Tips for Moth ID:

- **Empty the trap frequently**, preferably every other day.
- Examine **fresh specimens**; identifying characteristics fade with age.
- **Ignore** moths with a **wingspan less than about 1 inch** or **greater than 3 inches**; they are not economically important in field and vegetable crops.
- **Avoid handling moths by their wings**; identifying characteristics can be rubbed off.
- **Use forceps or tweezers to handle moths**; fingers are more likely to rub off scales.

Most pictures featured in this guide were taken of moths caught in a blacklight trap and may exhibit minimal damage.

### European Corn Borer (*Ostrinia nubilalis*)

**Wingspan:** 1–1 1/4 in (2.5–3 cm)

**Forewing**
- Straw colored/light brown, males darker than females.
- Pale box with dark spot inside near leading edge.
- Dark wavy line two-thirds of the way toward outer edge.

**Hindwing**
- Dark edge with light spot.

**Flight Calendar**

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### Corn Earworm (*Helicoverpa zea*)

**Wingspan:** 1 1/4–1 1/2 in (3–4.5 cm)

**Forewing**
- Tan/light brown.
- Many dark blotches.
- Large bold spot halfway between body and wing tip.
- Wide, dark band near outer wing edge.

**Hindwing**
- Dark edge with light spot.

**Flight Calendar**

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Spotted Cutworm (*Xestia dolosa*)  
Nearly indistinguishable from *Xestia c-nigrum*

**Wingspan:** 1½–1¾ in (4–4.5 cm)  
**Forewing**  
- Fairly even brown-gray color  
- Pale brown/pinkish triangle in a black box  
- Black notch near wing tip  
**Hindwing**  
- Pale brown

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Dingy Cutworm (*Feltia jaculifera*)

**Wingspan:** 1¼–1½ in (3–4 cm)  
**Forewing**  
- Pale triangle and kidney shape within a black swath  
- Black wedge  
**Hindwing**  
- Pale with dark veins  
- Dark band along outer wing edge

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Western Bean Cutworm (*Striacosta albicosta*)  
Formerly *Richia albicosta* and *Loxagrotis albicosta*

**Wingspan:** 1½ in (4 cm)  
**Forewing**  
- White leading edge  
- Pale brown circle and crescent within black swath  
- Pale fringe along outer wing edge  
**Hindwing**  
- White/cream colored

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**Black Cutworm** *Agrotis ipsilon*

**Wingspan:** 1¼–2 in (3–5 cm)

**Forewing**
- Dark brown to black leading edge
- Dagger mark two-thirds of way toward outer edge
- White band across width near outer wing edge

**Hindwing**
- White with dark veins

**Variegated Cutworm** *Peridroma saucia*

**Wingspan:** 1¾–2¼ in (4.5–5.5 cm)

**Forewing**
- Speckled, gray to brown, individuals vary in darkness
- Seven dashes along leading edge (more visible in some specimens)
- Pale line along leading edge
- Pale spot halfway between body and outer wing edge

**Hindwing**
- Gray with dark veins

**Forage Looper** *Caenurgina erechtea*

**Wingspan:** 1–1½ in (2.5–4 cm)

**Forewing**
- Two bands cross width of wing
  - filled in on male
  - outlined on female
- Dark double-fingerprint spot near wing tip

**Hindwing**
- Dark tan/brown with two pale bands across outer third of wing
**Cabbage Looper** (*Trichoplusia ni*)

**Wingspan:** 1½ in (4 cm)

**Forewing**
- Mottled brown-gray
- Silvery-white U-shaped mark next to (sometimes connected to) a silvery white egg-shaped spot

**Hindwing**
- Pale brown, darker along outer wing edge

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**Alfalfa Looper** (*Autographa californica*)

**Wingspan:** 1½ in (4 cm)

**Forewing**
- Mottled brown
- Silvery-white V-shaped mark merged into a slipper shape
- Dark band near wing tip

**Hindwing**
- Pale brown wing with dark band along outer edge

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**Celery Looper** (*Anagrapha falcifera*)

