INVASIVE PLANTS OF THE CHICAGO REGION

An identification guide to 32 invasive or native aggressive plants most damaging to local ecosystems.

Compiled by Robert Sullivan, Argonne National Laboratory (Retired) and Henrietta Saunders, University of Illinois Master Naturalist

Common Buckthorn¹

(Rhamnus cathartica)

- Shrub or small tree up to 25 ft. tall.
- Dark green leaves with finely toothed edges 11/2-3 in. long, in pairs along stems.
- Branches may end in short thorns.
- Small green-yellow flowers.
- Clusters of berry-like black fruit.

Reed Canary Grass²

(Phalaris arundinacea)

- Coarse grass 2–6 ft. tall.
- Stems hairless, hollow, smooth, rounded.
- Leaves 1/4-1/3 in. wide, gradually tapering, up to 10 in. long.
- Seed heads 3–16 in. long.
- Often found in moist/wet soils.

Lesser Celandine³

(Ficaria verna or Ranunculus ficaria)

- Non-woody plant up to 12 in. tall.
- Leaves dark green, shiny, kidney- to heart-shaped varying in size.
- Bright yellow flowers in early spring on stalks above leaves.
- Numerous underground tubers.
- Grows vigorously into dense mats.

Callery (Bradford) Pear⁴ (Pyrus calleryana)

Tree up to 60 ft., usually less.

- Leaves 2–3 in. long, on stalks, with wavy, slightly toothed edges.
- Showy white flowers 1 in. wide in spring, before leaves appear.
- Green to brown round fruits ½ in. across.

Oriental Bittersweet⁵

(Celastrus orbiculatus)

- Climbing, woody vine up to 60 ft. long and 4 in. in diameter.
- Mature bark gray or brown. Smooth twigs green or gray.
- Rounded leaves 2–5 in. long.
- Small fruits ripen then split to reveal showy, scarlet berries.

Bird's-Foot Trefoil⁶

(Lotus corniculatus)

- Non-woody plant up to 2 ft. tall.
- Compound leaves on stems, with three leaflets at leaf tip, and two more near leaf base.
- Clusters of 3-12 pea-like yellow flowers are produced on long stalks.
- Often found in colonies.



Common Reed⁷

(Phragmites australis)

- Coarse grass up to 15 ft. tall.
- Broad, pointed leaves on thick, vertical stalks.
- Smooth flat leaves 6-24 in. long, up to $2\frac{1}{2}$ in. wide.
- Flower heads dense, fluffy, gray or purple, 6–16 in. long.

Japanese Barberry⁸

(Berberis thunbergii)

- Small woody shrub 2–8 ft. tall.
- Branches have short straight spines.
- Leaves up to 1 in. long, paddleshaped. Leaves wine-red, green, or both, on same plant.
- Drooping clusters of pale-yellow flowers in mid- late spring.
 • Red berries ~ 1/4 in. long.

Purple Loosestrife9

(Lythrum salicaria)

- Multi-stemmed (30–50 per plant) non-woody plant up to 10 ft. tall.
- Lance-shaped leaves without stems 1 ½-4 in. long, but round or heartshaped at the base.
- Pink to purplish flowers in 4–16 in. long spikes at the tops of the stems.

Common Teasel¹⁰

(Dipsacus follonum)

- Non-woody plant with rosette of basal leaves, flower stalks to 7 ft tall.
- Upper leaves to 11 in. long, in pairs along flowering stem, fused at base, with sawtooth edges and short prickles.
- Spiny flower heads covered with small, lavender to white flowers.
- Biennial or short-lived perennial, i.e., usually blooms second year, then dies.
- Dead gray-to-brown stems and flowerheads often visible through winter.

Crownvetch¹¹

(Securigera varia)

- Non-woody plant up to 3 ft. tall.
- Compound leaves on floppy, creeping stems with 11-25 leaflets, with single leaflet at tip.
- Clusters of 10–25 pea-like, pink, two-toned flowers on stalks.
- Often found in dense patches.

