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| An Invasion in Your BackyardIn addition to air and water pollution, we humans cause another type of pollution when we transport plants and animals from around the globe into new habitats. The introduction of an alien species may be accidental, as when international vessels release ballast water in a foreign port, or when stowaways travel the world in shipping containers. However, some species are imported intentionally to satisfy human desire for exotic pets or ornamental plants. No matter what the method of introduction, alien organisms can wreak havoc on the environment into which they are introduced, and the cost to eradicate them grows every day. |  |
| **What Are They?**An "invasive species" is defined as one that is non-native (or alien) to the ecosystem under consideration, and whose introduction causes or is likely to cause harm to the economy, the environment, or to human health (Executive Order 13112, Appendix 1). Invasive species can be plants, animals, insects, or microbes. Most of the foreign species that have been imported into America are harmless or even beneficial. For example, who could deny the benefits that imports such as wheat, rice, and cattle have brought to our country? But one in seven of the almost 50,000 organisms imported throughout our country's history have proven themselves to be troublemakers. And one study estimates their economic toll to be near $137 billion per year.**Some Known Invaders**There are an estimated 7,000 invasive species in North America today. Each has their own unique method of competing with native species for food and habitat, decimating crops and forests, or spreading disease to cattle and humans. So who are these troublemakers? Here are a couple examples:The Kudzu vine, a native of Japan and China, was introduced as an ornamental plant in 1876 and promoted by the U.S. Soil Conservation Service between 1935 and 1942 as a solution to soil erosion. It was declared a weed in 1970 and now encroaches on thousands of acres of forests from Texas to New England. If left uncontrolled Kudzu will eventually grow over almost any fixed object in its proximity including buildings, parked vehicles, and other vegetation. It will even eventually kill trees by blocking the sunlight. A number of abandoned houses, vehicles and barns covered with kudzu can be seen in Georgia and other southern states.The Rusty Crayfish, a native of the Ohio River Basin, has spread to many northern lakes and streams where it is having an environmental impact. They often displace native crayfish and reduce the amount and variety of aquatic plants, invertebrates, and some fish. They are now found in parts of Michigan, Massachusetts, Missouri, Iowa, Minnesota, New York, New Jersey, Pennsylvania, Wisconsin, Ontario, and many other northern waterways. Scientists theorize that anglers who used them as bait facilitated the northward spread of the crayfish. Interestingly enough, once their numbers reached noticeable proportions in their new habitats, they were actually harvested and sold as bait as well as to biological supply companies, further proliferating their population.The crayfish are opportunistic feeders and dine on a variety of aquatic plants, aquatic worms, leeches, clams, insects, crustaceans, decaying plants and animals, fish eggs and small fish. The rusty is aggressive and forces out other species of crayfish that are more passive. They also compete with young fish for food, something that native crayfish don't do. This in turn reduces the amount of food available for fish and translates to smaller fish populations.While the displacement of native crayfish is troublesome, the bigger impact of this invasive species is destruction of aquatic plant beds. This is a serious concern for northern bodies of water that have scarce plant beds to begin with. The plant beds provide a habitat for invertebrates, shelter for young fish, nesting places for fish eggs, and erosion control. And, although all crayfish eat aquatic plants, rustys with their higher metabolic rate and appetite can decimate a plant bed in no time.**This Is War!**Invasive species have been recognized globally as a major threat to biodiversity, as well as to agriculture and other human interests. The seriousness and scope of the problem continues to grow as international travel and trade increase. Studies aimed at improving import/export regulations and management practices for areas already infested by invasive species are being initiated in countries all over the world. Invasive species are a concern of international conservation scientists, and are the subject of cooperative international efforts such as the Global Invasive Species Program (GISP).In February of 1999, President Clinton issued Executive Order 13112 that established the National Invasive Species Council to help coordinate efforts and ensure cost-efficient and effective Federal activities. The Council is co-chaired by the Secretaries of Interior, Agriculture, and Commerce; and its members include the Secretaries of State, Treasury, Defense, Transportation, Homeland Security, Health and Human Services, and the Administrator of the Environmental Protection Agency.**Future of the Environment**The number of invasive species and their cumulative impact continues to accelerate at an alarming rate. They have damaged our waters, farms, forests, and even our backyards. By creating the National Invasive Species Council and its respective subcommittees, our government is taking a crucial step toward educating America about the invasive species problem and the steps we need to take to protect our environment. |