



Dragonfly Food Chain Game

Teach students about food chains in a fun, interactive game! This game focuses on what dragonflies eat, and what animals might eat them!

Supplies:

- Balls to represent small flying insects (dragonfly food)
- Buckets to represent basket created by the legs of a hunting dragonfly

Background Information:

Dragonflies are sometimes called the raptors of the insect world. They are always hunting for food, using their spiny, out-spread legs to create a basket for catching prey in mid flight. They then eat the prey by ripping off pieces of it while still flying, sometimes numbering 600 insects in one day.

The damselflies and dragonflies that form the order Odonata are all consummate predators. Every species of odonate eats other animals: there's not a vegetarian among them. This is true for both the adults and the larvae.

Dragonflies and damselflies are supremely adapted to be predators, with huge compound eyes; the largest species have up to 12,000 simple eyes (ommatidia) in each compound one. Odonates eat just about any arthropod their size and smaller, and they take their prey from just about anywhere. They do this with three different foraging styles:

1. The first mode involves both predator and prey being in flight, which takes some skillful flying on the dragonfly's part.
2. The second mode involves the predator perching and waiting for prey to fly by, then pouncing when it is in range.
3. The third mode is the most interesting to watch, as the predator will fly slowly and watch for prey in the substrate, sometimes darting suddenly for what turns out to be moss on a rock.

How about prey size? Most odonates take prey much smaller than themselves, (*it's got to fit in the "basket"*) Larger prey will be quickly taken to a perch to be consumed. Dragonflies feed on other dragonflies, mayflies, caddis flies, mosquitoes, black flies, deer flies, termites, ants, gnats, and invertebrates taken from plant stems. Each year the last thing billions of mosquitoes see is the face of the dragonfly. They catch so many mosquitoes that they are sometimes called a "mosquito hawk".

from: <http://www.scsc.k12.ar.us/2001migration/Projects/RoarkJ/Default.html>

The Game:

- Scatter the dragonfly food on the green.
- Students put on “dragonfly eyes” headbands. (*Have parents tie headbands onto their kids.*)
- Each dragonfly contestant gets a bucket to be the “basket” made by the dragonfly’s legs to capture food.
- Food can only be captured by using one hand to scoop it into the basket while in motion.
- If there are enough players, one may be a fish by “swimming” and another a frog who travels by “jumping”.
- The fish and frog try to capture the dragonflies. (*touch football rules*)
- Dragonflies may escape capture by perching on vegetation. (*touching a tree*)
- Dragonflies must capture 10 insects (*balls*) to stay alive.
- Use a time limit or play until the insects are all captured or the dragonflies are all eaten by the predators.

