

Wildlife Survey

Teacher's Guide

Subjects: Integrated Science (Life; Earth-Space; Physical)

Topics: Wildlife Identification and Survey, Habitat,

Summary: Students will use the glass-bottom boat to float a short distance downriver and or around the spring to conduct a wildlife survey. Students will record observations of common wildlife with special emphasis on whether the wildlife is on the river bank or toward the center of the river.

Objective(s): After completing the field lab, students will be able to:

1. Identify common wildlife at Wakulla Springs
2. Correlate river habitat with specific wildlife

Ecosystem(s): Freshwater Wetlands; Rivers/Springs

Equipment:

- Data sheets, clipboards, and pencils
- Watch
- Counters (optional)
- GPS (optional)
- Binoculars
- Bird Rings and I.D. books

Background:

- **Vocabulary:** survey, wildlife, migration, abundance
- **Reference Material:** Wakulla Springs Birds: <http://www.wakullasprings.org/Birds.htm>
National Audubon Society Field Guide to North American Birds: Eastern Region
- **Equipment Training:** Species identification books

Procedure (Engage; Explore; Explain)

1. Review common species of birds at Wakulla Springs.
2. Review wildlife survey methodology.
3. Review variables that may affect the outcome of a wildlife survey: experience of surveyors; temporal factors (daily, monthly or annually); equipment used (binoculars, etc.); weather; etc
4. What can wildlife populations tell us about the health/quality of the river?
5. Formulate your own hypothesis about the relationship between birds and the quality of the river.
6. Students float down river and identify, count and record wildlife seen noting whether the wildlife was observed on the riverbank or on the center of the river.
7. Students work in groups of three with one person recording and two people observing and identifying wildlife

Sunshine State Standards:

Science: SC.F.1.3.7; SC.G.1.3.3; SC.G.1.3.4; SC.G.2.3.3; SC.G.2.3.4; SC.H.1.3.5

Language Arts: LA.A.1.3.3; LA.B.2.3.1

Mathematics: MA.E.1.3.1; MA.E.3.3.1

Social Studies: SS.B.2.3.9

Climate Literacy: 1-c,f

Ocean Literacy: 5-f

Wildlife Survey

Student Data Sheet

Full Name:		Date:	
School (teacher):		Time:	
Latitude:		Longitude:	

Student Hypothesis and Rational

The species diversity will be higher (circle one: **on the riverbanks** or **in the river's center**) because... _____

Field Observations/Measurements/Data

Weather: Sunny Cloudy Rainy Windy					
Temperature: Cold Chilly Warm Hot					
Rotational Station (boat trip): 1 2 3					
Wildlife	Count		Wildlife (continued)	Count (continued)	
	Riverbank	River Center		Riverbank	River Center
Turkey Vulture			Fish Crow		
Black Vulture			Red-winged Blackbird		
Osprey			Northern Mockingbird		
Red-shouldered Hawk			Northern Cardinal		
Great Egret			Mourning Dove		
Snowy Egret			Red-bellied Woodpecker		
Great Blue Heron			Pileated Woodpecker		
Little Blue Heron			Downy Woodpecker		
Yellow-crowned Night-Heron			Northern Parula		
Double-crested Cormorant			Blue Jay		
Anhinga			Tufted Titmouse		
Limpkin			Eastern Towhee		
			Yellow-rumped Warbler		
White Ibis			Carolina Wren		
Merganser			Carolina Chickadee		
American Coot					
Common Moorhen			American Alligator		
Wood Duck			Suwannee Cooter		
Blue-winged Teal			Yellow-bellied Slider		
Lesser Scaup			Softshell Turtle		

Pied-billed Grebe			Banded Water Snake		
American Wigeon					

Wildlife Survey

Assessment

1. What species did you see the greatest number of? Why do you think there is an abundance of this species?

2. Which bird species did you see the least of? Why do you think the bird was not sighted often?

3. Does your data support your hypothesis? Whether your hypothesis is supported or not, what can you infer from your observations, and results?

4. Would you expect to see the same wildlife in January?

5. How might exotic and invasive species such as hydrilla affect the wildlife in the park?

6. Think about what you learned in this lab; has it generated any new questions? Write a new question about something you want to learn more about.
