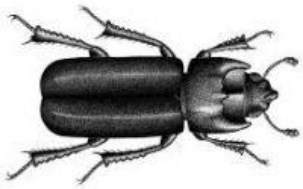
Nov 18 Invasive Species Station 1-4

Station 1: Invasive Species Comic Strip

Directions: Drag and drop the captions in the correct order, then write a summary of how invasive species changed the ecosystem in Australia.

People thought introducing a foreign species to Australia to help control a pest problem was a good idea, but it backfired. Australia's sugarcane crop was being damaged and threatened by the cane beetle. A couple hundred cane toads were imported and released into the wild in Australia in hopes that they would eat the pesky beetles. Instead, they ate other prey, did not kill the beetles, and rapidly multiplied and spread throughout parts of Australia. Also, the cane toad is poisonous and is responsible for making many native organisms sick, as well as killing some pets. The cane toad is an invasive species that has not been healthy for Australia's ecosystems.



Australia is the setting of one of the most infamous cases of an invasive species.

However, not only did the cane toads not take care of the beetle problem, but they also multiplied and spread over the island. The cane toad is a poisonous toad and is responsible for the deaths of pets and for making many animals and people sick.

Australia's sugar crop was being threatened by the cane beetle.

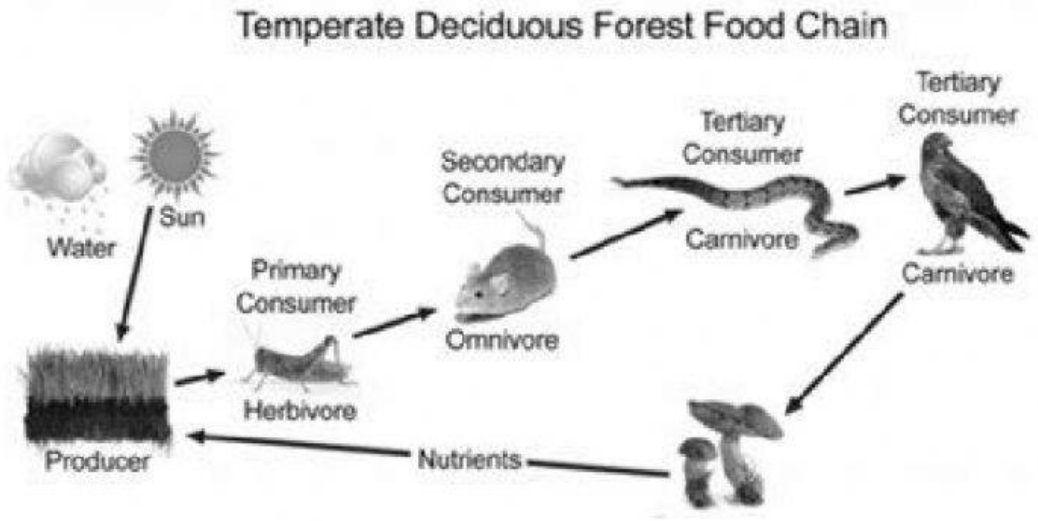
The cane toad was introduced to take care of the beetle pest problem.

Write a brief summary about how invasive species changed the ecosystem in Australia.

Station 2: Effects of Invasive Species

Directions: Read the scenario below. Write in the text box, how the dingo affected the ecosystem here.

Below you will find a food web for a deciduous forest food chain. Dingo pups have become a popular pet in the surrounding towns. Unfortunately, when the pups grow up and become unruly adults, pet owners tend to release the dingos into the forest. Dingos are known for eating small rodents. Draw an "X" through the mouse and then in the space below describe all the changes that would occur to the ecosystem as a result of the introduction of an invasive species.



How did the dingoes affect the ecosystem here?

Station 3: Evaluate Invasive Species

Directions: Click the correct answer for each question.

