



Invasive Species Overview



Kudzu is among our best known invaders, with no form of natural control. The vegetation in southern parts of the U.S is being completely taken over by this non-native species brought over from Asia in 1876. (Photo: USGS)

Fact vs. Myth

Myth– It's ok to plant non-native species in urban areas because there's no way for them to spread.

Fact– Seeds of invasive plants are not only spread by humans. Birds, wind, and water play a major part in dispersing all kinds of seeds.

Conserving biodiversity is a worthy goal, but the day-to-day work of it is often fraught with trouble. It's not just issues of jobs versus the environment that undermine biodiversity conservation. More insidious are problems that nature herself provides—with the help of humans the invasion of species where they don't belong.

The United States spends more than \$138 billion per year on major environmental damages and losses caused by non-native species—that is, a species living outside its original ecosystem with few or no natural checks and balances to keep its population from getting out of control. When invasive species multiply to unmanageable levels, they damage native plant and animal communities, increase soil erosion and sedimentation, and destroy the economic value of land. There are now an estimated 50,000 non-indigenous species in the United States. While not all are considered invasive, those that are invasive are causing more than their share of trouble.

How Do Non-native Species Get Here?

Most plant and vertebrate animal introductions have been *intentional*. Exotic species have been introduced for food, ornamental purposes, landscape restoration, biological pest control, sport, and pets. Unintentional invaders including the majority of insect, disease, and fungus introductions are often accidental travelers in ship ballast or via plants or soils entering the United States. Fire ants, Formosan termites, zebra mussels, and the emerald ash borer are prime examples of this group. Though points of entry are strictly monitored and controlled by the U.S. Department of Agriculture, identifying these pests often amounts to finding a needle in a haystack. Though we're somewhat wiser with hindsight, biotic invaders continue to spread rapidly. Global economy and travel, coupled with the alteration and simplification of many natural environments, has enormously increased the potential for species invasion.

What is Being Done to Save Our Native Environment?

A long-term solution to the invasive plant problem requires a coordinated, landscape approach that connects smaller pieces of land within a geographic region to control the spread of invaders. On a national and state level, there is much work being done. In



Melaleuca's attractive flowers fueled its spread. Native to Australia, it is now considered one of Florida's most problematic invasive plants. (photo: Australian Government Dept. of Environment and Heritage)

Fact vs. Myth

Myth– Species expand their ranges naturally. When humans introduce a species to a new area, it's no different than nature taking its course.

Fact– Humans are moving species around faster than any natural form of re-colonization. Native species can't adapt to the aggressive nature of the invasive species.

1999, President Clinton signed an executive order creating an Invasive Species Council and directed federal agencies to create a framework for planning and coordinating all stakeholders. The council is charged with a variety of tasks, including: preventing the introduction of invasive species; detecting and controlling problems; monitoring the spread of existing invasive species; conducting research; and promoting public education.

In 2009, President Obama vowed to provide assistance to the Great Lakes states to keep invasive species out of the lakes and to help control invasive species that are already posing serious threats to the native plants and animals of those regions. The Obama administration will be encouraging the Invasive Species Council to aggressively pursue the policies set forth by President Clinton in 1999.

Here's What You Can Do to Help.

Prevention is the most cost effective and environmentally safe method to manage invasive and exotic species. Short of that, detection, control, and eradication are the chief methods of dealing with invaders. Here are a few things that you can do to help keep invasive species under control:

- When landscaping, use grasses, flowers, shrubs and trees that are native to your area.
- Do not transport plants or animals from one area to another. For example do not catch a fish from one pond and then release it in another pond.
- After using a boat, be sure to spray it with high pressure water or let it sit and dry for at least five days before using in a new location.
- Wash your boots before you hike in a new area.
- Join a local invasive species awareness organization.
- Host an invasive species awareness event to raise money for organizations that are working to restore our native environment and to share knowledge about invasive plants and animals.

For more information about invasive species, please visit: www.invasivespeciesinfo.gov.

For more information on using native plants for landscaping visit: www.usna.usna.gov.



A major pest to lawns, and agriculture in the north eastern United States, the Japanese beetle was accidentally introduced to the U.S. from Japan in 1916.

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