# CRITICAL HABITAT INDOOR LAB
# LESSON PLAN

**Subject Area:** Inland Lake Critical Habitat Designations
**Grade Level:** Middle School
**Seasonal timing:** Fall
**Instructional time:** 45 minutes

**A. Learning Goal:** Students will be able to identify critical habitat types and understand the importance of these areas to the functioning and ecology of lake ecosystems.

**B. Objectives:**

- Identify critical habitat area types and factors that distinguish them from other habitat areas.
- Apply knowledge of critical habitat areas to animal habitat needs and where animals live.
- Explain why an area of a lake would be designated as a critical habitat area.
- Navigate through a series of websites to find specific information pertaining to critical habitat and research of a specific body of water (*optional add-on exercise*).

**C. State Standards:**

- SCI.LS1.B.m – Animals engage in behaviors that increase the odds of reproduction. An organism's growth is affected by both genetic and environmental factors.
- SCI.LS2.A.m – Organisms and populations are dependent on their environmental interactions both with other living things and with nonliving factors, any of which can limit their growth. Competitive, predatory, and mutually beneficial interactions vary across ecosystems but the patterns are shared.
- SCI.LS2.C.m – Ecosystem characteristics vary over time. Disruptions to any part of an ecosystem can lead to shifts in all of its populations. The completeness or integrity of an ecosystem's biodiversity is often used as a measure of its health.
- SCI.LS2.D.m – Changes in biodiversity can influence humans' resources, such as food, energy, and medicines, as well as ecosystem services that humans rely on — for example, water purification and recycling.

**D. Setting:** Indoor classroom.

**E. Materials and Resources:**

- Laminated WI DNR Critical Habitat designation descriptions (1 per group).
- Laminated map of selected local lake with critical habitat designation sites (1 per group).
- Specific critical habitat description page to accompany local lake (1 per group).
- Copies of animal cut-out sheets (1 per group).

- LEEP Critical Habitat lab packets (1 per student).
- Glue sticks (1 per group).
- Scissors (1 per group).
- Relevant PowerPoint slideshow (see LEEP website) led by local aquatics/fisheries expert, if available.
- Copies of WI DNR critical habitat web site research assignment (extra credit).

**F. General delivery, see teacher guide for detailed implementation suggestions:**

**Introduction of Lesson**

- Review Critical Habitat Information from WI DNR website.
- Define critical habitat, the criteria, and identification of different types.
- Discuss the importance of critical habitat for lake ecosystems.
- Create a map of Bony Lake with critical habitat areas identified (available to be printed from WI DNR website).

**Small Group:**

- Identify the type of critical habitat they have been assigned.
- Review the information for what types or animals live in the critical habitat areas and paste their images on the lake map.

**G. Assessment:**

- Have each group write a short paragraph about what they learned for what animals use critical habitat areas.
- Have an informal class discussion (wrap up) about the activity and what types of critical habitat they were assigned and which animals they pasted on their respective areas of the lake.