Garlic Mustard 12

(Alliaria petiolata)

- Non-woody plant 1–4 ft. tall, biennial (flowers in second year).
- Heart shaped leaves, 1-6 in. long at base, smaller on flower stalk.
- Strong garlic odor when crushed.
- Early spring flowers have four small, white petals.



Amur Honeysuckle¹³

(Lonicera maackii)

- Woody shrub up to 16 ½ ft. tall.
- Oval leaves 1 ½-3 ½ in. long in pairs along stems.
- Fragrant white flowers ½-¾ in. long in pairs above stems appear in late spring.
- Red spherical fruit ¼ in. in diameter.

Cutleaf Teasel¹⁴

(Dipsacus laciniatus)

- Non-woody plant with rosette of basal leaves, flower stalks to 7 ft tall.
- Basal leaves to 16 in. long.
- Upper leaves, in pairs along flowering stem, fused at base, with deeply cut lobes, and short prickles.
- Spiny flower heads covered with small white flowers.
- Biennial, i.e., blooms second year, then dies.
- Dead brown stems and flowerheads often visible through winter.
- Very similar to common teasel, except for lobed leaves; both should be removed.

Glossy Buckthorn¹⁵

(Frangula alnus, Rhamnus frangula)

- Shrub or small tree up to 30 ft. tall.
- Shiny leaves 2–3 in. long, with smooth edges and prominent veins.
- Inconspicuous, very small greenish yellow flowers in clusters along stems, followed by small berries ripening from red to purple or black.

Multiflora Rose¹⁶

(Rosa multiflora)

- Woody shrub or vine, 3–6 ft. tall as shrub or 10 ft. as vine.
- Very thorny green to brown stems.
- Compound leaves with 5–9 leaflets.
- White flowers (rarely light pink) about 1½ in. wide in late spring, followed by small red hips.

Narrowleaf Cattail¹⁷

(Typha angustifolia)

- Non-woody aquatic plant 3–6 ft. tall.
- Leaves very narrow (up to ½ in. across), flattened.
- Round flowering stalk has two cylindrical flower clumps separated from each other by at least ½ in. (usually a few inches). Upper clump narrower and fluffier and yellow to light brown, lower clump wider, tighter, and darker brown.
- Found in wetlands, lakeshores, ponds, marshes and bogs, road sides, ditches.
- Native but very aggressive.



Bishop's Weed, Goutweed¹⁸ (Aegopodium podagraria)

- Non-woody plant up to 2 ½ ft. tall, with a low rosette of basal leaves, and smaller leaves on taller flower stalks.
- Leaves sometimes green and white.
- Tiny white flowers in flat-topped clusters, late spring to midsummer.

Canada Thistle¹⁹

(Cirsium arvense)

- Non-woody plant up to 4 ft. tall.
- Leaves alternate on stem, usually 3– 4 in. long and less than 1 in. wide.
- Stems often branch near top.
- Leaf edges have pale yellow thorns.
- Pale pink or lavender flowerheads up to 3/4 in. across, early to midsummer.

Dame's Rocket²⁰

(Hesperis matronalis)

- Non-woody plant up to 4 ft. tall, blooming in second year.
- Leaves 2–6 in. long and hairy, usually without stalks.
- Four-petaled, white to purple or pink, fragrant, showy flowers in clusters.
- Blooms late spring to midsummer.

Japanese Honeysuckle²¹

(Lonicera japonica)

- Woody vine up to 60 ft. long.
- Climbs adjacent woody vegetation, or sprawls on ground.
- Oval leaves up to 3 in. long and 2 in. wide in pairs on stems.
- Fragrant white flowers tan with age.
- Fruit is black berry ~1/4 in. across.

Lily of the Valley²²

(Convallaria majalis)

- Non-woody plant up to 12 in. tall.
- Paired leaves with parallel veins arise almost directly from the ground.
- Dainty white bell-like flowers about 1/4 in across on a single separate
- Flowers are strongly fragrant, blooming in spring.
- Flowers are replaced by red berries, but many plants do not set fruit.
- Spreads by rhizomes to form dense colonies.

