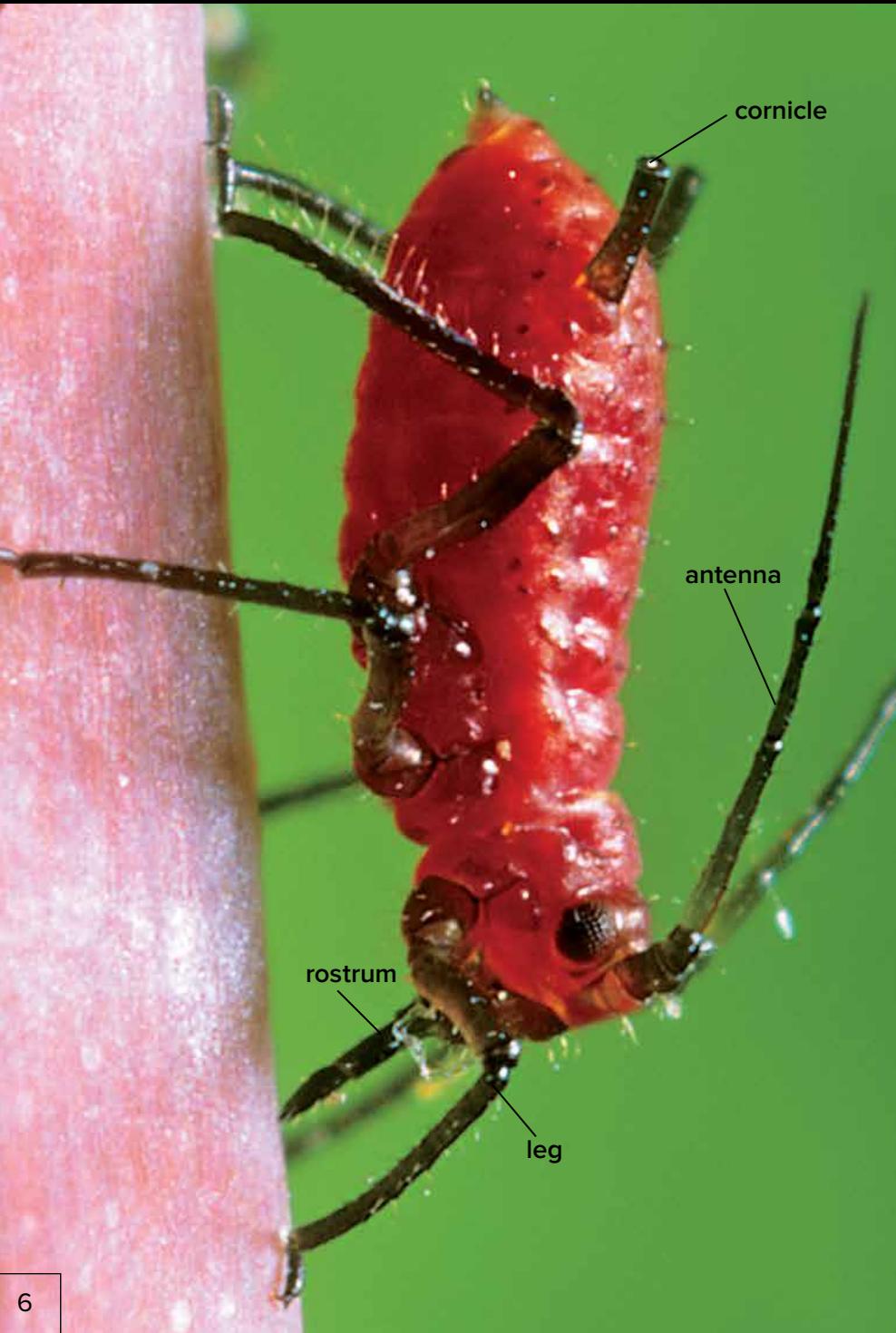


Here they come—those incredible little insects called . . .

APHIDS



BY ELLEN LAMBETH

What would a summer garden be without *aphids* (AY-fidz)? Actually, gardeners aren't so happy to see them. Why not? Because huge masses of aphids can suck the life right out of prized plants!

But most of the time aphids don't really cause trouble. That's because there usually aren't too many of them in any one place. So let's just focus on what makes them cool.

WHAT IS AN APHID?

Here's an aphid at **left**, shown *waaaay* bigger than normal size. A real one—or two or three or more—could fit inside the enlarged eye in this aphid picture.

Just use the close-up photo for checking out an aphid's body parts. First, notice the antennae and three pairs of legs. Those should tell you that you're looking at an insect.

That long "beak" between the front legs is called the *rostrum* (ROSS-trum). And the two little tubes on the back end are called *cornicles* (KOR-nih-kulz). More on all these later.



