

Student Handout: Alien Impacts

DRAWING CONCLUSIONS

Student Name _____

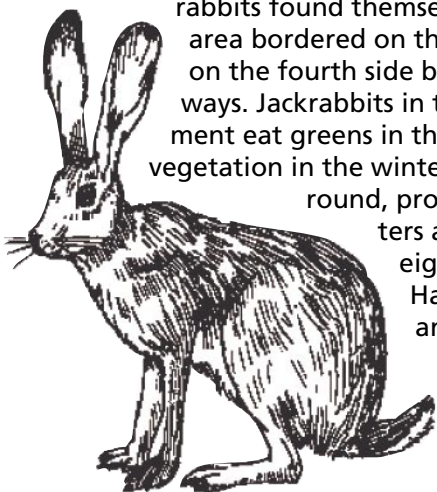
Alien species reach new homes through many different pathways and with very different results. Some die off quickly, some persist but never cause any trouble, some bring people benefits, and some cause significant environmental disruption. Can you guess how each of the following ended up affecting its habitat?

1. In the 1960s, scientists in Florida discovered a non-native aquatic plant called *Hydrilla* growing in local waterways. Once it is rooted in the bottom of lakes and ponds, *Hydrilla* grows upward to form a dense mat on the water's surface. It can grow in waters with low or high nutrient levels, and it does not require much sunlight. It has four modes of reproduction, including resprouting from a very small plant fragment. It can grow as much as an inch a day.



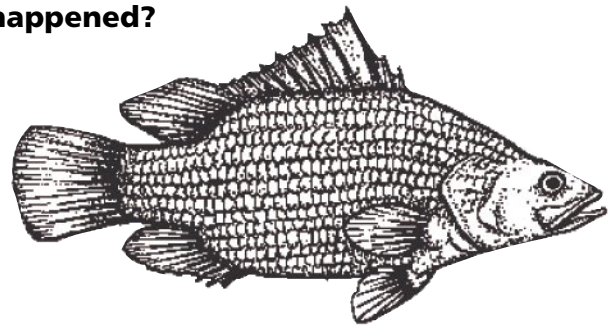
What do you think happened?

2. In the 1950s, a crate broke open at what is now the John F. Kennedy International Airport in New York City, allowing dozens of black-tailed jackrabbits to leap to freedom. These large hares normally live in prairies, meadows, and pastures of the western United States. However, after this incident, the jackrabbits found themselves on a wide, grassy area bordered on three sides by water, and on the fourth side by a network of highways. Jackrabbits in their native environment eat greens in the summer and woody vegetation in the winter. They mate year-round, producing one to four litters a year with one to eight young per litter. Hawks, coyotes, owls, and badgers eat jackrabbits.

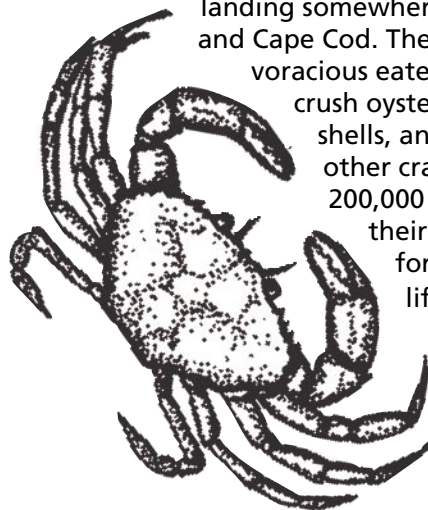


What do you think happened?

3. In 1962, Africa's Lake Victoria contained a rich diversity of native fish, including hundreds of species of small fish called cichlids (SIK-lidz). British businessmen introduced Nile perch to Lake Victoria to create commercial and sport fishing opportunities for the local people. Nile perch are large fish that consume a diversity of other fish. **What do you think happened?**



4. The European green crab reached the Atlantic coast of the United States in the eighteenth century, landing somewhere between New Jersey and Cape Cod. The green crab is a voracious eater and can open or crush oysters, mussels, and clamshells, and it even consumes other crabs. Females produce 200,000 eggs each year, and their young are very mobile for the first 80 days of life. **What do you think happened?**

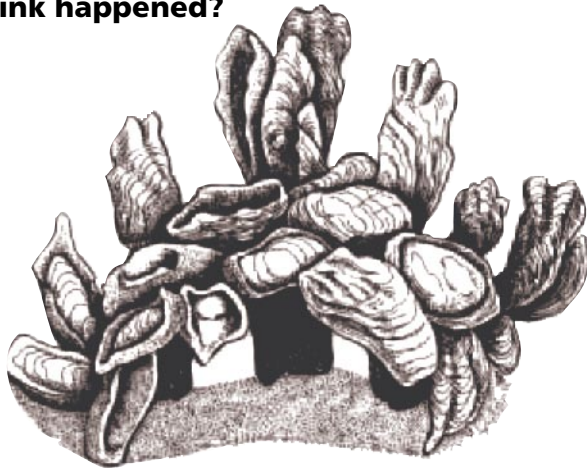


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5. In the 1890s, native oysters off the US Pacific Northwest coast were being overharvested. In the 1920s, in an effort to boost the oyster industry, people imported a species of large Japanese oysters to the region. They are still being imported today. This oyster matures in about one and one-half years in warm waters. In cold waters, it can take four to five years to mature. An oyster produces millions of eggs, but only a small portion of these survives. **What do you think happened?**



6. In 1937, imported South American rodents called nutria were released into the US Gulf Coast region in hopes that they would someday supply the fur industry with an alternative to mink. Nutria are aquatic animals that are able to survive in freshwater and salt-water habitats. They reach sexual maturity as early as four months of age, and they breed year-round, producing four to six young per litter. They feed on almost any green plant found on land and in the water, including some grains. They may eat an amount of food each day that is equal to one-fourth of their body weight. Their primary predators are trappers and alligators. **What do you think happened?**



7. Hunters brought ring-necked pheasants from Asia to the United States from the 1800s to early 1900s. Wildlife management agencies and individuals alike hoped that these ground-dwelling birds would reproduce and provide a good target for hunters. Ring-necked pheasants feed on a wide variety of plants, including berries, grasses, and cultivated crops. They spend a lot of time in the open, but they require hedges or wetland areas for shelter. Females lay about 6 to 18 eggs each year, many of which are eaten by predators. **What do you think happened?**

