



Earth Gauge

A National Environmental Education Foundation Program

## National Public Lands Day

On **September 29, 2007**, volunteers in every state will put their hands to work on **National Public Lands Day (NPLD)** – a coast-to-coast effort to improve and enhance our treasured lands.

Last year, more than 100,000 volunteers worked at 1,100 locations to build bridges and trails, improve wildlife habitat, plant trees, and more. This year, NPLD is putting a special focus on eliminating non-native invasive plants from our public lands.



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Read on for information about invasive species in the U.S., courtesy of the National Public Lands Day team. And, check out [www.publiclandsday.org](http://www.publiclandsday.org) to find a volunteer site near you – get outside, enjoy nice weather, and lend a hand!

### The Facts about Invasive Species

- The U.S. is home to an estimated 200,000 different species of plants, animals, and microbes (microscopic organisms, such as bacteria and fungi).
- Since early colonization, over 500 native species have gone extinct, and many more have decreased to “vulnerable” population levels. The Nature Conservancy and the National Heritage Network took an inventory of 20,000 native species and found that one-third were at risk of extinction.
- An estimated 39 percent of all extinctions since 1600 have been due entirely to the introduction of exotic or invasive species. These species often lack predators and can out-compete native species for food, water, nutrients, and light.
- Invasive species cost the United States an estimated 32 billion dollars each year. These are direct costs that do not include associated impacts on water quality, tourism, biodiversity, land values, erosion, etc.

### Common Invasive Plants

#### Spotted Knapweed (*Centaurea biebersteinii*)



- Spotted Knapweed is native to Eurasia, and made it to the U.S. accidentally in the 1800's.
- It's been found in every state except Alaska, and is considered invasive in AZ, CA, CO, DE, ID, IN, KY, MA, MD, MI, MN, MT, NJ, NY, PA, OR, SD, UT, VA, WA, WI, WV, and WY.
- Spotted Knapweed attacks pastures, dry meadows, flood plains, rangelands, and other dry and sandy sites. It grows in early spring and out-competes native plants for water and nutrients. Grazing animals typically avoid eating knapweed, which heightens its advantage over native plants.
- Seeds are viable for years, and are often transported by livestock, humans, vehicles, and contaminated hay.

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## Kudzu (*Pueraria lobata*)

- Kudzu was purposefully introduced from Japan in 1876 to prevent soil erosion and provide feed for livestock – it now covers seven million acres of land, and has been nicknamed “the plant that ate the South,” “mile-a-minute vine,” and “foot-a-night vine.”
- Once established, Kudzu can grow up to 60 feet per season (12-inches per day!), swallowing forests and preventing other trees from getting proper sunlight.
- Kudzu is notoriously hard to control – vines grow exclusively from a root-crown (a fibrous knob of tissue that forms underground), and if any portion of the crown remains intact, the plant has potential to grow back. The plant is often spread during the eradication process when soil with healthy crowns is transported to a new location.



## Garlic Mustard (*Alliaria petiolata*)



- Garlic Mustard was introduced to the U.S. via Long Island, NY in the 1860's. European settlers likely brought the weed overseas as a source of food, or for medicinal purposes.
- The weed has spread from eastern Canada, south to Virginia, and as far west as Kansas and Nebraska.
- Spring beauty, Wild ginger, Dutchman's breeches, Bloodroot, Hepatica, and Trilliums are all examples of native species that are struggling to compete with Garlic Mustard for nutrients, light, moisture, soil, and space. Because white-tailed deer prefer to eat native plants, Garlic Mustard has no predator to curb its growth.

## How You Can Help

- **Join a National Public Lands Day volunteer event in your community to help eradicate invasive species. Visit [www.publiclandsday.org](http://www.publiclandsday.org) to learn more.**
- Clean hiking boots and other outdoor equipment to avoid transporting hitchhiking seeds to new areas.
- Verify that plants you buy for your garden are not invasive. Choose native plants that are well-adapted to your climate – your local garden center or University Cooperative Extension office can help.
- Use weed-free hay and avoid grazing livestock in infested areas to reduce the spread of seeds.

## Learn More

- Visit the Plant Conservation Alliance's **Least Wanted: Alien Plant Invaders of Natural Areas** to find fact sheets about invasive plants found in the U.S. [www.nps.gov/plants/alien/factmain.htm](http://www.nps.gov/plants/alien/factmain.htm).
- Check out the USDA's **National Invasive Species Information Center** for invasive species news, facts, and tips. [www.invasivespeciesinfo.gov](http://www.invasivespeciesinfo.gov).
- The invasive species information in this fact sheet can also be found on the NPLD website at [www.publiclandsday.org/managers/invasive\\_tips.htm](http://www.publiclandsday.org/managers/invasive_tips.htm).