

## Invasive Plant Species Information

### Spotted Knapweed



**Life Cycle:** Perennial with a stout non-branching taproot capable of living up to 9 years. Flowering occurs from June to October. Seeds germinate in the fall and early spring when moisture and temperature are suitable. Some evidence that spotted knapweeds release chemicals which inhibit surrounding vegetation.

#### **Control Measures**

**Mechanical and Cultural:** Persistent and careful hand pulling can control spotted knapweed. Since re-growth can occur from crowns and viable seeds in the soil, entire plants must be removed before they produce seeds each year. Mowing has not been successful--plants merely reflower at a lower height.

**Spotted knapweed can also be controlled through hand pulling.** Plants are easiest to pull after plants have bolted (elongation of flowering stem has started), and when the soil is moist. When digging or pulling, try to remove as much of the root as possible to prevent regrowth.

## Phragmites



**Biological Impacts:** Phragmites outcompetes and blocks out native vegetation and provides little to no food or shelter for most wildlife which normally thrive in these environments. Phragmites can also eliminate water channel and pool habitats which offer natural refuge and feeding grounds for invertebrates, fish, and water birds. Phragmites can create a dense jungle of vegetation that native species cannot penetrate. In addition, decomposing Phragmites can raise surface elevation, depriving wetlands and marshes of vital nutrients needed by native plants and animals for survival. Phragmites will easily out-compete native cattails and dry up wetlands.

Phragmites grows rapidly, and each fall, plant material dies back, creating large concentrations of tinder-dry vegetation that increase the potential for fast-spreading fires that can threaten residential and commercial developments on surrounding uplands.

**You can utilize an aquatic rake to help pull them up**, but be aware that doing so may simply break the rhizomes rather than removing all of them and, again, the phragmites will just regenerate (are you beginning to get an idea of why this plant is so tricky to manage?).



## Autumn Olive



Because autumn olive is capable of fixing nitrogen in its roots, it can grow on bare mineral substrates. **It threatens native ecosystems by out-competing and displacing native plant species, creating dense shade and interfering with natural plant succession and nutrient cycling.**

If your control method is to simply cut back or mow the autumn olive stems, however, this only serves to prune and stimulate the shrub's growth. Even when controlled with a brush specific herbicide, keep an eye out in the next seasons of growth for new autumn olive bushes — where there was one previously producing berries, new shrubs will grow.

### **What problems does autumn olive cause?**

Like most invasive plants, autumn olive replaces native plants in high quality natural areas, which in turn reduces critical food resources for birds, butterflies, and other wild creatures. Autumn olive is perhaps the most notorious invasive plant, both for the irony of its spread by organizations now seeking to control it and for how dominant the plant has become. Although it does provide a healthy supply of late season berries, autumn olive monocultures do not sustain insect populations during the growing season that songbirds require for their nestlings to survive to adulthood.