

## Termite Academy

Sept 12-13



Nebraska Extension will present a two-day termite hands-on training for termite applicators, home inspectors and others interested in wood-destroying insects. This "Termite Academy" will be held Tuesday, Sept 12–Wednesday, Sept. 13, 8 a.m.–5 p.m. both days. There will be classroom and field instruction by Nebraska Extension entomologists, UNL Pesticide Safety Education Program staff, Nebraska Department of Agriculture staff and industry specialists.

Classroom instruction will be at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln. Participants will travel to a house in Lancaster County to observe preparation and treatment for subterranean termites.

Registration fee is \$300 before Aug. 31, \$325 after Sept. 1. Fee includes manual, refreshments and lunches.

Registration form is online at <http://lancaster.unl.edu/pest> and available at the Extension office.

For more information, contact Jody Green at 402-441-7180 or [jgreen17@unl.edu](mailto:jgreen17@unl.edu).

# Minute Pirate Bug: A Good Little Bug with a Big Bite

Jody Green  
Extension Educator

Ever wonder about those small bugs that tend to bite during football season? These are minute pirate bugs, scientific name: *Orius insidiosus*, sometimes referred to as the insidious flower bug. For years they flew under our pest radar, but recent attention has focused on their ability to inflict a painful bite relative to their size.

## Description

As their name implies minute pirate bugs are tiny, measuring 1/8-inch in length. Their bodies are flattened and oval-shaped, with wings positioned flat over the body. They are mostly black in color, with a gold patch across the back and white tip of the wings, which extends past the abdomen. Like other "true bugs" they have piercing-sucking mouthparts used to inject digestive enzymes into prey before ingesting the liquid from the plant or animal source.

## Good Eater

Minute pirate bugs are predators and feed on a variety of soft-bodied invertebrates, which include thrips, aphids, leafhoppers, spider mites, whiteflies, caterpillars and the eggs of other insects. Due to their generalist diet and diverse distribution, they are considered beneficial insects and biological control agents in a variety of agricultural crops, greenhouses, orchards and home gardens.

Natural enemies, like the minute pirate bug, are very important to the ecosystem.



Minute pirate bugs are small bugs with a big bite. They are predaceous and also feed on plant sap. (Shown magnified.)



Photos by Jody Green, Nebraska Extension in Lancaster County

In high enough densities, they can effectively control pest species that destroy crops like corn and soybean. Minute pirate bugs are predaceous throughout their entire lives, but are omnivores and feed on plant sap and juices from flowers.

## Life Cycle

Minute pirate bugs undergo incomplete metamorphosis where the immature form or nymph resembles the adult, only smaller and without wings. They overwinter as adults in protected places such as leaf litter and plant debris. They

become active in March-April and fly until October, producing two to three generations per year. Females lay 80–100 eggs in her lifetime, often in plant tissue, where they hatch four to five days later. Nymphs are teardrop-shaped, brown-orange color and lack wings. They undergo five stages of development, growing larger with each molt, which lasts two to three weeks. The oldest nymphs possess wing pads and develop wings on their final molt. Adults are highly mobile, actively searching for prey and can live for three to four weeks.

## Bad Biter

Minute pirate bugs spend the spring and summer unnoticed, staying close to plants with attractive flowers. Once fall comes, their bites cannot be ignored. They land on the exposed skin of humans and will use their short, blunt mouthparts to probe and puncture our skin. They do not feed on human blood, nor do they inject saliva or venom. Some people react to bites with redness or a welt and others have no reaction. Minute pirate bugs are slow to respond and are easily squished.

## Control

It is not practicable to control minute pirate bugs. Insecticidal treatment to plants harm these predators and consequently increase plant pests. Unfortunately, the use of insect repellent is not effective at minimizing bites.

The good news is minute pirate bugs do not transmit pathogens, survive or reproduce indoors. Predators of the minute pirate bug include spiders, lacewings and other predaceous true bugs.

