Top Ten U.S. Invasive Species

By Virgene Link-New July 6, 2018



They adapt easily with no natural predators

Invasive species are plants, animals or organisms that spread so quickly they harm other wildlife, our country's environment, economy and human health. When natural predators are not imported too, they spread exponentially. The Washington Invasive Species Council has a list of fifty that are top priorities in our state.

Some 30,000 invasive species cost \$148 BILLION each year in detection and suppression in the United States. These invasive species that have no native predators and adapt to our soils and climate, cause mega damage to the ecology and economy. Farmers, foresters, wildlife managers and home owners are all affected as they demolish crops, impact our livelihoods and displace native wildlife.

The U.S. Customs and Border Protection in North Dakota recently found six carloads contaminated with invasive insects and seeds from China and Southeast Asia. Three carloads were sealed and returned to Asia and the other three were decontaminated and released to their owners. These can be difficult to identify or even to see. Some can be hidden in seeds, leaves or soil and nearly impossible to detect.

The National Wildlife Federation has made a list of the TOP TEN invasive species that plague America today. Drum roll....

- 1. Asian Carp— introduced to help control weeds and parasites in the aquaculture business. They out-compete native species for food and habitat, are killing off sensitive species and now compromising water quality. These bottom feeders stir sediment, eat invertebrates and kill aquatic vegetation that feed migrating waterfowl and shorebirds. Waterfowl numbers have drastically declined due to this species. They spread up the Mississippi River system with efforts taking place to keep them out of the Great Lakes. They are now in the Malheur National Wildlife Refuge (NWR) in Oregon.
- 2. Cane Toad—introduced to fight crop pests (which it didn't do). It secretes a toxin dangerous to pets and wildlife including predators and prey on and compete with native species. Native to extreme South Texas, it is now in Florida and Hawaii as well as many Caribbean Islands.
- 3. European Starling—brought as a romantic gesture to bring all of Shakespeare's mentioned birds to New York City, now causing \$800 million in agricultural damage and

airplane damage per year. While starlings march across our lawns consuming crane fly larvae, they also consume our farmers' berries. Noise cannons, row covers and raptors help keep the damage in check.

4. Kudzu ("the plant that ate the South" and is now in the Northeast) brought to the U.S. in 1876 by the Japanese delegation to Philadelphia's Centennial Exposition. It was cultivated to prevent soil erosion and as a livestock feed. It destroys other native forest species by choking out sunlight as it can grow <u>a foot a day</u>. An acre of kudzu has 270 gallons of ethanol content from the carbohydrate that is mostly in roots that can go six feet deep. This could be a useful supplement as corn ethanol competes with corn as food. It is also edible, and the starch is a jelling compound. Even a fragment can restart the plant, but just how much do we need?!



Kudzu can grow a food a day, choking out sunlight. Photo courtesy of Google Free-to-Use Images.

- 5. Giant Reed—introduced to North America two centuries ago. This fast-growing grass became invasive across the South. It is water hogging, hard to control and out-competes native plants, threatening wildlife, ecosystems and taxpayers. Examples include tall *fescue*, switch grass, Indian grass and Illinois bundleflower.
- 6. Zebra Mussel (larval stage is plankton)—escaped from ballast on the Great Lakes. This bivalve reduces fish populations by devastating the food chain and thereby reducing high quality human food (fish). Mats of these mussels clog water intakes, encrust boats, docks and equipment. There can be 100,000 per square meter, smothering native species.



Left: The Brown Marmorated Stink Bug specializes in fruit and nut tree crops. Right: Burmese pythons have no known predators. *Photos courtesy of Google Free-to-Use Images*.

- 7. Brown Marmorated Stink Bug—mentioned in an article titled "Unwelcome Guests" in the Skagit Valley Herald on Friday, May 23, 2017. It has now been found in Skagit County and first trapped in south Mount Vernon near the I-5 corridor. It has been found on filbert (hazelnut) trees and holly berries by the thousands. They particularly like anything with sap but specialize on fruit and nut tree crops.
- 8. Emerald Ash Borer—first discovered in Detroit in 2002 and thought to have been brought in on wooden packing material from China. It has killed 17 million trees with related costs for treatment, removal and replanting. This does not quantify the loss due to food and insect resource losses for our native animals, nor the value of the energy consumed for air conditioning due to loss of shade. Native American losses include loss of sustainable materials and spiritual appreciation.
- 9. Burmese Python— released into Florida's Everglades either accidentally or intentionally by pet owners. It was first sighted in 1980. These creepy crawlies are now as far north as Virginia. As many as 100,000 are in the Everglades eating birds, bird eggs, pets, alligators, goats and other livestock. They have no known predator. Yikes! The National Park Service has implemented a "Don't Let It Loose" curriculum guide.
- 10. Climate Change—while not an individual item, is leading to extreme weather events, potentially endangering ecosystems and their species. It may cost billions if not trillions in infrastructure costs. Ireland will plant the largest grove of Redwood trees outside of California to help mitigate climate change and establish another species enclave.

Please do your part to prevent transport of invasive species and take suppressive measures where appropriate.

FURTHER FACTS:

- The National Wildlife Refuge is now partnering with Pacific Foods to net Asian Carp and turn them into fish fertilizer for their food crops.
- The State of Montana is actively monitoring Flathead Lake in hopes of keeping Zebra Mussels out, even though they have been found two hours away to the east. They hitch rides on tailorable boats, which is why they are now a one-day drive from the Columbia River drainage system.
- The "Show Me Energy Cooperative" in Missouri is now growing native plants as biofuel instead of kudzu.
- The Conservancy of Southwest Florida has expanded the Python Patrol started by the Nature Conservancy to include male pythons with radio transmitters, called "Judas" males. They lead the trackers to female pythons and other courting males so they can be located and removed. Currently there are about 20 radio-tagged pythons.

RESOURCES:

- <u>www.scientificamerican.com/article/asian-carp-woes</u>
- <u>https://blog.nwf.org/2012/04/revisiting-the-ten-plagues-10-invasive-species-that-plague-america-today/</u>
- <u>https://www.nwf.org/Educational-Resources/Wildlife-Guide/Threats-to-Wildlife/Invasive-Species</u>
- <u>https://www.nwf.org/Magazines/National-Wildlife/2017/Dec-Jan/Conservation/Malheur-Refuge-Rebound</u>
- USDA National Agriculture Fact Sheet
- <u>https://invasivespecies.wa.gov</u>
- <u>https://science2017.globalchange.gov</u>
- http://www.takepart.com/article/2016/09/23/real-threat-border/
- Earth Watch/Ireland to Plant Largest Grove of Redwood Trees Outside of Californi

Note: some hyperlinks in this article have been updated since its initial publication.