SPOTTED LANTERNFLY
(Lycorma delicatula)
Photo: Holly Reguza, Pennsylvania Dept. of Agriculture

ASIAN LONGHORNED BEETLE
(Anoplophora glabripennis)
Photo: Donald Quen, US Forest Service

JUMPING WORMS
(Amythas agrestis)
Photo: Wisconsin Dept. of Natural Resources

GOLDSPOTTED OAK BORER
(Agrilus auroguttatus)
Photo: Mike Lewis, Center for Invasive Species Research

CHINESE LONGHORNED BEETLE
(Trichoferus campestris)
Photo: Christopher Pierce, USDA APHIS PPQ

ASIAN GYPSY MOTH
(Lymantria dispar asiatica)
Photo: Paul Weston, Cornell University

SUDDEN OAK DEATH
(Phytophthora ramorum)
Photo: Joseph O'Brien, USDA Forest Service

THOUSAND CANKERS DISEASE
(Geosmithia morbida)
Photo: Ned Tozer, Colorado State University

BOXWOOD BLIGHT
(Cyclindrocladium buxicola)
Photo: N. Gregory

WATER SOLDIER
(Stratiotes aloides)
Photo: Josef Hlasek

LESHER CELANDINE
(Ranunculus ficaria)
Photo: Leslie J. Nehrhoff, University of Connecticut

GIANT HOGWEED
(Heracleum mantegazzianum)
Photo: Donna R. Ellis, University of Connecticut

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A primary objective of the Illinois Cooperative Agriculture Survey (CAPS) program is to safeguard our nation's food and environmental security from exotic pests that threaten our production and ecological systems. This program focuses domestic surveys for harmful or economically significant plant pests and weeds that have eluded first-line inspections at ports of entry.
Illinois has been faced with the arrival of many unwanted, invasive plant pests and will continue to do so well into the future. Each of these invasive species has the potential to significantly impact the urban and natural landscapes of the state. Preventing the arrival of these pests is the best and most economical form of protection against invasive species. However, should they arrive, early detection is the key to protecting our natural resources.

### Spotted Lanternfly (Lycorma delicatula)
- **Identification:** Spotted lanternfly nymphs are black with white spots, and develop red spots on their wing pads and thorax as they develop. Adults are 1” long and ½ wide. Forewings are light brown with black spots. The hindwings are black with spots, and have bright yellow abdomen with black stripes.
- **Importance:** While only detected in Pennsylvania, expansion of its range may be implicated in serious economic losses of the country’s grape, orchard, and logging industries as nymphs are known to feed upon and damage more than 70 native plant species. **Not known to occur in Illinois.**

### Asian Longhorned Beetle (Anoplophora glabripennis)
- **Identification:** Asian longhorned beetles (ALB) can be from 1-1 ½” long, are black with white specks on their elytra (wing covers) and have long white and black banded antennae. Females tend to be a bit larger than the males.
- **Importance:** Larvae tunnel through the living tissues of the phloem and xylem. Ultimately the tree looses its ability to transport water and nutrients to its canopy and roots and dies.**Because ALB can be quite large it can also weaken the structural integrity of a tree. It has an extensive list of acceptable host species with Maples, Buckeyes, Willows, and Elms being the most preferred.** **Declared eradicated from Illinois in 2007.**

### Jumping Worms (Amynthas agrestis)
- **Identification:** Jumping worms are typically 1 ½-2” in long and display a narrow, white, and smooth band around their body. Most notable about black and white banded worms will thrash or “jump” violently when handled or disturbed.
- **Importance:** Jumping worms are an invasive species that feeds upon and thus changes the composition and quality of soil they inhabit. This non-native worm in turn cannot support understory plant growth, which results in a reduction in animal and fungal populations. **Confirmed Cook and DuPage counties.**

### Goldspotted Oak Borer (Agrilus auroguttatus)
- **Identification:** The goldspotted oak borer (GSOB) is a metallic wood-boring beetle that is slightly smaller than 1 ½" long. They are black or iridescent green with six gold-colored spots on the wings and two gold-colored spots on the outer edge of the thorax.
- **Importance:** GSOB has caused extensive injury and mortality to red oaks in California. Oaks play a significant role in Illinois landscapes - both natural and urban. Widespread oak mortality can impact wildlife through loss of food source and habitat. **Not known to occur in Illinois.**

