

PROTECT
OUR **Nation's**
Public Lands

*Invasive and noxious weeds are rapidly
spreading across America's national landscapes*



A cheatgrass (*Bromus tectorum*) infestation in the western United States.
Photo: J.M. Randall, The Nature Conservancy, Bugwood.org.

A Growing Concern

Invasive and noxious weeds are threatening our national landscapes

The federal Bureau of Land Management (BLM) manages over 245 million acres of public lands—more than any other U.S. federal agency. Public lands are one of our country's greatest assets; they provide opportunities for forage production, forestry, energy production, and outdoor recreation. As invasive and noxious weeds spread, the health of these lands is threatened.

Invasive weeds are not native to the area where they are growing. They are able to grow and spread rapidly because they have no natural predators, diseases, or competitors to regulate their populations. **Noxious weeds** are invasive weeds that have been given special designation by a federal, state, or county government because they are known to cause damage to agriculture, wildlife, property, human health, or recreation.

Invasive and noxious weeds are one of the greatest biological threats to our nation's natural resources. At present, over 35 million acres of BLM-managed lands are infested; however, weeds are just one type of invasive species affecting our national landscapes. Numerous invasive aquatic plants, insects, and other species also pose considerable threats to our ecosystems. So why are weeds a problem?

Invasive and noxious weeds:

- » Displace native plants that wildlife depend on for food
- » Destroy wildlife, livestock, and bird habitat
- » Interfere with recreational activities such as hunting, fishing, hiking, camping, and boating
- » Put threatened and endangered species at further risk of extinction
- » Increase the frequency and risk of wildfires
- » Increase the risk of soil erosion in wetland areas and damage streams that provide habitat for fish
- » Reduce agricultural production and property values.

A FEW FACTS



Over the past 10 years, wildfires have burned more than **57 million acres** of public lands, increasing the presence of non-native annual grasses to over 25 million acres.

The BLM spends more than **\$13 million** each year on invasive and noxious weed management and control.

Invasive and noxious weeds spread at a rate of approximately **4,600 acres per day** on federal lands alone in the western U.S.

More than **20%** of public lands in the western U.S. (excluding Alaska) are infested with invasive and noxious weeds.

In Alaska, approximately **4,458 acres** are infested with invasive and noxious weeds but this number continues to grow.

Photo: Dave Powell, USDA Forest Service, Bugwood.org.

Common Invasive and Noxious Weeds on Public Lands

These weeds aggressively invade new areas and are already present in many parts of the U.S. By learning to identify them, you can help prevent them from spreading further.



Spotted knapweed
(*Centaurea maculosa*)



Cheatgrass
(*Bromus tectorum*)



Yellow starthistle
(*Centaurea solstitialis*)



Saltcedar
(*Tamarix* spp.)



Purple loosestrife
(*Lythrum salicaria*)



Leafy spurge
(*Euphorbia esula*)

Prevention is Essential

The most cost-effective way to deal with invasive and noxious weeds is by preventing their introduction in the first place



The photos above are examples of what can happen when prevention and early detection and rapid response steps are not taken. (Left) An infestation of dyer's woad in the western U.S. (Right) An infestation of purple loosestrife in the eastern U.S. Photos: (left) J.M. DiTomaso, University of California–Davis; (right) L.J. Mehrhoff, University of Connecticut. Bugwood.org.

Managing and controlling invasive and noxious weeds in the western states alone costs tens of millions of dollars each year. Prevention, early detection, and rapid response are extremely cost-effective and are easy for anybody who cares about our Nation's ecosystems to practice.

The first step in prevention is to become aware of the problems caused by invasive and noxious weeds and what you can do to help. Step two involves learning how to identify common and not-so-common weeds in your region. The third step involves changing your behavior when recreating outdoors; for example, checking your vehicle tires for weed seeds before leaving an area.

Early detection and rapid response is an important second defense measure that increases the likelihood that new weed populations will be found before they become widespread. This involves keeping an eye out for invasive and noxious weeds when outdoors and immediately reporting any weed sightings (see "Reporting Made Easy" on the next page).

By incorporating these practices into your outdoor activities, you can help ensure that your favorite recreation areas stay free of invasive and noxious weeds.

HOW DO WEEDS SPREAD?



Invasive and noxious weeds spread from place to place in many different ways. Weeds can spread naturally by wind and water, and by hitchhiking on the fur, hooves, and in the digestive tracts of wildlife, livestock, and birds.

Humans are also responsible for spreading invasive and noxious weeds into new areas. Weed seeds and plant parts can become embedded in tire treads, so always check your car, truck, ATV, and bicycle tires before leaving an area. Weed seeds can also stick to clothing, shoes, backpacks, and pet fur.

The next time you finish a hike, take a careful look at your socks and shoes. You might be surprised by what you find!

Species on the Move

These weeds are rapidly spreading across the U.S. Help prevent them from spreading to new areas by following prevention practices. If you think you see one, report it!



Garlic mustard
(*Alliaria petiolata*)



Rush skeletonweed
(*Chondrilla juncea*)



Sulfur cinquefoil
(*Potentilla recta*)



Dyer's woad
(*Isatis tinctoria*)



Medusahead
(*Taeniatherum caput-medusae*)



Perennial pepperweed
(*Lepidium latifolium*)

10 WAYS YOU CAN HELP PREVENT THE SPREAD OF INVASIVE AND NOXIOUS WEEDS

- 1. Be aware** Learn which invasive and noxious weeds are present in the areas where you live and recreate and how to identify them.
- 2. Inspect your gear** When participating in outdoor activities, always check your clothing, shoes, pets, pack animals, and tire treads for seeds and plant parts. Toss seeds in a trash can before heading home.
- 3. Wash your boat** Before leaving a water body, wash your boat, trailer, and waders to remove seeds and plant parts.
- 4. Exercise caution** Avoid hiking, camping, and driving through weed infested areas, and stay on designated trails and roads.
- 5. Leave the weeds** Don't pick or take home any unknown flowers or plants—they may be weeds.
- 6. Be prepared** Before starting a trip into the backcountry, ask a local ranger which species are a problem in the area and learn to identify them.
- 7. Use weed free forage** Feed your pack animals certified weed free forage products for at least four days before entering backcountry areas and throughout your trip.
- 8. Report it** If you come across a weed infestation, note the size and location, and take a few photos. Report your sighting online or with a smartphone app.
- 9. Spread the word** Tell your friends, family, and neighbors about the problems posed by invasive and noxious weeds and how they can help.
- 10. Be part of the solution** Get involved with a local organization that removes weeds from recreation areas, roadsides, or important habitats to wildlife and native plants.

Reporting Made Easy

If you see an invasive or noxious weed, report it



Two free smartphone apps make it easy for you to quickly report weed sightings to the appropriate authorities.

When you are in the field and you see an invasive or noxious weed, use the app to take a few photos of the plant (make sure the camera is set to record GPS coordinates), fill out the form, and hit the submit button.

REPORT ONLINE

National Invasive Species Information Management System

www.blm.gov/weeds/nisims

The BLM's web-based reporting system is coming soon.

Early Detection and Distribution Mapping System

iPhone and Android, apps.bugwood.org

Access species descriptions and photos and report weed sightings in the western U.S.

What's Invasive!

iPhone and Android

www.whatsinvasive.com

A citizen science effort to document invasive species.



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Center for Invasive
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For additional copies of this publication, visit: www.blm.gov/weeds.

LEARN MORE ON THE WEB

For more information on invasive and noxious weeds, visit:

www.blm.gov/weeds • www.weedcenter.org • www.invasive.org

www.fws.gov/invasives • www.wssa.net