



# Invasive Species



## How Does a Species Become Invasive?

Often, invasive species owe their success in colonizing new ecosystems to one or more of the following characteristics:

- ▶ They tolerate a variety of habitat conditions
- ▶ They grow and reproduce rapidly
- ▶ They compete aggressively for resources (like food, water, and nesting sites)
- ▶ They lack natural enemies or pests in the new ecosystem

## What Effect Can Invasives Have?

Invasive species can negatively impact ecosystems in a variety of ways. They can:

- ▶ Displace native species
- ▶ Reduce native wildlife habitat
- ▶ Reduce forest health and productivity
- ▶ Alter ecosystem processes
- ▶ Degrade recreation areas

## Are Invasives Ever Good?



In addition to their negative effects, some invasive species may have positive traits. These traits are often the reason a species that eventually becomes invasive was introduced to an ecosystem in the first place. In addition to growing rapidly and crowding out native plants in the region, the Himalayan blackberry, for example, produces edible berries that are relished by wildlife and people alike.

Similarly, though it now threatens to crowd out native plants and increase fire danger, scotch broom, with its bright yellow flowers, was originally planted for beautification and landscaping purposes.

Any positive effect an invasive species might have in an ecosystem can easily be outweighed by the damage it causes. According to the National Invasive Species Information Center, some estimates put the economic cost associated with invasive species damage and control efforts at more than \$100 billion a year in the United States.

## Will Nonnative Species Always Become Invasive?

Simply being nonnative in an ecosystem does not mean that a species will become invasive. It must possess certain characteristics, such as those listed above “How Does a Species Become Invasive?”, that ideally suit it for colonization in a particular area. It also is possible for a species to be invasive in one ecosystem, but non-invasive in another. This can be due to a variety of factors, such as the presence of a predator species or less-than-ideal habitat conditions.

## Invasive Plants

Like invasive species in general, invasive plants possess characteristics that make them especially suited for colonizing new ecosystems. In addition to the characteristics listed above “How Does a Species Become Invasive?”, these plant-specific characteristics can include invasive plants’ ability to:

- ▶ Produce abundant, easily dispersed seeds that can withstand adverse conditions
- ▶ Reproduce via multiple pathways: roots, stems, and seeds
- ▶ Release chemicals that inhibit the growth of or kill surrounding native plants

## What You Can Do About Invasive Plants



- ▶ Learn which invasive plants threaten the ecosystems in your area
- ▶ Do not collect invasive plants, their seeds, or reproductive bodies
- ▶ Control invasive plants on your property
- ▶ Manage the growth of ornamental plants on your property
- ▶ Avoid driving or recreating in areas where invasive plants grow
- ▶ Report invasive plant infestations to your local land management agency

## Invasive Species Research at PNW Research Station

Scientists with the Pacific Northwest Research Station are conducting studies to better understand invasive species in the region. Their findings will assist natural resource managers as they work to minimize the impact of invasives and limit their spread.

To learn more about invasive species research at the Station, browse the Web sites below.

## Sources

### **Invasive.org**

<http://www.Invasive.org>

### **National Invasive Species Information Center**

<http://www.invasivespeciesinfo.gov>

### **Pacific Northwest Region, Invasive Plant Program**

<http://www.fs.fed.us/r6/invasiveplant-eis>

### **USDA Forest Service, Invasive Species Program**

<http://www.fs.fed.us/invasivespecies/>

**Source:** <https://www.fs.fed.us/pnw/invasives/#how>

*The US Forest Service is a multi-faceted agency that manages and protects 154 national forests and 20 grasslands in 43 states and Puerto Rico. The agency's mission is to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations.*