

Invasive Species Super Sleuth

In the late 1860's, it seemed like a good idea: Let's start a silk industry in the United States! Silk is a valuable cloth, in demand all over the world. And insects do most of the work! All we need to do is import some Gypsy moths from France, then sit back and wait for the money to start rolling in!

So, the moths were imported. Unfortunately, they escaped. Today, Gypsy moths are a major threat to U.S. forests.

Gypsy moths are one example of invasive species, and there are many more. About 50,000 alien species are already in the U.S. What's the difference between "alien" and "invasive?" An alien species is not native to a particular ecosystem. If an alien species causes economic and/or environmental harm or threatens human health, then it is called invasive.

What's the big deal? Invasive species can seriously threaten native species and entire ecosystems. Plus, the costs of environmental damage, economic losses, and efforts to control invasive species average \$138 billion per year—more than the cost of all other natural disasters combined.

What can be done? NOAA's National Centers for Coastal Ocean Science are developing a group of experts that can help recognize alien species, hopefully before they become invasive. NOAA's National Sea Grant Office and state fish and wildlife agencies are partnering with the pet industry in the Habitattitude™ Campaign, which is about educating consumers about possible environmental consequences of aquarium and water garden hobbies, and how to be a responsible hobbyist. In addition, NOAA's Community-Based Restoration Program works with community groups to remove invasive plants as part of projects to repair damaged coastal habitats.

Here's how to learn a lot about aquatic invaders and have fun at the same time!



Lionfish are venomous fish from Indian and western Pacific oceans that have invaded East Coast waters Courtesy NOAA.

What You Will Need

Access to the internet.

How to Do It

Play *Nab the Aquatic Invader* and *Be a Sea Grant Super Sleuth* at www.iiseagrant.org/NabInvader/.

Want to Do More?

1. You can find a LOT more information on invasive species on the *Nab the Aquatic Invaders! Be a Sea Grant Super Sleuth* website (www.iiseagrant.org/NabInvader/). Click on "Information for Teachers" to go to all kinds of good links.
2. Visit the GloBallast web site archive.iwlearn.net/globallast.imo.org/ and watch *Invaders from the Sea* a very informative IMO-BBC documentary about the transfer of harmful organisms in ballast water from ships. You can also find it on youtube: www.youtube.com/watch?v=u5JkRtMTEdI.
3. Visit oceanservice.noaa.gov/facts/invasive.html and www.noaa.gov/topic-tags/invasive-species and fisheries.noaa.gov/insight/invasive-and-exotic-marine-species for even more information!

What You Will Do

Play a game called "Nab the Aquatic Invader!"

You will be a private investigator working with other detectives to catch suspected invaders including Louie "Sucker Mouth" Sea Lamprey, Zeke "The Prowler" Zebra Mussel, Purple "Lucky" Loosestrife, and Rocco "Ravenous" Ruffe.