Black Locust²³

(Robinia pseudoacacia)

- Tree usually 30-50 ft. tall.
- Compound leaves with 7–21 small, rounded leaflets, with a pair of spines at the base of most leaves.
- Long drooping clusters of fragrant white flowers mid- to late spring.
- Smooth, thin seed pods 2–4 in. long.
- Native but aggressive.



Japanese Knotweed²⁴

(Reynoutria japonica)

- Non-woody plant 3–8 ft.tall.
- Hollow stems zig-zag between spade-shaped leaves.
- Multiple flower stalks 2–4 in. long with very small, fragrant greenishwhite flowers developing from leaf/stem junctions.

Japanese Stilt Grass²⁵

(Microstegium vimineum)

- Sprawling grass ½-3 ½ ft. tall.
- Lance-shaped leaves 1-4 in. long, alternating on drooping stems.
- Leaves have silvery line in the center of the leaf blade.
- Green flower stalks develop from leaf/stem junctions or tops of stems.

Wild Parsnip²⁶

(Pastinaca sativa)

- Non-woody plant 2–5 ft. tall, with grooved stems.
- Large compound leaves up to 18 in. long and 6 inches wide at base of plant. Usually 9 leaflets per leaf. Smaller leaves on upper parts of stems.
- Flat-topped clusters of tiny yellow flowers 3–8 in. wide at stem tops.
- Each large flower cluster consists of 15-25 smaller clusters.
- Blooms late spring to midsummer.
- Plant is biennial (blooms second year, then dies).

Burning Bush²⁷

(Euonymus alatus)

- Woody shrub up to 8 ft. tall.
- 2–4 corky wings on branches.
- Dark green leaves 1–3 in. long and ½−1 in. wide.
- Leaves turn bright red in fall.
- Red fruit about ½ in. long in fall.
- Commonly sold as an ornamental.

Autumn Olive²⁸

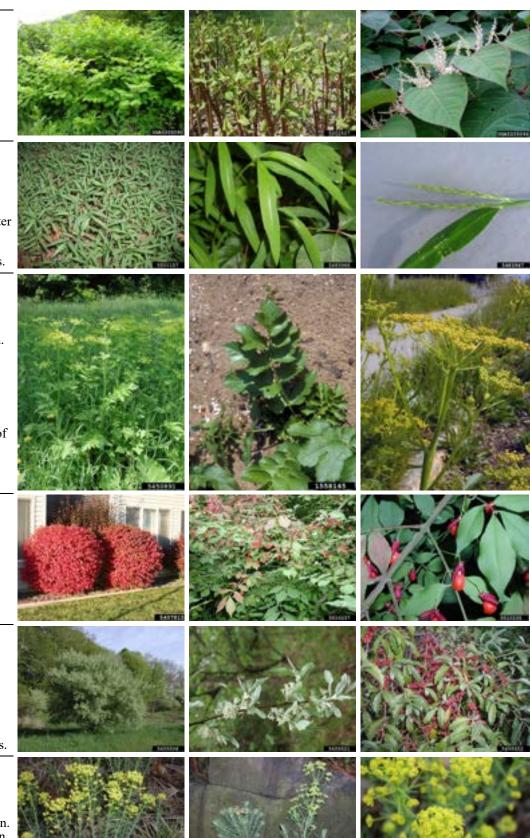
(Elaeagnus umbellata)

- Woody shrub 10–20 ft. tall. Leaves up to 3 in. long and 1 ¼ in. wide alternate on stems,
- Leaf undersides almost white, with numerous silvery scales.
- 1–4 fragrant small white flowers at leaf/stem junctions; round red fruits.

Leafy Spurge²⁹

(Euphorbia esula)

- Non-woody plant 2-3 ½ ft. tall
- Smooth, bluish-green stems that exude sticky white sap when broken.
- Lance shaped, smooth leaves 1–4 in. long, alternate around stem.
- Greenish yellow flowers in rounded clusters at top of stem in late spring.



Orange Day-Lily, Ditch Lily³⁰

(Hemerocallis fulva)

- Non-woody plant with rosette of basal leaves, flower stalks 3–6 ft tall.
- Floppy linear leaves, tapering gradually to a point.
- Flowers orange, with yellow centers; each flower lasting 1 day, midsummer.
- Fleshy fibrous tuber-like roots.