**Wingspan:** 1½ in (4 cm)

**Forewing**
- Can be light brown to dark red-brown
- Silvery-white swoop with a short spur
- Smooth dark line near wing tip

**Hindwing**
- Pale brown wing with dark band along outer edge

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**True Armyworm (Mythimna unipuncta)**

Wingspan: 1¼–1¾ in (3–4.5 cm)

**Forewing**
- Pale tan tinged with orange
- Lightly speckled
- White spot on center of forewing
- Dark line near outer wing edge, solid at tip then dotted extending inwards

**Hindwing**
- Gray-brown with dark veins
- Darker near outer wing edge

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**Fall Armyworm (Spodoptera frugiperda)**

Wingspan: 1–1¾ in (2.5–4.5 cm)

**Forewing**
- Markings distinct on male, vague on female
- Brown/orange spot halfway out to outer wing edge
- Pale arc next to spot
- White spot on center of forewing
- White patch at wing tip

**Hindwing**
- White
- Dark line along outer wing edge

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**Yellow Striped Armyworm (Spodoptera ornithogalli)**

Wingspan: 1¼–1¾ in (3–4.5 cm)

**Forewing**
- Heavily patterned with tan, black, brown, and white marks
- Yellow/white swath in middle of wing
- White patch at wing tip

**Hindwing**
- White
- Dark outline along outer wing edge

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**Stalk borer** (*Papaipema nebris*)

*Wingspan:* 1–1½ in (2.5–4 cm)

**Forewing**
- Pale line separates outer, more pale third of wing
- Two sets of spots either lighter (male) or darker (female) than the wing background

**Hindwing**
- Tan

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**Hop Vine Borer** (*Hydraecia immanis*)

*Wingspan:* 1½–2 in (4–5 cm)

**Forewing**
- Pinkish brown
- Two pale lines divide wing length into thirds
- Two pale spots in middle third of wing, near the leading edge

**Hindwing**
- Tan

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Tips on operating a blacklight trap:

- Put trap on a farm growing field or vegetable crops that are hosts for moth caterpillars.
- Position trap so it has unobstructed exposure for a minimum of 200 ft for at least 180° around the trap.
- Avoid putting trap near other sources of light.
- Be sure to replace kill strip when its potency decreases—a fast kill is necessary to maintain an identifiable specimen. There are usually guidelines on the package indicating how long the kill strip will last, but other signs that the strip may need to be replaced include low catch numbers and moth specimens with significant damage (torn wings, identifying features worn away).

If you are not seeing population peaks when you expect them, or if you have inconsistent or low moth numbers, keep in mind that environmental changes will influence how many moths your trap catches. For instance, moonlight, barometric pressure, wind velocity, humidity, temperature, and crop phenology all influence moth activity.
Additional references

Publications
The following publications, available from Cooperative Extension’s Learning Store, provide additional information on field crop moth pests. (Go to learningstore.uwex.edu and follow the links to Farming > Pest Management.)

* Corn Earworm (A3655)
* European Corn Borer (A1220)
* Western Bean Cutworm: A Pest of Field and Sweet Corn (A3856)
* Biological Control of Insects and Mites: An Introduction to Beneficial Natural Enemies and Their Use in Pest Management (A3842)
* Bt Corn and European Corn Borer: Long-Term Success Through Resistance Management (NCR602)
* Insect Resistance Management and Refuge Requirements for Bt Corn (A3857)
* Pest Management in Wisconsin Field Crops (A3646)

Online resources

Wisconsin Crop Manager—Timely articles on field crop pest management by University of Wisconsin Integrated Pest and Crop Management (ipcm.wisc.edu).

Western Bean Cutworm Monitoring Network—Hosted by Iowa State University, this site reports weekly pheromone trap captures across the North Central region (www.ent.iastate.edu/trap/westernbeancutworm).

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Moth Identification Guide for Blacklight Trap Catch in Wisconsin (A3855)