

Fish Relay

Subject: Science

Duration: 20 minutes

Location: Classroom / Outdoors

Key Vocabulary: Habitat, interrelationships, wet/dry season, adaptations

Related Activities: Lake Okeechobee, the Everglades and the Rainy Season in Three Cups; We're Sponging Off the Everglades; Alligator Hole Ecodrama; Algae: It Feeds, It Kills, It's Dying

Florida Sunshine State Standards: SC.4.L.17, SC.5.L.17, SC.6.L.14



Materials

- Fish cutouts (for half the group) made from the fish pictures in the Supplementary Materials Section
- Watch with a seconds hand
- Woodstork picture from supplementary materials section of the Appendix

Objectives: The students will be able to: a) describe the wet/dry seasons of the Everglades/South Florida, b) describe what happens to aquatic life as the waters in the Everglades dry down, c) explain why wading birds nest during the dry season, d) describe how the Everglades' wildlife is adapted to the wet/dry season.

Method: Students will have a relay race imitating parent birds feeding their babies; one team during the wet season, the second team during the dry season.

Background: There are two seasons in South Florida: the wet and the dry season. During the wet season (May - November) rain falls almost every day and surface water levels rise dramatically. This high water flow through the Everglades provides expanded habitat for aquatic life. During the dry season (December - April), the rains diminish and surface water levels drop. Aquatic life concentrates in small pools, making hunting easier for wading birds. The wood stork is an example of a wading bird adapted to the wet/dry season. Wood storks nest during the dry season when food is easier to catch. During high-water-level years without a dry down, the wood stork will either not nest or nest late, causing their young to remain dependent into the following wet season. If water levels fluctuate due to natural or managed alteration, wood storks may abandon established nests because they are unable to find the quantities of food needed to feed their young. (A wood stork nestling requires about thirty-six pounds of food during the sixty to sixty-five days it is dependent on its parents).

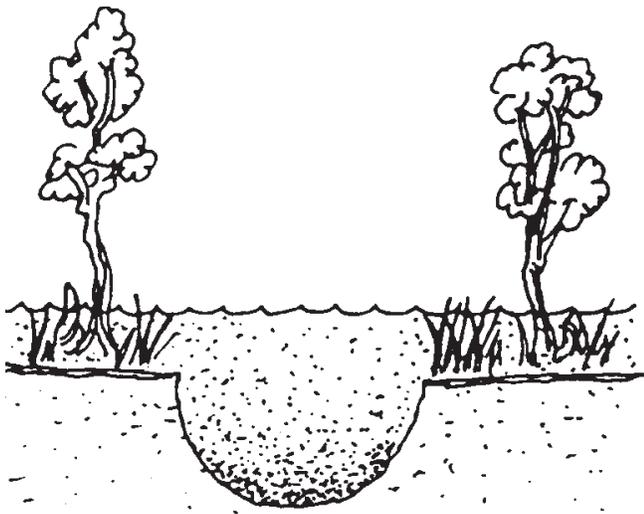
Suggested Procedure

1. Divide the group into two teams. They will be parent birds feeding their baby. Appoint an adult to be the baby bird. The feeding is done as a relay race. Each team member runs to pick up a fish, and returns to feed its baby. Once the first student gives the baby its food the next goes and so on, until all the fish are picked up. Time each team with the watch.

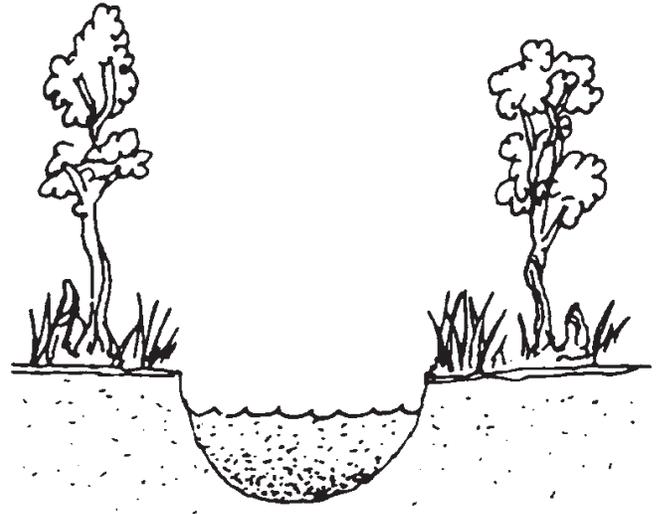
2. Explain that the first team will be raising their young during the wet season when the aquatic life is dispersed throughout the marsh. Spread the fish out to represent their expanded habitat. Time the wet season team.
3. The second team of birds will be raising their babies during the dry season. The fish have become concentrated in pools and shallows. Place the fish in a small area and time the relay for this team. The dry season team should complete the relay race in a shorter time.

Evaluation

Ask the students if this game was fair. If they had to choose whether to raise their young during the dry season or during the wet season, which would they choose? Would the wading birds in the Everglades be better off if the water remained at the same level throughout the year? Why? During which season do they think the fish reproduce?



Wet season



Dry season