

The Squirrel-Fox Game

Theme: Red and gray squirrels have different food storage strategies, but both must avoid predators.

Audience: North Country Students grades 1-6

Location: School Playground

Goals: (Why are you doing the program?)

- To help students understand differences in behavior between red and gray squirrels
- To teach students about the diets of red and grey squirrels
- To help students understand predator-prey interactions
- To encourage exercise and make outdoor play fun

Resources/Materials: Squirrel food*, laminated picture print outs, red and grey squirrel name tags, whistle, fox (or other squirrel predator) puppet, stopwatch.

*We recommend tree “cookies” - cross cut pieces of a tree sapling that is approximately 3” in diameter. You may also use pinecones or acorns.

OUTLINE

Introduction: Introduce concept of predators and prey. Predators are animals that hunt other animals, and prey are the animals that get eaten. Give examples of predator-prey relationships between local species (owl and mouse, garter snake and frog, weasel and chipmunk). The focus of this game is predator-prey relationships for two local squirrel species. Ask students to name the types of squirrels we have in the North Country. Red and grey squirrels in the North Country do not hibernate – they stay active throughout the winter. In order to make sure they have enough food to survive, they must collect it during the summer and fall. Introduce red and grey squirrels, talking about their appearance, behavior, vocalizations, diet, etc.

Round 1

1. Divide group in half: one group becomes red squirrels, and the other becomes grey squirrels. Each will wear the name tag corresponding with their squirrel species.

2. Explain the differences between food storage strategies of red and grey squirrels. During summer and fall, red squirrels create large stashes of food called middens comprised mainly of pine, fir, and spruce cones. A single squirrel’s midden can contain more than 15,000 cones! Grey squirrels have a different strategy – they create many different food caches. In the fall

you can watch grey squirrels burying acorns and other nuts in small stashes in the ground, under bushes, or in the nooks of tree branches.

3. Hand out four tree “cookies” to each participant. These are the squirrels’ food. Once the game starts, red squirrels must cache their food all in one place, while grey squirrels must drop their food in different places.

4. Pretend it is fall and all the squirrels are collecting food to survive the winter. Define boundaries of play area, then start the game. Each participant has 1 minute to hide their food anywhere within the play area. Talk about strategy – you want to hide your food in a place where you’ll remember it, but also where others won’t be able to find it easily.

5. Blow the whistle and call the group back to the middle. Explain that now all the squirrels have stashed their food for the winter, but it is not safe – other squirrels may try to raid their food cache. Now they will have one minute to collect as much food as possible – any squirrel can take food from another squirrel’s cache. When you blow the whistle again, participants will have one minute to collect as much food as they can.

6. After one minute call to participants come back to the middle. Ask how many have at least three tree cookies, four, five, etc. The ones who have four or more will survive the winter.

Round 2

6. Give the players one minute to hide their food as they did in round one, then call them back to the middle.

7. Now they will have another minute to collect as much food as possible, but with a catch: now there is a fox in the forest. Foxes prey on both red and grey squirrels. The player who collected the most food in Round 1 gets to be the predator in Round 2. As they are searching for food, if they are tagged by the fox they will have to drop all of their food and run back to the middle before looking again. Play for one minute, then blow the whistle and have the group return to the middle. Have the squirrels count their food to see who has enough to survive the winter.

8. If time allows, have the red and grey squirrels switch species and play rounds one and two again.

Variations: You may use predators other than foxes (owls, coyotes, weasels) or use multiple predators at once.

Summary: Different species of squirrels have different strategies for collecting food and avoiding predation. What did we learn about the different ways squirrels store food for the winter? Life is complicated for both red and grey squirrels – not only do they have to protect

their food from being stolen by other squirrels and other species, they have to avoid predators while doing it. So next time you see a squirrel running around your yard, you may have a new appreciation for how resourceful they must be to survive both winter weather and predators like foxes.