Name:_____ Date:_____

Alien Invasion

Nutria

Nutrias (NEW-tree-uhs) are water-loving animals from South America. Like their cousin the beaver, they have big front teeth and dense, warm fur.

People brought nutrias to the United States in the 1930s to raise them for their fur. But nutria fur never became popular, so some people released their nutrias in the wild. They are now found in 22 states across the United States.

Nutrias are vegetarians with very large appetites. They eat about one-fourth of their body weight every day. While they will eat any almost any plant, their favorite food is the roots of marsh plants. They dig underneath and turn over the plants to eat the root mat, often killing the plants.

Nutrias breed year-round and reproduce very quickly. An adult female can have two or three litters a year, with up to 11 young per litter.

Without predators to keep them in check, nutrias have destroyed thousands of acres of marsh plants in the United States. Nesting waterbirds and songbirds, as well as fish and crabs, depend on the marsh to live.

Alien Invasion

Hemlock Woolly Adelgid

Hemlock Woolly Adelgid (uh-DEL-jid) is a tiny, sucking insect that has killed many hemlock trees in the eastern United States. (Hemlocks are tall trees with evergreen needles.) It feeds on the sap at the base of the hemlock needles, causing them to fall off. Without needles, the tree starves to death, usually within a few years of the first attack.

Hemlock tree infested by woolly adelgid.

The hemlock woolly adelgid was accidentally brought from Japan to the western United States in 1924 through wood shipments. Western hemlocks are naturally able to resist the insect. But when the hemlock woolly adelgid traveled to the eastern United States in the 1950s, it became clear that eastern hemlocks cannot resist it.

The adelgid now threatens entire hemlock forests in the eastern United States. As the trees die, the plants and animals that depend on the hemlock forest may also die.

Hemlock woolly adelgids are spread by wind or carried by birds, mammals, and humans. They reproduce rapidly; one individual can produce up to 90,000 new adelgids in a year.

Alien Invasion

Tamarisk

Tamarisk trees guzzle up tons of water in the dry southwestern United States. The total amount of water they consume each year could cover the state of New Jersey with a foot of water.

Tamarisk roots grow deep into the desert earth, sucking springs dry. And as its nickname—saltcedar—suggests, tamarisk oozes salt from its leaves, making the soil around it unsuitable for native plants.

Western settlers in the 1800s brought this Eurasian tree to the region as a source of wood and shade. It has now spread all over the Southwest.

Tamarisk thrives because it has no predators or disease to keep it in check. It is also very quick to multiply. Each plant produces up to a half million seeds and can grow as much as 10 feet in height each year.

When tamarisk replaces native species, the numbers of birds, small mammals, and other animals in the area greatly decrease.

Alien Invasion

European Starling

European Starlings came to the United States in 1890 when a man named Eugene Schieffelin released 40 pairs of them in New York's Central Park. He said he wanted to bring all the birds mentioned by William Shakespeare to America.

By 1930, European starlings had spread all the way to the western states. Two hundred million starlings are now found over most of North America, Mexico, and parts of the Caribbean.

Starlings are intelligent and interesting birds, but they are bad news for native birds such as woodpeckers, bluebirds, and swallows. Starlings compete with these birds for nest cavities in trees, often destroying eggs and young birds in the process. Also, because they form large wintering flocks, they are considered pests by people.

Alien Invasion

Gypsy Moth

Gypsy moth caterpillar.

Gypsy Moths have lived in Europe and Asia for thousands of years. They were first brought to the United States in 1869 by a scientist who wanted to try using them to produce silk. By accident, several of the caterpillars blew off the windowsill of his home in Massachusetts and escaped.

Twenty years later, there was a gypsy moth outbreak in the surrounding areas. Today the gypsy moth is one of the most damaging forest pests in the northeastern United States. The caterpillars destroy the leaves of millions of acres of trees each year.

The caterpillars emerge from their eggs beginning in early spring. They are not fussy eaters. While they prefer oak, maple, and elm tree leaves, they will feed on approximately 500 different plants. When food is scarce, the caterpillars will eat almost any vegetation.

Gypsy moths are spread in two different ways. Newly hatched caterpillars spin short lengths of silken thread, which allow them to be carried by the wind. More often, they spread when people move their outdoor belongings—like cars, RVs, firewood, or lawn furniture—to new places, not knowing that they contain gypsy moth eggs.