Hemlocks are large trees like the redwoods in California. Hemlocks are found in parts of Tennessee along rivers and streams. Hemlocks keep streams and rivers cool, which helps trout and other coldwater species survive. Hemlocks have being invaded by the hemlock woolly adelgid. What might be a good way to control or destroy this invader?

A Allow the birds in the area to eat the hemlock woolly adelgid.

B .Release predator beetles that feed entirely on hemlock wooly adelgid.

C Try burning the hemlock woolly adelgid out of the trees.

D Ignore the hemlock woolly adelgid and hope it moves to another location.

Information about brown tree snakes is provided below, along with information about the island of Guam. Brown tree snakes were first brought to Guam in 1950.

Brown Tree Snakes
• Venomous and aggressive
• Live in trees
• Hunt at night
• Eat lizards and small birds

Island of Guam in 1950
• Home of growing US military base
• Jungle ecosystem
• No snakes
• Large lizard population

Which of the following is evidence that the introduction of the brown tree snake changed the environment and had an effect on the populations of organisms that lived on Guam?

A Military bases on Guam were closed in the 1980s.

B Several other species of snakes were known to live on Guam before 1950.

C The population of lizards on Guam in 1960 was very small.

D The longest brown tree snake ever found on Guam measured 3 meters in length.

An environmental disruption to an ecosystem occurred when nutria (a beaver-like animal) was released into the forest near the river. Nutria eat mostly the roots and stems of plants along the banks of rivers. Which of the following is evidence that the addition of nutria to this forest affected populations?

A Nutria can weigh up to 40 pounds.

B Other animals began to move away because the nutria fed on them.

C The trees began to die after nutria were introduced as far as 20 miles away from the rivers.

D Nutria destroy marshes, which protect against flooding and provide habitats for animal and fish.

Bank swallows are birds that make their nests on the edge of rivers. Bank swallows cannot swim or breathe underwater. They feed on flying insects and, in the spring, lay four or five eggs. Which of the following observations is evidence that the population of bank swallows was affected by a change in the environment?

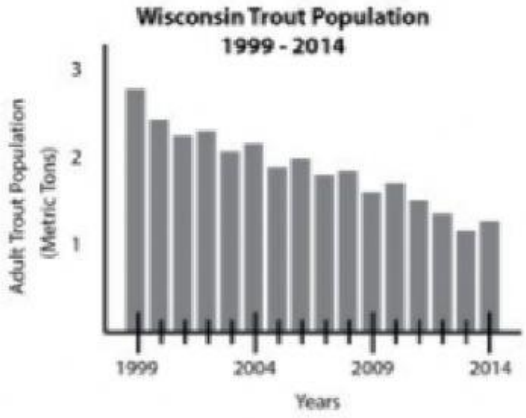
A The largest swallows catch and eat more insects than the smallest ones.

B Swallows that lay four eggs one year may lay five eggs the following year.

C Fewer swallows build nests along rivers when the water level rises.

D Swallows share a food source with other animals that also eat insects.

The trout is a fish that lays its eggs in cold fresh water but spends some of its life in the ocean. Trout eat smaller fish. The graph shows the population of trout in Wisconsin from 1999 to 2014. Which change to the ecosystem had the largest effect on the the population of trout in Wisconsin?



A A hard freeze of many of the lakes in Wisconsin in the winter of 2006

B The loss of Canadian Hemlock trees to hemlock wooly adelgids from 1999 to 2014

C The rise in population of smaller fish in Wisconsin lakes between 2010 and 2011

D A shift in ocean currents that occurred in 2000 and again in 2001

Station 4: Review Ecological Relationships

Directions: Click on the picture to access a game that will help you review biological relationships. Screen shot your results and paste them in the finish box.

Screenshot and paste your results in the box here:

Station 5: EcoPlay and Biodiversity

Directions: Click on the picture to access a game that will quiz you in invasive species. Screenshot your results and paste them in the text box below.

Screenshot and paste your results here: