

Invasive plants and animals are threatening our nation's environment and economy. Invasive species pose an enormous threat to our native plants, animals and ecosystems. In fact, their toll on the environment is second only to habitat destruction. Nearly half of the species listed as threatened or endangered under the Endangered Species Act are at risk due to competition with or predation by non-native species. Invasive species can also alter communities by changing the hydrology or soil chemistry. Invasive species are costing the United States nearly \$125 billion per year ([www.invasivespecies.gov](http://www.invasivespecies.gov)). Some of the worst weeds in natural areas in Illinois include purple loosestrife (*Lythrum salicaria*), Japanese and bush honeysuckles (*Lonicera japonica*, *L. maackii*, *L. tatarica*, *L. morrowii*), garlic mustard (*Alliaria petiolata*) and buckthorns (*Rhamnus cathartica* and *R. frangula*).

Although invasive plants are almost always not native to a region, it is important to note that most non-native species are not invasive. In addition, some native species can become invasive. For the purposes of this document, the following definitions will be used:

- (indigenous) – a species that was present in North America prior to European settlement or has arrived since through natural means of dispersal.
- (exotic, alien, introduced) – a species that was brought to North America by humans, either deliberately or accidentally.
- – a non-native species, or native species from another region of the country, that has become established in disturbed areas and/or native communities.
- – a species that readily spreads, especially in disturbed areas, but generally does not pose a threat to the integrity of native plant communities.
- – a species, usually non-native, that is able to establish itself within existing native plant communities and is posing a threat to the integrity of the community.

When plants are introduced to a new location, either intentionally or accidentally, they can spread prolifically, out-compete native species for resources, and eventually even dominate the landscape. Biologists are studying the mechanisms underlying a taxon's ability to become invasive, but for now it is still difficult to predict whether or not a species will become invasive in a new habitat. Some factors common to many invasive plants include:

- Escape from natural enemies
- Rapid growth and early maturity
- Production of many seeds
- Ability to reproduce vegetatively
- ,Nm /TT1 1m /TT1 1ds that are dis6.7 -0.5 ( p) -0.3 (r) -0.5 (e)0.5 (da)[(A) -0.1 1 Tf (yg) 0.2 (e)Tj 448

species arriving accidentally. Seeds can hitch rides to new locations in cargo or even stuck to the bottom of hiking boots.

The federal government has responded to the invasive species crisis in several ways.



5. Interpretation about many of the species under evaluation will be provided. The list will

12.

Plan: R = Remove as soon as possible









1. If taxon is on the Chicago Botanic Garden Invasive Plant List as "R" or "P"—do not add to collection.

1. If taxon is not on list, go to 2.

2. Taxon is already in U.S. and commercially available in the Chicago area -- no risk assessment needed, can add to collection.

2. Taxon is in U.S. but not commercially available in the Chicago area – perform risk

(modified from those of the Southwest Exotic Plant Information Clearinghouse)