

# Earth in Balance- it's a community effort!



This activity center is part of the **Water Protection** theme.

## What's the purpose of this activity?

The purpose of this activity is to reinforce the concept of interconnectedness of living things through a hands on activity and facilitated discussion.

## Key messages:

- All living things are connected
- Human kind is part of this connection
- It will take cooperation to help restore the natural balance of nature

## Materials

- 1 Earth ball
- 2 Rings with strings
- 2 earth ball mounts of PVC pipe
- 2 scenario cards
- Lesson plan

## Activity Set Up:

1. Start with the earth ball mounted on one PVC stand using the largest ring- ground needs to be flat and free of tripping hazards

## What will I be doing?

Ultimately you want to create a discussion around what the earth in balance means and how the earth's elements, plants and animals are interconnected.

Start with a quote attributed to Chief Seattle.

*"Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves."*

Ask the participants what do they think this quote means.

Once you have a few responses, consider asking the following question.

## What are all the things that make up the "balance of the earth"?

Here you want the kids to identify the earth's elements like fire, water, atmosphere and rock as well as the more obvious elements like plants and animals.

Introduce the group to the earth ball and the ring and strings. Do not let pick up a string until your discussion is finished. You can let them know that the ring represents the total diversity of all living things on earth. Each string can represent individual species. Have the participants identify a species from each large category of living things including:

Plants

Fungus

Birds

Amphibians (salamanders, frogs, toads)

Insects

Reptile (lizards, turtle, snakes, etc)

Mammals (bats, wolves, skunks, etc including humans)

Once the kids have created a circle of biodiversity, tell them the objective of the activity is, working together, to move the ball from one PVC mount to the other without dropping the ball. You may have to remind them to communicate with each other to help them to be successful.

Facilitate the team work component as little or as much as needed to help this random group to be successful. For example, if they are not talking to each other you need to remind them that good teamwork takes good

communication.

Once they have moved the earth ball successfully, they can drop the string and introduce the following scenario:

### **SCENARIO 1**

**Due to excessive water pollution some species of small aquatic organisms are not able to survive. Frog tadpoles have less to eat so their numbers drop. Mink cannot find enough frogs to eat so their numbers drop, as there is not enough food for the mother mink to have babies. Larger predators have less mink to hunt and therefore move out of the area and compete with other large predators for food elsewhere.**

### **SCENARIO 2**

**Due to a huge rainfall over a short period time, areas of a river shoreline are washed away into a fast flowing river. Further erosion occurs downstream as the river has human made break walls and concrete structures which do not slow the flow of the river. Great quantities of silt, sand, plant matter and other debris are deposited along the riverbank and out into the lake, covering fish breeding areas. Fish eggs are covered by silt and they do not hatch. Less small fish reduces larger fish population and osprey and herons have less fish to eat and therefore, do not have the energy to produce eggs the following year.**

**Ask the participants that will less animals or plants on earth, is earth more or less “balanced” or “stable”?**

Introduce the next ring, string and earth ball. Have the participants tell you what the smaller ring might represent.(you might have to remind them that the previous ring represented the sum total of bio diversity on earth).

They can now pick up a string and try moving the earth ball the same distance as with their first attempt.

Notice any difference? (should be more difficult, less stable, more difficult to balance on the ring)

Finish off the activity by asking them ways they can help restore the balance of nature in their home or community. ( use less electricity or water, walk or ride a bike instead of driving, consume less, plant trees, no unnecessary killing of anything living, etc)

### **Additional Information:**

**Rules for moving the earth ball are as follows:**

Place the PVC mounts for the earth ball and ring about 5 meters apart. Place the ring over the mount then

place the ball on top so the activity is ready to have the group raise the ball together. Spread the strings out in a spiral so it is easy to see each string.

Maximum, one person per string, if you have a large group each person can have a string in each hand. Invite adults to participate if your numbers are low. If your group has 12 participants, each get 1 string. If there are 8 people, 4 would get individual string, 4 would get 2 strings.

Hands must be kept between the taped area at the end the string. Participants are not allowed to move their hands up the string close to the ring.

Encourage concentration- one person not holding the string properly (could represent a species in decline) makes the process of moving the earth ball more precarious.

If the ball falls off, replace onto ring where the group is and encourage slow, steady progress. Help out where necessary depending on the functioning level of the group.

### **Clean Up Procedures:**

Wrap up strings with rings and put in ziplocks provided. Keep earth ball mounts assembled and put in bin provided. Put ball in bin with lesson plan and scenario cards.