

Natter's Notes

Noctua *pronuba*, the Winter Cutworm

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Winter cutworms, also known as Large Yellow Underwings, were first identified in Oregon about 2001. Since then, they have raised a ruckus in home gardens, lawns, pastures, and agricultural fields during the winter. The larvae (caterpillars) feed on a wide array of plants at night, whenever the air temperature is 40F or more. So, it's critical that the damage is differentiated from that of slugs and snails which, by the way, don't always leave a slime trail.

ID characteristics

Both the adult and larvae are seen in several color forms. Among the adults (moths), the wing coloration ranges from light tan to quite dark brown. But certain characteristics are constant, among them the 2 dark, kidney-shaped spots on each forewing.

To ID the larvae (caterpillars), look for a brown, inverted-Y on a light-colored head capsule. And, along each side of the body, you'll see a row of dark dashes, each one underlined with a slightly shorter, light colored dash. Newly molted caterpillars are bright green. And, as is usual for Lepidoptera, the larvae will also have prolegs and 3 pair of true legs.

Life cycle

During the growing season, the adults rest in the shelter of leaves on low-growing plants. Now and then, it's likely you'll flush one out while working in the garden during the summer.

The flash of orange on each hind wing of the brown moth is an easy field ID character. (See <https://bugguide.net/node/view/9821>.)

The life cycle follows complete metamorphosis. The several hundred eggs are laid in large patches on the host plant, arranged in neat side-by-side rows. Larvae (caterpillars) hatch in 2 to 4 weeks. They'll feed in the fall and continue through the winter, at night, whenever the temperatures are above 40F. During the day, the larvae rest just under the soil surface, quite close to the stem of the victimized plant.

Because caterpillars are chewing pests, plant parts disappear. Winter cutworms commonly align with leaf edges and eat inward, creating large scallops. Or they may chow down somewhere within the leaf blade.



Fig 1: Common mullein, *Verbascum thapsus*, with numerous holes, most likely caused by the winter cutworm. (J. R. Natter; 2019-04-14)

The caterpillars pupate in the soil. Likely you'll find a number of them as you prepare your flower and veggie beds this spring. A fun project is to rear out the pupae to verify which particular caterpillar species you have.

To rear a pupa, place it in clear container and cover with a breathable lid, perhaps paper toweling held in place with a rubber band. Set the container somewhere you'll see it often, but not in the sun, then wait for the adult to emerge. Adult moths are always easier to ID than are pupal cases you find in soil.



Fig 2: A full-grown winter cutworm, 2 inches long, which recently molted. Normal coloration will spontaneously appear after several hours. (J. R. Natter; 2010-04)

(continued)

Common victims

Favored host plants are numerous, among them flowers and vegetables; Pacific coast iris; and the great common mullein, *Verbascum thapsus*, the latter considered a weed here in Oregon. During 2015, they specialized in “mowing” grasses at their bases.

Damage

Because these caterpillars feed during the winter, be certain to differentiate the damage from that caused by slugs and snails which, by the way, don't always leave a slime trail. Then, too, before you suggest treatment, determine if damage is current and possibly ongoing. Or is it old damage? In the latter case, the pest is long gone.



Fig 3: *Rhododendron* leaf with damage that occurred quite some time ago. The telltale evidence is the dry tissue surrounding the wound. If the damage was fresh and on-going, the edges would be moist, perhaps even juicy. (J.R. Natter)

Management

The PNW Insect Management Handbook discusses home garden management of caterpillars in the section Horticultural, Landscape, and Ornamental Crops: Common Landscape Pests.

Take your choice of physical methods, among them to handpick; feed to the birds, drop into a nearby spider web; flick into soapy water; cut in half or stomp. *Bacillus thuringiensis* (Bt) is an organic

ingredient useful against caterpillars on both ornamental and edible plants; always apply according to label directions.



Fig 4: Newly emerged adult winter cutworm, *Noctua pronuba*, with hindwings which haven't yet expanded. (J.R. Natter; 2011-06)

Resources

A. *Large Yellow Underwing; A New Cutworm in Idaho* includes images of several very similar species, most of which are more common in agricultural sites than in home gardens;

<http://www.cals.uidaho.edu/edComm/pdf/CIS/CIS1172.pdf>.

B. *Winter Cutworm: A New Pest Threat in Oregon* contains close-up views of the larvae [page 3] as well as chemical recommendations for both home and commercial users;

https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em9139_1.pdf.

C. *Large Yellow Underwing moth and cutworm caterpillar, Noctua pronuba* has excellent images of eggs, larvae, pupae, and adults;

<http://www.wildlifeinsight.com/british-moths/large-yellow-underwing-moth-and-caterpillar-noctua-pronuba/>.