



HABITAT INFORMATION AND GAME

By: Phil White

30 minutes

At the Indian Creek Nature Center, this game could be played in any of the areas marked on the map, depending on availability.

You will be teaching about **habitat**, **habitat diversity**, **food chains**, what they are and what happens when habitat loss occurs.

What is a Habitat: Habitat is the environment where something lives, it needs to have **Food, Water, and Shelter**. Explore different types of habitats and adaptations that make that work. Examples: the pond has fish with gills to breathe, a forest supports animals in every layer, some in tops of trees that fly, some in the ground that burrow. Etc.

Habitat Diversity: It is important to have many 'options' in a given habitat. This will allow for many things to coexist. Think of plants, some plants might be drought tolerant therefore, if it's a dry year, things can go on. But if there is little diversity one change could wipe out an entire environment.

Food chain, and balance: If our environment only supports one type of habitat it makes it hard to be sustainable long term. This game will show what happens if one habitat component becomes in short supply. You can also discuss what happens to a deer when it dies. It becomes a habitat for totally different creatures, which will be consumed by others and so on.

A story about Habitat balance: The Wolf and the Tick

None of us likes those little ticks! How could we control them? One thought might be to reintroduce Wolves (there are reasons this might be a challenge, but for now let's ignore that).

Ticks find mice to be a pleasant habitat for food, liquid, and shelter. So, a lot of mice means a lot of ticks. What eats mice? Red foxes are one of the prime predators that control the mouse population. More foxes means less mice.

Coyotes, see foxes as competition and they don't like having them around, so coyotes chase foxes away. The more coyotes, the fewer foxes, the more mice, the more ticks, and coyotes don't often eat mice.

The wolf sees coyotes as competition. Wolves chase them off, creating a balance between all four of our players in this story.

Back to today. We know that coyotes are becoming more common as they learn to live with humans. What might that mean for the tick population?

Oh Deer! Game Directions

adapted from Project Wild Teacher's Guide.

1. Explain that the deer need to find food, water, and shelter, in their Habitat, in order to survive. If they do not have those things they will die.
2. Mark two parallel lines on the ground 10 to 20 yards apart, or use any natural dividing line. Ask students to count off in fours. The ones become the "deer" and line up behind one line **with their backs** to the other students. The other students become habitat components necessary to survive (food, water, and shelter) and line up behind the other line **with their backs** to the "deer".
3. In this activity when the "deer", is looking for food, it should clamp its hands over its stomach. When a "deer" is looking for water, it should put its hand over its mouth. When a "deer" is looking for shelter, it holds its hands together over its head.
4. A "deer" can choose to look for any one of its needs during each round of the activity. Emphasize that the "deer" **cannot change** what it is looking for during a round. It can only change what it is looking for at the beginning of each round.
5. The other students are the food, water, and shelter. Students get to choose what they want to be at the beginning of the round. They show their choice in the same way as the "deer". Emphasize to these students that they **cannot change** what component they are during a round. They can only change at the beginning of each round.
6. The teacher should begin the first round by asking all students to make their signs—hand over stomach, mouth, or head. Emphasize that students should choose one of these symbols before turning around to face the other group. **NO PEEKING**

7. When the students are ready, tell them to "GO!". At this time each "deer" and each "habitat component" turns to face the opposite group continuing to hold their sign clearly.

8. When the "deer" see the "habitat component" that matches what they need, they are to run to it. Each "deer" must hold the sign of what it is looking for until getting to the matching "habitat component." (Hint: the first round could be a walking round until the kids are familiar with it)

9. Once the "deer" find their correct component they should take it back to their line, and the "habitat component" becomes a "deer", good breeding season. Only one "deer" per "habitat component", Any "deer" who fails to find its "habitat component" dies and becomes a "habitat component" on the other side and becomes available as food, water, or shelter to the "deer" who are still alive.

10. "Habitat components" not taken by a "deer" continue to be "habitat components".

11. Do another round starting at step 6. The activity should consist of 12-15 rounds, but can run as long or short as you like. Observe how the deer population and habitat components vary in flux.