Many landscapes have already been infested by crafty creatures who are the masters of disguise. The evergreen bagworm is sneaking around feeding on a wide variety of plant material right under our noses. To get a handle on controlling these little critters, we need to know a little bit about their life cycle and feeding preferences. Find out what evergreen bagworms are and if there is anything that you can do yet this year.

Correct identification is key to know how to control these pests. Fall webworms or tent caterpillars are an occasional pest. They are sometimes called 'bagworms,' but using the correct name will help clear up confusion. Tent caterpillars appear as white, webbed nests on the ends of branches in deciduous trees.

Evergreen bagworms are a whole different story from webworms. Bagworms feed on a wide variety of trees and shrubs, but they mainly prefer evergreens. Some of their favorites include junipers, cedars, and spruce. The reason that they are called bagworms is because they spin their own individual cases or bags around them for protection. As the bagworm grows, so does the bag that contains them. They will also add leaf fragments to the outside of the bag for camouflage. The bags look like baseball bat-shaped, wiggly ornaments hanging on the trees.

Knowing about their life cycle can help you select the correct control method. The evergreen bagworm usually hatches out around here the beginning or middle of June. When they first hatch, they look like tiny inchworms. These tiny caterpillars have a silk strand behind them that acts as a parachute, moving them wherever the wind takes them. When they land on a suitable host, they begin to feed and make their bag homes around them. The caterpillars continue to feed until the middle of August. At that point in time, they begin to pupate until the middle of September. The adult male clearwing moth looks more like a fly than a moth. The adult males leave their bags in search of the females. Once mated, the female evergreen bagworm lays her eggs inside of her bag, then drops to the ground. Each female can lay between 500-1,000 eggs. The eggs overwinter in the bags until spring when they start the process all over again. If you have had an issue with bagworms in the past, start scouting now.

The earliest sign of bagworm injury on evergreens is brown stressed needles. If the infestation is severe, the tree they are feeding on will have a brown tint to it. Heavy infestations of mature bagworms are capable of completely defoliating a tree or shrub. This can cause stress to the plant or even kill it if damage is great enough. This is especially true if they have infested an evergreen which is unable to re-grow new foliage until next year. If you have bagworms on any deciduous plant, ones that lose their leaves every year, they are able to re-grow foliage the following year.

There are several options for controlling bagworms. Insecticidal sprays require thorough coverage to penetrate the plant canopy. The products are applied to the foliage and must be eaten by the insect. Once the bagworms have stopped feeding for the year to pupate, there isn't a product that can penetrate the bag to control the larvae. The spray must completely cover the plant, almost to the point the product is dripping off of it. If the bagworms have made their home on a windbreak, the applicator has to be sure to have enough pressure to get product between the two rows of the windbreak. If this area is missed, the hiding bagworms will move and re-infest the rest of the plant. Hand removal is also an option for controlling bagworms. After removing the bags, place them in a bucket of soapy water.

There are several options available for insecticidal control of bagworms. Some of the reduced-risk options include *Bacillus thuringiensis* (Bt), spinosad, or azadirachtin (neem oil) are effective on young larvae and may need to be applied repeatedly. Additional insecticidal options include permethrin (Eight), bifenthrin (Talstar), cyfluthrin (Tempo), chlorantraniliprole, carbaryl (Sevin), dimethoate, esfenvalerate, fluvalinate (Mavrik), lambda-cyhalothrin, acephate (Isotox IV), and tebufenozide (Confirm). Depending on the product and size of the insect, secondary applications may be needed especially this late in the season.

Be on the lookout now for bagworms and be prepared to control them before they make a meal out of your plants.

Elizabeth Exstrom is the Horticulture Extension Educator with Nebraska Extension in Hall County. For more information contact Elizabeth at elizabeth.exstrom@unl.edu, her blog at http://huskerhort.com/, or HuskerHort on Facebook and Twitter.