IT TAKES ALL KINDS: There are several thousand species of aphids. Naturally, they don't all look alike. They also live in different places and feed on different plants and plant parts. Here you can meet just a few kinds: rosy apple aphid (left), milkweed aphids (top), pea aphids (above), and woolly aphids (right).



MCDONALD WILDLIFE PHOTOGRAPHY / ANIMALS ANIMALS (6); JOHN PICKLES (7T); KEN PRESTON-MAFHAM / PREMAPHOTOS WILDLIFE (7M); NURIDSANY ET PERRENOU / PHOTO RESEARCHERS (7B)



READY FOR WINTER: Can you see the eggs the aphids above have laid on a rose's thorny stem? The eggs have tough shells that will protect them until they hatch next spring.

LITTLE BITTY BUGS

Aphids are usually found in clusters called *colonies*. Most kinds of aphids are green or black. But some are red, gray, lavender, pink, yellow, or brown. A few even have patterns. And some—known as woolly aphids—are covered with white, waxy fibers. A colony of woolly aphids looks like tufts of cotton on a plant.

SAP-SUCKERS

Want to find some aphids? Then look on a plant's newest growth, such as tender stems and leaves or shoots and buds. That's where most of them feed.

An aphid's rostrum is specially suited for sucking. The insect uses it to explore the plant for a good spot and then to pierce it. Next it sips the sap as if through a straw.

IT'S A GIRLS' WORLD

In the spring and early summer, young aphids, called *nymphs* (NIMFS), hatch from eggs. These nymphs are all females. Then a very interesting thing happens: These females make babies without the help of dads! And the babies are all females, too. Another interesting thing is that the new nymphs come out of their moms live instead of as eggs (as most insects do). When the nymphs grow up, they do the same thing. This can happen maybe a dozen times during the summer. Every so of-

LIKE MOTHER, LIKE DAUGHTER: The aphid below is giving birth! Like her mother, the baby is female. And, before long, *that* baby will make even more female babies.

HAVE YOU "HERD"? Some ants tend aphids, which are sometimes called ant cows (right). From time to time, the ants "milk" the aphids for some sweet honeydew (below right).

ROD PRESTON-WAFLAM/REMAPHOTOS WILDLIFE (8); MELUL/ARCO/NATUREPL.COM (9L); GERRY BISHOP (9TR); KIM TAYLOR/WARREN PHOTOGRAPHIC (9BR)





MEUL/ARCO/NATUREPL.COM (10T) © JEF MEUL / FOTO NATURA / MINDEN PICTURES (10B) ©

ten, some of the nymphs develop wings, fly off to other plants, and start new colonies.

At summer's end, both male and female young are born. Once they mature, the males mate with females, which then lay eggs. The eggs survive the winter—and hatch next spring.

DOWN ON THE FARM

If you find a colony of aphids, you might see some ants hanging around with them. Like shepherds or dairy farmers, the larger ants are keeping watch over the little guys. They herd them, move them to better places to feed, and protect them from enemies. In return, the ants are rewarded. How?



GOTCHA! A lacewing larva snags an aphid with its jaws (top). No wonder it's often called an aphid wolf. And a ladybug like the one in the circle above might gobble hundreds of aphids! Can you see the blobs oozing from the aphids' cornicles? That's icky stuff that stops some predators—but not these two.

Aphids squirt clear, sweet, sticky drops from their rear ends. The drops are called *honeydew*. Honeydew is just extra plant juice that the aphids can no longer use. But, to an ant, it's something special. The ant strokes an aphid with its feet or antennae. By “milking” the smaller insect this way, the ant gets an instant sweet treat.

LIVE AND LET LIVE

Aphids have soft bodies and are juicy. No wonder they're on the menu for many creatures, especially other insects. Not all aphids have guardian ants, you know. But they do have one trick that might make some hungry predators back off: They squirt out nasty-tasting or waxy stuff from their cornicles.

Even so, aphids don't always get off easy. Some of their worst enemies are ladybugs and lacewings. Not only do the adults of these insects eat gobs of aphids, but so do their larvae (young). Gardeners love ladybugs and lacewings, because these insects keep aphid colonies from getting too big—naturally.

Certain tiny wasps have a creepy sort of aphid attack plan: They lay their eggs *inside* aphids. That way, a baby wasp can grow up in its own food cupboard. That's bad news for the aphid, though.

The good news for aphids is that there are so many of them. While some become animal food, others live on to make more aphids. In the world of the wild, it's a natural balance. 🐛

RISING FROM THE DEAD: Check out the female wasp, stabbing her egg-laying tube into an aphid (bottom). After the egg hatches, the wasp larva grows up inside, slowly killing the aphid. Finally, it comes out of the “aphid mummy” as an adult (below).



DWIGHT KUHN (11B & INSET)