



Wildlife Biodiversity: Educator Handout

OVERVIEW

Students will view a slideshow and will complete two activities to help them understand what wildlife biodiversity is, why it's important, threats that can occur, and what they can do to help.

LEARNING OBJECTIVES

Students will be able to:

- Define biodiversity.
- Explain the three levels of biodiversity
- Explain some wildlife diversity threats and the effect they can have.
- Learn what they can do to help wildlife diversity.

CURRICULUM CONNECTIONS

Curriculum	Standards
Wisconsin Standards for Environmental Literacy & Sustainability	ELS.EX2.B.i, ELS.EX3.B.i, ELS.EX5.B.i
Wisconsin Standards for Science	SCI.LS3.A.3, SCI.LS3.B.3, SCI.LS4.B.3, SCI.LS4.D.3

KEY TERMS

See slides associated with this lesson plan.

TIME REQUIREMENTS

45-60 minutes

SUGGESTED AUDIENCE

This activity is appropriate for 5th grade students.

PRIOR KNOWLEDGE

No prior knowledge is necessary.

MATERIALS

- Wildlife Biodiversity Lesson Presentation
- Sandwich bags
- Multicolor beads
- Paper
- Writing utensils
- Cups
- Pictures of Wisconsin's Wildlife

*This lesson plan was created by Golden Sands RC&D.
Feedback is always welcome! Any questions or improvements?
Contact us at DNRSnapshotWisconsin@Wisconsin.gov*



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- Dice
- Wildlife Biodiversity Student Handout

TEACHING TIPS

- For the Species Survival Activity, more wildlife pictures can be found on Snapshot Wisconsin's Facebook page: <https://www.facebook.com/SnapshotWisconsin/>

PROCEDURES

- Go through the slideshow with students and perform each activity below:
- For the Genetic Diversity Activity:
Split students into groups. Each group will receive a bag of 80 beads. Some bags will have an even distribution of colored beads while others will not. Inform students that a virus was introduced into the population that only affects a specific colored bead. Have students count and discard those specific colored beads in a cup. Instruct students to find the number of individuals that survived the disease. They can do this by counting the number of beads they have remaining or by having them subtract the discarded amount from the total amount. Have each group write the number of survivalists on a piece of paper. As a class, have each group discuss the number of beads they started and ended with and the assortment that they had.
- For the Species Survival Activity:
Wildlife needs to meet five basic needs in order to survive. Have students list the basic needs, which include: food, water, shelter, space, and air. Have the students get into the same groups that they were in during the first activity. Each group will receive a picture of a Wisconsin wildlife species, 1 dice, a writing utensil, and the Wildlife Biodiversity Student Handout. Inform students that each number on the dice represents a basic need or a threat. 1 represents food, 2 represents water, 3 represents shelter, 4 represents space, 5 represents air, and 6 represents a threat to that species (Habitat Loss, Diseases, Pollution, Overexploitation, Invasive Species). Instruct students to take turns rolling the dice. After each roll, students should include an x on the Wildlife Biodiversity Student Handout to indicate the number on the dice. Students will roll the dice 24 times, then add up the total number of x's received in each column on the Wildlife Biodiversity Student Handout. If the group's species received at least 2 for each basic need and 4 or less threats, the wildlife species survived.

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