

## Web of Wonder Lesson Plan

**Grades: 3-4**

**Length of Program: 30 minutes**

**Time of Year: Year round**

**Preferred Adult/ Student Ratio: 1/10**

### Summary:

In this activity, students will learn how all living things in an ecosystem are connected in some way. By building their own "web" your class will be able to look at energy flow through the food web system and how environmental changes disrupt the system. This program can be conducted at Horicon Marsh, or right in your own classroom.

### Teacher Preparation:

Review the concept of a food web.

### Academic Standards Addressed:

Environmental Education

B1.4.1 Describe the flow of energy in natural systems

**Special Instructions:** None

### Materials:

- Ball of String
- Web Cards

### Procedure:

Have the students sit in a large circle, cross-legged. Review with the students the definition of a food web. Hand out the web cards, one to each student and ask them to set the card against their legs so all in the circle can see it. Explain to the students that they are plants and animals in an ecosystem and they are going to try and build a web showing how they are connected to the other plants and animals around them. Hand the ball of yarn to one person. Have them pick someone else in the circle that their organism helps support or are supported by. They should say out loud what the connection is before they pass the yarn ball, while still hanging on to the end of the string. The new person with the ball of yarn now holds on to the string and passes the ball to someone else in the circle making a new connection. Continue this until everyone in the circle has been included in at least once.

Ask the students to hold the yarn so the string has tension in the middle. Ask one person to give their string(s) a little tug. Ask how many people can feel that tug through their connections. Have these people give a tug and find out how many people can feel these additional connections. Continue this until everyone has felt the tug of their connections.

Introduce a scenario. One example is that in the absence of a hunting bag limit, hunters come in and over harvest one of the animals. Have the person who has the animal card corresponding with the animal you chose leave the circle, dropping their strings. Consequently some animals that had been dependent on them for food, etc. are now affected. The people who were connected now find their strings loose. They should get up and leave the circle. Now the other plants and animals dependent on this second group have been affected as well, so they should get up and leave the circle, and so on until everyone in the circle can see how the connection works.

**Wrap-up:**

Ask the students for examples of how, in the real world, plants and animals are affected by change. What can they do to help protect these plants and animals?