### Chinese Longhorned Beetle (Trichophorus canadensis)
- **Identification:** Chinese longhorned beetles are ~ ½" long and have a narrow, rectangular body shape. These beetles range in color from dark brown to almost an orange with irregular clusters of gray hair on their back creating a mottled or spotted appearance. The antennae of adults are ⅔ - ¾ of the body length.
- **Importance:** This beetle infests and feeds on a variety of fruit and deciduous trees that are native to Illinois. Even in situations where the infestations do not kill these trees they can severely decrease growth, yield of fruit, and quality of wood. **Found in Cook, DuPage, and Crawford Counties.**

### Asian Gypsy Moth (Lymantria dispar asiatica)
- **Identification:** The Asian gypsy moth (AGM) is very similar to the European gypsy moth (present in Illinois) in both appearance and impact. AGM has a much larger host range, and the female has the ability to lay eggs (Eulalia does not), which could lead to much more rapid spread of this invasive. Like the European gypsy moth, AGM male moths have grayish-brown wings with a wingspan of about 1 ½”. Adult females are white and much larger, with wingspans of about 3 ½”. The only way to differentiate the two species is with DNA tests.
- **Importance:** AGM could cause serious damage to the landscape and natural resources. Females can lay hundreds of eggs. Caterpillars feed on and destroy the leaves of a variety of plants. They may also affect forests and pastures. **Not established in the United States, but has been intercepted several times.**

### Sudden Oak Death (Phytophthora ramorum)
- **Symptoms:** Sudden Oak Death (SOD) causes two types of problems: canker and root. The canker form on highly susceptible species killing them and/or foliar blights that serve as a reserve for pathogen transmission. Infected oak species develop cankers and branch dieback from the tips; the leaves turn brown but remain on the branches for a few weeks. Necrotic bark tissues may ooze a black or red tar from cracks. The pathogen is transported by rain, irrigation and ground water, and through the transportation of infected plant material and soil.
- **Importance:** P. ramorum is the causal agent of several diseases, including oak, ramorum leaf dieback, and boxwood blight. These plants have a wide host range and the potential to move quickly and efficiently. Concerns lie with not only the loss of oak trees, but the potential of this pathogen to move through the U.S. nursery system. **Not known to occur in Illinois.**

### Boxwood Blight (Cylindrocladium buxicola)
- **Symptoms:** Boxwood blight has been reported throughout the eastern U.S. Symptoms of this disease include leaf spots, rapid defoliation, and blackening of the stems of infected plants. Initial signs of infection begin as small light brown spots on the leaves which further develop into brownish-black lesions. Entire leaves turn straw-colored and fall of the stem. Stem infection results in distinct blackened brown lesions forming in a diamond-like pattern on the outer portion of the stem.
- **Importance:** A wide array of plants belonging to the Buxaceae family, including Japanese boxwood, Allegheny spurge, boxwood, and boxwood are all susceptible to boxwood blight. These plants are readily found in the landscape and nurseries, and therefore dispersal of the disease may be easily facilitated by transporting infected plants between nurseries and homes. **Not known to occur in Illinois.**

### Water Soldier (Statiotes aloides)
- **Identification:** Water soldier is very similar in appearance to aloe-vera, or the top of a pineapple fruit. Water soldier has serrated leaf edges. Leaves on mature plants are 40 cm long, bright green, and can grow up to depths of 5 m. During the summer, the plant is buoyant, but as the leaves mature, they become waterlogged and sink below the surface.
- **Importance:** This aquatic plant forms dense mats of vegetation, that outcompete native plants, destroy fish and wildlife habitat and impedes water flow. The sharp leaf edges can cut swimmers.

### Lesser Celandine (Ranunculus ficaria)
- **Identification:** Lesser celandine (rg buttercup) is a perennial plant that forms low-growing mats. It has a basal rosette of dark-green, kidney shaped leaves. It has bright yellow flowers on a single stalk. The root is made up of a cluster of tuberous roots.
- **Importance:** Lesser celandine is aggressive and emerges earlier than other spring flowers. It replaces native plants with its thick vegetation. The greatest impact is primarily on the native spring-flowering community and consequently, the wildlife and pollinators associated with them. **Becoming a problem in northeast Illinois.**

### Giant Hogweed (Heracleum mantegazzianum)
- **Identification:** This biennial or short lived perennial can grow up to 10’ tall. It has a numerous compound leaves. The flowers are held in a cluster at the tips, 3 - 5 wide. For more information regarding Illinois’ Most “Unwanted” Invasive Pest List, please visit http://www.inhs.illinois.edu/research/