The Hawk in the Nest

A circle game for teaching early elementary students about trophic levels

by Edith Pucci Couchman

Paying Circle Games is a traditional way for people to have fun together. Here’s a version of “The Farmer in the Dell” that can help children up to age seven or eight—or perhaps older—learn about food chains within a given habitat. On one level, this is a classic singing, skipping and choosing game. On another level, it builds students’ understanding of how energy is transferred through various creatures within a community.

Here are the basics: Let everyone know that this game is similar to “The Farmer in the Dell.” The melody of the song is identical, but the words are different. The point is to create realistic food chains and have fun learning in a group.

Hawk: Top carnivore

To begin, everyone joins hands and forms a large circle. The circle represents the interconnecting trees and other inhabitants of a forest ecosystem. One person is selected to be the “Hawk.” The hawk is, of course, a top carnivore in numerous food webs in North America. Since Broad-Winged Hawks, with their short, highly maneuverable wings, are especially well-suited for life in New England forests (where my classes play this game), I usually designate this species as our starting player. By calling students’ attention to the existence of different types of hawks in their region, I hope to stimulate their awareness of biodiversity.

Hawk goes into the center of the ring where he or she stands or swoops about, acting hawk-like. Meanwhile everyone else begins circling clockwise, singing once or twice, “The Hawk in the nest, the Hawk in the nest, Heigh-ho, the forest oh, the Hawk in the nest.”

The next line is: “The Hawk takes the ________.” At this phrase, everyone stops circling and listens as Hawk announces what (or rather whom) he or she is having for supper. As needed, the teacher prompts, “Which creature would a hawk select for dinner: a mouse, a squirrel, a careless sparrow, or perhaps a chipmunk?” Any creature that a real hawk might use for food can be named. Students forming the circle call out menu suggestions to Hawk. When Hawk has made up his/her mind, he or she chooses a student and leads that person from the ring into the central area.

Let’s imagine that Hawk has chosen a deer mouse, a small white-footed rodent that is very common in our forests. Everyone sings, “The Hawk takes the Deer Mouse. The Hawk takes the Deer Mouse. Heigh-ho, the forest oh, the Hawk takes the Deer Mouse.”

Deer Mouse: Omnivore

Next, the circling students sing, “The Deer Mouse takes the ________.” And now it’s time for Deer Mouse to tell what his/her favorite snack might be. At this point, the youngsters almost invariably call out, “Cheese.” Teachers can then explain that just now the goal is to build a forest food chain without careless campers who might have left behind cheese sandwiches. Suggest that students consider instead what deer mice eat in their environment when there are no people around. Perhaps Deer Mouse will choose a crunchy June beetle or a softer moth larva or a huckleberry, etc. As you can see, this game offers many opportunities to provide detailed but very relevant natural history information.

Suppose that Deer Mouse selects a June beetle. Cue the students to the most euphonious, rhythmic chant possible, i.e., you might shorten the creature’s name to simply “Beetle” or perhaps drop the word “the” and replace it with “June.” The resultant lyric might be “The Deer Mouse takes June Beetle. The Deer Mouse takes June Beetle. Heigh-ho, the forest oh, the Deer Mouse takes June Beetle.” During the singing, Deer Mouse surveys the revolving students, selects one to be Beetle, and brings that child into the center.
June Beetle: Herbivore

Now that everyone is beginning to understand the process, one of the youngsters might call out, “June Beetle, what are you going to eat?” Here’s an opportunity for a discussion about what kinds of things different beetles eat at various stages of their lives. Do students know that some beetles are like the tigers of the forest floor racing about gobbling other insects, while others eat plant parts such as pollen or roots, or that still others are recyclers and decomposers of dead creatures? In this particular instance, let’s assume that our well-informed June Beetle replies to the questioners, “A leaf of the red oak tree.” This would prompt the others to sing, “June Beetle takes the Oak Leaf. June Beetle takes the Oak Leaf. Heigh-Ho, the forest oh, June Beetle takes the Oak Leaf.” Now June Beetle has the enviable social challenge of choosing an Oak Leaf from the circling singers.

