2010

ISSUE OVERVIEW

THE NATIONAL INVASIVE SPECIES COUNCIL (NISC)

FACTSHEET

Meet the Invasive Species Challenge. Know the NISC Plan, Manage the Problem. PREPARE, PREVENT, PROTECT.

ISSUE OVERVIEW

What are Invasive Species? Invasive species[1] are plants, animals, or pathogens that are non-native (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause harm.

How do invasive species harm the environment? Invasive species are a leading cause of biodiversity loss. Some invasive animals feed upon fish and wildlife. Invasive plant pathogens kill forest trees. Animal pathogens sicken livestock, wildlife, and humans. Invasive plants shade out desired species. Indirectly, invasive species can interfere with growth, reproduction, and development of other species. The invasive plant hydrilla not only clogs waterways; it also can harbor algae that kill eagles and waterfowl. Invasive species can place other species at increased risk of extinction.

What do invasive species cost? Costs are estimated in the tens of billions of dollars a year. Invasive weeds are a leading cause of crop yield loss (over 4 billion dollars a year[2]). Just 16 invasive plants alone infest over 126 million acres of range and pasture lands. They are spreading at a rate of 1.3% to 25% annually. Nationwide aquatic weeds are estimated to cost the economy from 1 to 10 billion dollars. The State of Florida spends $30 million annual to control invasive aquatic weeds alone.

Do invasive species harm humans? Giant hogweed causes skin blistering, and other plants trigger allergic reactions. Imported Red Fire Ants cause painful stings. Invasive zoonotic pathogens and parasites infect humans and wildlife and livestock. There have been over 1,000 deaths from West Nile Virus.

Invasive Species:

Nation-wide 42 percent of the species listed under the Endangered Species Act are at risk primarily because of invasive species.

Heartwater disease is transmitted by invasive ticks and commonly fatal to cattle, sheep, goats, deer, antelope, buffalo, and other animals.

Sudden Oak Death, an invasive plant disease, can also kill redwood, fir, willow, maple, ash, yew, lilac, buckeye, magnolia, and other forest plants across the U.S.

Purple Nutsedge has been called the world's worst weed. It severely reduces crop yields across the southern and mid-western farm belts.

New Zealand mud snails reduce western stream productivity. Populations can reach 28,000 snails per square foot.

Over 41 square miles of the Georges Bank fishing grounds off the northeast coast of the U.S. is covered by invasive tunicates or "sea squirts."

Downy Brome is an invasive grass that increases wildfires across the West.

Zebra mussels threaten Whitefish, one of the Great Lakes' last remaining commercial fisheries.

Brown tree snakes cause power outages and have extirpated 10 native birds from Guam.

The invasive beetle Emerald Ash Borer has killed more than 40 million ash trees in southeastern Michigan alone, with tens of millions more lost in Ohio, Illinois, Indiana, Pennsylvania, West Virginia, Missouri, Wisconsin and Virginia.

[1] see Invasive Species Definition Clarification White Paper (www.invasivespeciesinfo.gov/docs/council/isacdef.pdf)

[2] In 1992, the estimated average annual monetary loss in the U.S. caused by weeds with current control strategies in 46 crops is $4.6 billion (D.C. Bridges, 1992).