White Sweet Clover³¹

(Melilotus albus)

- Non-woody plant 3–8 ft. tall.
- Three-lobed leaves up to 1 in. long, alternating on stems.
- Flower clusters 2–6 inches long, with small white flowers.
- Seeds in small pods, usually 1–2 seeds per pod.
- Often grows in colonies.
- Annual or biennial blooming early summer to fall (second year).
- Nearly identical to yellow sweet clover except flower color; both should be removed.

Yellow Sweet Clover³²

(Melilotus officinalis)

- Non-woody plant 3–8 ft. tall.
- Three-lobed leaves up to 1 in. long, alternating on stems.
- Flower clusters 2–6 inches long, flowers yellow, occasionally white.
- Seeds in small pods, usually 1–2 seeds per pod.
- Often grows in colonies.
- Annual or biennial blooming late spring to early fall (second year).
- Nearly identical to white sweet clover except flower color; both should be removed.











Instructions: Use this guide to identify whether listed plants are present on property you own or manage. After positive identification, these plants should be removed from your property or destroyed. Some listed species are commercially available; do not purchase or authorize planting of any listed species. Please share this list and encourage others to identify and remove or destroy listed species and refrain from buying, selling, or planting them.

You are encouraged to verify preliminary identifications made with this guide by using online or other resources. Photos and descriptions in this guide were derived primarily from *Invasive.org* (https://www.invasive.org/species.cfm) and *Illinois Wildflowers* (https://www.illinoiswildflowers.info); both of these websites provide more extensive descriptions and high-resolution photographs.

Please note: Plants on this list were identified by six local subject matter experts with extensive knowledge of plants and ecosystems of the Chicago region as posing the greatest threat to regional ecosystems. The list reflects the professional opinions of the ecologists surveyed. This is a prioritized list, i.e., plants are listed in order from greatest to least ecological threat as rated by the surveyed subject matter experts. It applies to Cook, DuPage, Lake, Kane, Kendall, McHenry, and Will counties in Illinois, but will be useful in nearby areas as well. Many of these plants occur throughout the U.S.

The list is not comprehensive; there are more than 200 invasive plant species in the Chicago region, and all pose at least some threat to local ecosystems. The list is subject to change over time. For an expanded invasive plant list, see: https://www.chicagobotanic.org/research/invasive_species.

Two listed species are native to Illinois but are aggressive and significantly harmful to local ecosystems: Black locust (*Robinia pseudoacacia*) and narrow leaved cattail (*Typha angustifolia*). These species should also be removed/destroyed.

SURVEYED SUBJECT MATTER EXPERTS

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PHOTO CREDITS

¹ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

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QUESTIONS? Email Robert Sullivan at rgsullivan@hotmail.com. Please note we cannot assist you with plant identification.

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² All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

³ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

⁴ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

⁵ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

⁶ Left and center: Ohio State Weed Lab, The Ohio State University, Bugwood.org; Right: Mary Ellen (Mel) Harte, Bugwood.org.

⁷ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

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⁹ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

¹⁰ Left: Barry Rice, sarracenia.com, Bugwood.org; Center and right: Ohio State Weed Lab, The Ohio State University, Bugwood.org.

¹¹ Left and center: Dan Tenaglia, Missouriplants.com, Bugwood.org; Right: James H. Miller, USDA Forest Service, Bugwood.org.

¹² All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

¹³ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

¹⁴ All photos: Chris Evans, University of Illinois, Bugwood.org.

¹⁵ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

¹⁶ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org

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²² Left and right: Ansel Oommen, Bugwood.org; Center: Gil Wojciech, Polish Forest Research Institute, Bugwood.org.

²³ All photos: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

²⁴ Left and right: Jan Samanek, Phytosanitary Administration, Bugwood.org; Center: Leslie J. Mehrhoff, University of Connecticut, Bugwwod.org.

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³¹ Left and center: University of Alaska - Anchorage, Bugwood.org; Right: Mary Ellen (Mel) Harte, Bugwood.org.

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