Oak Leaf: Photosynthesizer

Next it’s Oak Leaf’s turn to select the food. This is a key moment in the game — a fine chance to transmit or reinforce important information about botany and photosynthesis. Remind the students that trees, grasses, berries, nuts, flowers and seeds are all beings or parts of organisms that belong to the great kingdom of Plants (a difficult concept for children to grasp until the stage of operational thinking, usually sometime after age eight).

Make certain that the youngsters know that most green plants obtain their food (energy) from the sun. Keeping this in mind, they’ll understand why the child representing a plant (whether an oak leaf, a walnut, a milkweed blossom or a bit of maple bark) always chooses the sun as a food source. If the group is patient and interested, you could explain that green plants (like the Oak Leaf) use the sun’s radiant energy to transform water and carbon dioxide into energy-rich food molecules. The plants weave the tiny atoms together to create sugars and starches. At the same time, they release free oxygen. This wonderful process (photosynthesis) allows the plants (and certain bacteria and protists) not only to feed themselves but also to feed other creatures. Plants form the foundation of the food webs here on earth. Without plants and the sun, most life as we know it couldn’t exist on our planet. Thinking about this, the children sing, “The Oak Leaf takes the Sun. The Oak Leaf takes the Sun. Heigh-ho, the forest oh, the Oak Leaf takes the Sun.”

The Sun: Earth’s energy source

As the game draws to a close, things become a little more exciting. The selection of the Sun is accomplished with great fanfare and enthusiastic commentary. I usually make a point of saying that the sun is an immensely powerful source of energy and our closest star. Energy from the sun (solar energy) not only forms and flows through almost all of Earth’s food webs but it also helps power the winds and weather, the water cycles, and even, to some extent, the ocean currents. For older groups, I might mention that the sun is a place where nuclear fusion is constantly occurring, transforming matter into energy and sending vast quantities of light and other types of electromagnetic radiation out into space. And given that the sun is so powerful and so very hot, everyone has to be very careful not to get too close to the sun itself. Therefore, once the Sun is chosen and brought gingerly into the center, all of the other food chain creatures must scamper from the middle and rejoin the outer circle, thereby avoiding being burnt to bits. The entire ring stretches out to give the Sun plenty of room to shine. The children skip and sing, “The Sun helps feed us all. The Sun helps feed us all. Heigh-ho, the Forest oh, The Sun helps feed us all.”

And this concludes the game. After giving thanks to the food chain creatures for their clever work and to the Sun for being such a brilliant star, the teacher can start a new round by asking Sun to select the next Hawk. And so the game continues. The physically active kids have had a chance to move about; the shy ones have participated in a structured, relatively pleasant and inclusive group; the more socially-minded youngsters have had some time to build their relationships with peers; the musically inclined have been able to sing; and many of the students have learned something new and true about the inhabitants of the forest.

Variations and extensions

Certainly, there are thousands and thousands of food chains that can be realistically constructed. For the forest habitat, you could challenge your class to see how long a food chain they can devise — and fit into the circle. Could they think of a different top carnivore or perhaps start with a scavenger? Could there be a “Barred Owl in the Pine Tree” or a “Bobcat in Its Den”? What about a game for a different habitat? A game for wetlands could have an opening line about “A Heron in the Marsh. A Heron in the Marsh, Heigh-ho, the Wetlands oh, The Heron in the Marsh.” You could have “The Pickerel in the Stream” for a freshwater habitat or “Tree Swallow in the Meadow” for a temperate forest in early succession. There could be “Sea Stars in a Tide Pool” for a rocky shore biome or “The Gator in the Swamp” for a southern wetland. Older students who have been studying biomes on other continents could form teams and create variations on this game to teach their classmates what they’ve learned. Imagine “The Jaguar in the Ferns” for a South American rainforest or “The Hawksbill in its Den?” What about a game for a different habitat? A game for a different top carnivore or perhaps start with a scavenger? Could they think of a different top carnivore or perhaps start with a scavenger?

Finally, for any of these scenarios, it’s especially fun if the children act like the creatures they’re representing. Encourage them to use gestures and sounds. Can’t you just see the Leopard Frog hopping or the Flying Squirrel gliding or hear the Field Cricket chirping?

Circle games — the fun and learning are almost never-ending.

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**Resources**


