NSTA Connection *or* In-Article Text Box

Alternative Exploration:

"Living" Wetland Food Web

Objective: Create a "living" classroom food web in which students research and represent various species within a wetland ecosystem to gain understanding about the interdependence of wetland organism and the impacts of human intervention.

Source: The free lesson plan entitled, "Marsh Market" (Part I) from the, *Wow! Wonders of Wetlands* (an NSTA Recommends® resource) guide is available at: http://www.wetland.org/downloads/Marsh%20Market.pdf

Grade Levels: 3-4

Materials: (per student) 1 piece of construction paper, crayons/markers, string/yarn to hang placard around their neck. (per class) *Wetland Food Chains* and other resource books, cards with animal and plant names on them for random assignment of organisms, ball of string or yarn.

Procedure:

1. Have students randomly choose cards with identities including grass, cattails, duckweed, muskrat, beaver, rabbit, hawk, duck, fox, snail, crayfish, earthworm, bacteria, algae, etc… and create their own placards using construction paper, crayons or markers, and string (to hang the placards around students' necks).
2. Students then research their organism using various sources including *Wetland Food Chains*, by Bobbie Kalman and Kylie Burns, among others (see Table 1 for an assortment

of excellent books on wetlands) to familiarize themselves with what their organism eats and who eats their organism.

3. Follow the steps of the free *Wonders of the Wetlands* lesson plan above, with students passing the yarn (energy) around from the source (sun) to the producers, consumers, and decomposers. During this activity, various threats to the wetland food web are introduced, such as draining the wetland for construction, or having pesticides enter the food web.
4. Assess students via discussion of the following questions:
    - If a wetland became polluted, how would it affect the living things? (water would not be healthy for plants or animals, oxygen could be reduced, light could be reduced and impact plants animals)
    - If a wetland were drained for buildings, how would it affect the living things? (animals and plants would lose their homes, flooding would increase from lack of absorption from wetland, more erosion if plant roots aren't there to keep soil in place)
    - If people build dams that prevent water from entering a wetland, how would it affect the living things? (without water, plants and animals would die).