# Education is Key to Preventing Conflicts with Coyotes

Soni Cochran  
Extension Associate

A native predator of the prairie grasslands and southwestern United States, the coyote has expanded its range to include every state in the union. As cities grew and people built acreages in rural areas, these members of the dog family were able to adapt and survive in relatively close proximity with humans.

## About Coyotes

**Description** — Coyotes are medium-sized and adults weigh between 25–35 lbs. Their heavy coat may make them appear larger. With its pointed ears, drooping bushy tail with a black tip and a slender muzzle, coyotes can resemble a German Shepard dog. The coloration of coyotes can vary from grayish brown to silver-gray and even black. Coyotes with missing hair and wrinkled skin are sometimes reported. These animals are most likely suffering from sarcoptic mange caused by a mite.

**Diet** — Coyotes are opportunists and take advantage of what prey or other foods are available. This includes small rodents like voles which are a common pest found in southeast Nebraska. Other prey animals include rabbits, deer, birds and bird eggs. Coyotes will also eat plants and fruit. Although there are reports of coyotes taking pets, this is an uncommon occurrence. However,



Coyote scat (droppings or feces) is described as "rope-like" and is full of hair, bits of bone and sometimes plant material like berries.

people should be aware of the possibility and understand animals like cats that are allowed to be outdoors, can become prey for predators like coyotes.

## How Do You Know If Coyotes Are In The Area?

**Sounds** — You may never see a coyote, but you may hear the whines, howls and yips of a pack in the distance at night. Growing up in rural Lancaster County, the sounds of coyotes in nearby fields were a regular occurrence, and I enjoyed listening to them.

**Tracks** — Coyotes leave prints similar to those of a medium-sized dog and can be tough to distinguish from a dog. Coyotes are more likely to travel and leave prints in a straight

line whereas dogs shift their directions constantly. Coyote scat (droppings or feces) is described as "rope-like" and is full of hair, bits of bone and sometimes plant material like berries. Most dog feces are soft in comparison because of a pet food diet. Coyotes will leave scat in obvious places such as in the middle of a trail or bordering their territory as a way to communicate their presence to others.

## Preventing Conflict

Coyotes play an important role as predators in our ecosystem. However, there are times when human activities and property can come into conflict with coyotes. In urban areas, conflicts with coyotes can be avoided by taking precautions or by altering behaviors to avoid confrontation. City of Lincoln Animal Control (402-441-7900) is monitoring coyote reports in the area, and has tips on what to do around coyotes — see sidebar at right. USDA Wildlife Services (402-434-2340) is able to help rural residents outside city limits with problem wildlife like coyotes.

## FOR MORE INFORMATION

- City of Lincoln Animal Control at <http://lincoln.ne.gov/city/health/animal>
- Extension at <http://lancaster.unl.edu/pest>

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Lincoln Animal Control has received reports of coyotes in the Holmes Lake Park area and in areas south and east of Holmes Lake and Rickman's dog run. Animal Control continues to patrol the Holmes Lake Park and surrounding areas. Animal Control will investigate calls where there is a threat to the safety of the public. Lincoln Animal Control has received no reports of aggressive coyotes.

## Tips on What to Do Around Coyotes

**The urban coyotes in Lincoln have become more acclimated to people and pets. Most all of them are just curious and, therefore, may not be as fearful.**

- Make loud noises, carry a walking stick, blow a whistle, clap your hands.
- Presence of a coyote does not automatically mean it's a threat.
- Report aggressive coyotes to Lincoln Animal Control at 402-441-7900.
- **What to do with your pets:**
  - Keep your pet confined to your yard.
  - Stay with small pets while outside.
  - Avoid letting pets out at night/dawn/dusk especially unattended.
  - Keep your pet on a leash or under your complete control while on walks.

**Coyotes are more likely to stay around if they have a food source. The open areas in Lincoln and especially around the Holmes Lake area provide good habitat for the prey that coyotes hunt.**

- Coyotes generally feed on rabbits, rodents, fruits, insects.
- Do NOT feed coyotes or other wildlife.