

Bird Observations

Field Activity: Migration Flyways and Local Habitat Exploration, Tools Explanation, Outdoor Field Activity

Introductory Activity: Bird Bingo, Binocular Usage

Description: Using guided scientific inquiry, students explore and evaluate local bird habitat focusing on a bird's requirements for food, water, shelter and space. Students collect general weather data using Vernier LabQuest scientific handhelds, locate and identify local birds using binoculars, make personal observations about the local environment and analyze their surroundings against a given habitat criteria. Findings are used to evaluate the local area and determine whether the habitat is suitable to support biologically diverse bird populations. Students discuss their findings and suggest best management practices to further enhance suitability of their site.

Objectives: By the end of the program, the students will be able to:

- Define the terms habitat, migration, flyway, biodiversity, and best management practices
- Describe the defining characteristics all birds share
- Describe several factors that influence the survival of migrating birds
- Identify best management practices to increase bird habitat
- Explain the four core habitat criteria needed for birds to survive
- Illustrate an increased knowledge about birds and their habitats
- Use field binoculars and field guides to properly locate and identify birds
- Investigate local surroundings, apply scientific investigation methods, and draw reasonable conclusions about local bird habitats and populations

Indiana Academic Standards for Science:

Fourth: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 2.3, 2.4, 2.5, 2.7, 4.2, 4.3, 4.4, 4.7, 6.1, 6.2, 6.3

Fifth: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.2, 2.4, 2.7, 2.8, 4.4, 4.5, 4.7, 5.1, 5.7, 5.8, 5.10, 6.1

Sixth: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.3, 2.8, 4.8, 4.9, 4.10, 5.2

Seventh: 1.1, 1.2, 1.3, 1.4, 1.7, 1.8, 1.9, 1.10, 2.6, 2.8, 4.6, 4.7, 4.8, 4.9, 5.4, 7.1, 7.2

Eighth: 1.1, 1.2, 1.3, 1.8, 2.4, 2.5, 2.7, 2.9, 4.4, 4.5, 4.6, 4.7, 4.8, 5.1, 5.8, 7.2

High School: Env.1.4, Env.1.6, Env.1.14, Env.1.19, Env.1.20, Env.1.30, Env.1.34, Env.1.35, Env.2.1, B.1.37, B.1.38, B.1.40, B.1.41, B.1.44, B.1.45, B.1.46, B.1.47

Indiana Academic Standards for Mathematics:

Fourth: 1.1, 1.3, 1.9, 7.1, 7.3, 7.4, 7.5, 7.6, 7.8, 7.9

Fifth: 1.2, 7.1, 7.3, 7.4, 7.5, 7.7, 7.8

Sixth: 5.6, 7.1, 7.4, 7.5, 7.6, 7.9, 7.10

Seventh: 7.1, 7.4, 7.6, 7.7, 7.10, 7.11

Eighth: 7.1, 7.4, 7.6, 7.7, 7.10, 7.11

Excellence in Environmental Education – Guidelines for Learning (Pre K – 12):

Fourth Grade	Fifth – Eighth Grade	Ninth Grade
Strand 1 A, C, D, G	Strand 1 C, D, G	Strand 1 C, G
Strand 2.2 A, B, C	Strand 2.2 A, B, C	Strand 2.2 A, B, C, D
Strand 2.4 A, D	Strand 2.4 A, D	Strand 2.4 A, D
Strand 3.1 C	Strand 3.1 C	Strand 3.1 C
Strand 4 D	Strand 4 D	Strand 4 D

Please note specific learning objectives and academic standards will vary based on timeframe, location, availability of resources, and tailored content of programming.