

Hula Hoop Biodiversity

Junior Activities (9-12)

Source: Beth Parks, Environmental Education teacher

Basic Description:

This activity is designed to let students use all their senses to determine the biodiversity in a variety of different areas of the site.

Materials:

- 5-10 hula hoops (enough for each group of 3 or 4 students)
- Booklets brought with each student, or paper provided with circles drawn in the top 2/3 of the page
- Something hard for each student to draw on (i.e.: clipboard)
- Pencils

Time Allotment: 45 minutes- 1 hour.

The length of this activity will depend on how many times you repeat it, and how on-task your group is.

- Introduction- 5- 10 minutes
- Activity- 10-20 minutes (repeated at least twice)
- Follow-up- 5-10 minutes

Procedure:

Introduction:

- Announce to the group that they are going to go on an exploratory mission on the BG/Arb grounds.
- Show them the sheets with the circles and the hula hoops and show them how they will find their special site to study when they arrive. Throw the hula hoop in a short toss like a Frisbee, or alternately, walking over to a spot with tall plants and drop it from overhead.
- Invite them to record everything they can about their site- including drawing a picture of all the different plants they see in their hula hoop, in the circle on their page. Other factors to note and record are:
 - Sunny or shady?
 - Cold or warm?
 - Short plants or tall plants?
 - How many are flowering?
 - Any other visitors? i.e.: bugs, evidence of other animal visitors
- Have the teacher spilt the class into groups of 3 or 4

Activity:

- Bring the group to a site with interesting potential (woodlot in spring, tall meadow, stream side), and hand out a hula hoop to each group, and paper handouts to each students (alternately, they can draw circles in their own notebooks)

- Ask them to place their hula hoops and begin to document what they see. Be sure to walk amongst the groups, offering encouragement, and help.
- Give the groups enough time to draw and list all they can, or until they lose focus.
- When either happens, walk them over to a different type of site, and ask them to repeat their study.

Follow-up/Discussion:

- Sit the class down still in their own groups of 3 or 4 and ask them to compare what they found. What area had more plants? Why do you think? What other factors might effect what grows there?
- Have the whole group come together and ask a representative from each group to report to the whole group. Lead the group on a larger discussion about how might cause the number and type of plants the be different in different places (i.e.: light, warmth, moisture, invasive plants, pollution, etc)
- Ask the group to suggest places where they think biodiversity might be high/low.
- Ask the group if they think having lots of different kinds of plants growing together might be a good or bad thing. Give an example of a sports field versus a meadow- which do they think is a healthier ecosystem, or supports more life?

Extensions:

- An interesting exercise to try if there is more time, is the Biodiversity Lap Sit or the Biodiversity Trust Web, for a more experiential illustration of these concepts (see Classroom Activities for details)
- Back at school, consider repeating the exercise on the school playing field, and add the results to the ones gathered at the BG/Arb.

