

## IDENTIFICATION

## HABITAT & THREAT

## MANAGEMENT



### COMMON REED (*Phragmites australis*)

Plants grow 3-14 feet tall.

1. Feathery plumes of brownish flowers are produced in mid-late summer.
2. Leaves and stems are stiff and sharp, leaves are broad and sheath-like.
3. Horizontal stems (rhizomes) give rise to annual erect shoots.

- Grows in shallow brackish and freshwater marshes; sunny wetlands; along riverbanks, lakeshores and disturbed areas.

- Human-caused disturbance, such as increased sedimentation and salinity (often caused by de-icing salt runoff from roads), may promote invasions.

- Forms dense monocultures (some as large as 7,000 acres), which decrease biodiversity and crowd out native vegetation such as cattails and native wetland orchids; rhizome fragments and seeds can be transported to establish new plants.

- Minimizing human-caused disturbance may be the best prevention to invasions of *Phragmites*.
- Cut plants just before the end of July, when plants have not yet stockpiled their energy reserves into their rhizomes (repeat for a number of consecutive years).
- Native varieties do occur - proper identification is essential before carrying out active control methods.



### GARLIC MUSTARD (*Alliaria petiolata*)

First-year plants grow to 4 inches tall; second-year plants grow 2-4 feet tall.

1. First-year plants have kidney-shaped leaves, no flowers.
2. Second-year plants produce stalks of white flowers in late spring.
3. Second-year leaves are large-toothed and triangular.

- Thrives in deciduous forests, partially shaded moist habitats; most invasive in disturbed areas; cannot tolerate acidic soils.

- Dominates forest understorey by growing rapidly in spring before most native understorey species, including springtime wildflowers. Also may release phytotoxins into the soil to suppress growth of neighboring plants.

- Prolific seed producer (mature plants can produce thousands of seeds), also self-fertilizes; lacks natural predators; invasions appear to make habitat less suitable for native birds, mammals and amphibians.

- Pull or cut plants in late spring when flowers are in bloom, and repeat the process over a number of years in order to deplete the seed bank already present in the soil (seeds stay viable for up to five years).
- When pulling smaller plants, as many roots as possible should be removed.



### JAPANESE KNOTWEED (*Polygonum cuspidatum*)

Plants grow 3-10 feet tall.

1. Cascading white flowers bloom in August and September.
2. Leaves are alternate, broadly ovate, and leathery.
3. Bamboo-like, hollow stems are upright and jointed.

- Grows best in sunny areas; wetlands, waste places, along roadways and other disturbed areas; frequently spreads along stream beds and river banks.

- Emerging early in the season, it can shade out native vegetation, thereby degrading wildlife habitat and causing a reduction in species diversity; along rivers and streams it can grow into impassable, dense stands, often making access for fishing a problem.

- Reproduces primarily from rhizome growth (rhizomes can spread up to 60 feet) and fragments of rhizomes and stems, which can be as little as 0.5 inches.

- Small stands and individual plants can be removed by either digging up the whole plant, being careful not to leave rhizome fragments in the soil, or by repeated cutting.
- For effective control, cutting must be done at least twice per month during the growing season, especially between April and August.
- Revegetation with native plants may help eliminate Japanese knotweed from a specific site.



### PURPLE LOOSESTRIFE (*Lythrum salicaria*)

Plants grow 1.5-8 feet tall.

1. Spikes of magenta flowers bloom July to September.
2. Lance-shaped leaves grow opposite or in whorls around the stem.
3. Stems are stiff and angular.

- Thrives in moist environments, in partial to full sun; along ditches, streams, and ponds; very aggressive invader of wetlands and marshes.

- By forming dense monocultures, purple loosestrife forces out native vegetation, reducing food, shelter and nesting sources, and thereby detrimentally affects shorebirds, waterfowl, native grasses, sedges, flowering plants, and other wildlife.

- Spreads primarily by seed - older plants can produce more than 2 million seeds annually, which remain viable in soil and water for many years.

- Pull or dig out small plants or cut larger plants close to the ground. Pulling and cutting should be done in July and August when the plants are flowering but have not yet developed seed-heads.
- Do not buy purple loosestrife from nurseries!



### SHRUBBY HONEYSUCKLES

(*Lonicera x bella*, *L. tatarica*, *L. morrowii*)  
*L. x bella* (Bell's, common; hybrid of *L. tatarica* and *L. morrowii*) grows 4-9 feet tall.

1. Pink-yellow flowers grow in pairs and bloom in June.
2. Leaves are slightly hairy, oval to oblong, and opposite.
3. Branches of all non-native honeysuckles are hollow.
4. Orange-red berries ripen in August.

- Grows most often in open or disturbed areas such as woodlots, forest edges, and abandoned fields; *L. morrowii* can invade fens, bogs and lakeshores.

- Berries produced by non-native honeysuckles are not as high in fat or nutrients as native varieties, and thereby negatively impact migrating birds that use these berries as a food source.

- Forms dense shrub layers, crowding out and shading native vegetation and hindering normal forest regeneration; may release growth-inhibiting phytotoxins into the soil.

- Non-native varieties can be identified by their hollow twigs.
- Pull or dig up seedlings and small plants; cut larger stands repeatedly for three to five years, since the plants resprout from the rootstock.
- Cut plants in late summer or early fall, or once in early spring and again in early fall. Cutting in winter only encourages resprouting in spring.