





**Saltcedar or Tamarisk (*Tamarix ramosissima*)**, an ornamental tree native to Eurasia. Tamarisk was first introduced in the 19th century as an erosion control measure, and people did not foresee that it would quickly invade waterways throughout the basin. Estimates of the saltcedar invasion in the southwest include over one million hectares of sensitive habitat ranging from northern Mexico to southern Canada which have become dominated by this species.

Saltcedar is tolerant to high salinity and secretes salt at a high rate which is deposited on the soil surface to the detriment of native plant species. Saltcedar increases fire frequency within the riparian habitats it dominates because of its high levels of dead leaves and branches that provide fuel for fires. After fires, saltcedar sprouts rigorously, while native riparian trees and shrubs generally do not. Saltcedar groves push out native species, affecting their reproductive potential and contributing to a loss of natural biodiversity

This pest also contributes to the decline of wetland communities as habitat refuge for wildlife. Species affected by the spread of saltcedar include the entire gamut of animals and plants associated with riparian communities, including several threatened or endangered species (i.e., desert pupfish, bighorn sheep, southwestern willow flycatcher, etc.).

**Nutria (*Myocastor coypus*)**- large, beaverlike rodents native to South America- were brought to the United States to be farmed for fur in the 1940s, but nutria that escaped or were released into the wild from captivity went on to found populations throughout the southeastern United States. Nutria were eradicated in California by 1978, but are currently established in as many as 17 states, including 2 populations in Oregon near the California border.

Nutria burrow, frequently causing water-retention or flood control levees to breach, weakening structural foundations and eroding banks. They can consume up to 25% of their body weight in vegetation per day, causing extensive damage to the native plant community, soil structure and any nearby agricultural crops. Nutria carry tapeworms, a nematode that causes a rash known as “nutria itch”, and blood and liver flukes, which can contaminate swimming areas and drinking water supplies. They are also hosts for tuberculosis and septicemia, which are threats to humans, livestock, and pets.

Originally from the Indo-Pacific Ocean Basin, **Lion Fish (*Pterois volitans*; *P. miles*)** have established a new home range in the warm Atlantic Gulf Stream waters. In 1992, a few lionfish were most likely introduced into Biscayne Bay, Florida; when a beach side aquarium or nursery broke open during Hurricane Andrew. However, the first sighting of lionfish was reported in 1985, leading experts to theorize that aquarium owners were most likely releasing them-intentionally or unintentionally into natural water bodies even before the storm.

While this fish is a valued addition to an aquarium, when out of its home range and relocated to suitable habitat in the wild such as the southeastern coast, it out-competes the resident predators and takes a deadly toll on native marine animals.

The lion fish is now the top predator in coral reef environments along the coast of Florida, with its range stretching northward to North Carolina. Lionfish aren't picky about what they eat, preying upon more than 50 other species of fish as well as on crustaceans such as lobster, shrimp and crabs. They even eat the herbivorous fish that control seaweed growth on coral. All this negatively impacts the natural environment as well as the fishing industry.