

Why Do Loons Occupy Certain Wisconsin Lakes?

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Activity Overview:

This is a multi-media based classroom activity originally designed for 7th grade students as part of a late winter field trip to the Trout Lake Station. It is part of a collection of indoor activities that followed a morning of outdoor activities related to lake studies on the ice.

It involves the use of video, paper topographic maps and web based data to help students determine why loons choose to occupy certain lakes for nesting and foraging. The activity takes about 45 minutes to complete.

This activity could be used for any grade level between 7-12 depending upon the content of the class and the functional level of the students. It is probably best for middle school general classes within an ecology unit or in a specialized high school class for environmental studies.

Linking the activity to a field trip as is its original use or including it as a component of any project-based environmental topic related to lakes.

Student Learning Objectives

Students will be able to use a variety of media sources to research a wildlife connected topic.

Students will be able to recognize the conditions needed to provide a positive loon habitat.

Wisconsin Academic Standards Connections

Environmental Literacy and Sustainability- ELS.EN6 - Students analyze the dynamic balance between natural and cultural systems.

Standards for Science- SCI.CC1 (crosscutting concepts) Students use science and engineering practices , disciplinary core ideas and patterns to make sense of phenomena and solve problems.

Materials

Guide sheets and blank data tables

Computers

USGS Topographic maps

Writing supplies, rulers, magnifying glasses

Procedure

Why Do Loons Decide to Occupy Certain Wisconsin Lakes?

Introductory video: <http://www.cornell.edu/video/understanding-loons-1-introduction>

Remember these characteristics for the best lakes for loons:

- a. Islands present, especially small islands
- b. Few houses, and likely not too much boat traffic
- c. Area at least 25 acres
- d. Panfish present
- e. Clear water (Secchi greater than 6 feet, and CHL (chlorophyll) less than 10mg/l)

Loon Activity Directions

1. Look at map
2. Find suggested lakes (see post-it with lake names)
3. Decide which lake you want to look at
4. Fill out name on worksheet
5. Record:
 - a. Any islands?
 - b. Low, moderate or high number of houses?
6. Go to Computer
 - a. Find a Lake (Wisconsin DNR tool)
 - b. Search
 - c. Enter lake name
 - d. Enter county (Location)
 - e. Click **Search** (box next to lake name)
 - f. Click **Facts & Figures**
 - i. Record area
 - ii. Record if panfish present
 - g. Click **More**
 - h. Click **Water Quality Reports and Data**
 - i. Click **Details** (Use **Deep Hole** if more than one station)
 - j. Click **Secchi** (water clarity)
 - i. Record Secchi
 - k. Click Back Button
 - l. Click most recent year under **Annual Reports**
 - i. Record chlorophyll (**CHL**) range
 7. **Is your lake a good loon lake?**
 8. **Repeat all steps with a second lake if you have time! Go to Chrome Bookmark Menu bar and click on Find-a-lake**

Pictures of students involved in the activities

These students are 7th graders at North Lakeland, Lac du Flambeau, Arbor Vitae-Woodruff and Minocqua-Hazelhurst-Lake Tomahawk schools participating in the March 7, 2017 activity day at Trout Lake Limnology Field Station in Boulder Junction WI





This activity was transcribed by Karyl Rosenberg as a sample for format to be used in a potential CLMN data in classrooms web page to be included on the Extension Lakes website.