Objective(s):

Student will be able to understand how invasive species have advantages over native species due to the lack of specific evolved predators.

Supplies Needed:

Large open area 4 rope circles Plastic golf balls Plastic spoons Pen and paper Stop watch or timer

In a large area, scatter the plastic golf balls and spread out the rope circles.

This activity is a modified game of tag.

ROUND ONE

The first round select 5 students to be predators and the rest to be native prey. The goal of the prey is to pick up as many plastic golf balls (food) with the plastic spoons and put them inside the rope circles before the predators tag them. Once the prey are tagged, they are out of the game and have to sit where they were tagged. Keep track of the amount of time it takes to pick up all the balls or until all prey are tagged. Also count the number of balls that were put into the rope circles.

ROUND TWO

Again select 5 students to be the predators, but half of the remaining students are native prey and the other half are invasive species. The goal again is to get the plastic balls inside the rope circles before the food runs out or everyone is tagged. But just like in nature, the invasive species have an advantage, they can pick up the plastic balls with their hands while the native prey have to continue to use the spoons. Keep track again of the amount of time it takes to pick up all the balls or until all the prey are tagged. Also count the number of the balls that were put in the rope circles.

If everything goes according to plan, the second round, the food will run out faster and the invasives will put many more plastic balls into the rope circles compared to the native prey.

There are many modifications that can be made to the game for varied results and data collection:

- 1. The natives and invasives can put their food into different rope circles, and the food can be counted after and compared for the two groups.
- 2. The number of prey, predators, rope circles, and invasives can be modified.
- 3. Other limitations can be placed on the native prey...hop on one foot, etc...
- 4. The collection can be timed or the invasives get a time advantage.
- 5. Many, many other modifications can be made with the goal of giving the invasives an advantage over the native prey.

Discuss after the activities how and why different invasive species might have advantages over native species. Be specific with the invasive species in question as well as each ecosystem and native species be affected.