

NatureMapping Program
2nd Grade Bird Project

Modules	Life Sciences	Math	Technology
1. Scientific question What is the diversity of birds in Waterville? (descriptive & comparative study)	Hypothesis: There are more species of birds in Waterville than was predicted by the WA-GAP Project		
2. Project Design (Identify a Setting within a System and Identify variables of Interest) What you are going to do?	Learn about different families of birds. Begin the development of a list of birds observed in Waterville and compare to the predicted species list. Record habitat needs for each of the birds studied in class each year.	Learn how to use binoculars (magnification and power) Measure the size of birds Count individuals	Download pictures from the Internet. Students will use <i>NatureMapping</i> website to learn about WAGAP species lists, maps, and habitats birds use. The bird list will be published on the website
3. Methods (Collect Data) How you are going to do it?	Learn observational skills Get a list of local birds from a local birder. Introduce 4 local birds to students to learn how to use reference materials	Measure size difference of birds Record the number of sightings by students from home and school	Internet to find information and details about birds. Submit data to the <i>NatureMapping</i> Program Publish species list on website.
4. Data Analysis - Results What did the data tell you?	Example: There are more non-native species than native in Waterville or There are more migratory (summer and winter) birds than residents or Birds that eat insects are the most plentiful. There are more species than WAGAP's list	Example: Divide the list into native and non-native, or m migratory and resident, or seed, insect, or birds of prey and give totals in a chart.	Maps show where the sampling occurred.
5. Discussion (Use Evidence to Support an Explanation) Why do you think you got the results that you did?	Why might this occur? WAGAP created maps at a statewide scale and Waterville was too small to pick up when mapping	Focus is only on a few birds each year, but after a few years, will not only have a list, but observations over the same amount of time.	

NatureMapping Program
2nd Grade Bird Project

Modules	Reading/Writing	Art	Social Studies
1. Scientific question What is the diversity of birds in Waterville? (descriptive & comparative study)	Hypothesis: There are more species of birds in Waterville than was predicted by the WA-GAP Project		
2. Project Design (Identify a Setting within a System and Identify variables of Interest) What you are going to do?	Students will learn new science related vocabulary related to the birds and bird parts. Learn about habitat and food needs for selected birds	Students will draw or paint life size pictures of each of the 4 birds	Why people like birds – use of feathers (down jackets). Eat insects and small rodents that destroy crops Why some birds like to be around people
3. Methods (Collect Data) How you are going to do it?	Each student will select a bird and learn to record their data in a field journal. Read stories about different birds Teacher reads literature and ask questions such as “How do birds survive?”	Use silhouettes to learn about the shapes of birds Draw birds and “parts” in their journal Draw different families of birds Compare the same parts (e.g., beak) across different families	Read Native American legends and stories about pigeons
4. Data Analysis - Results What did the data tell you?	Students will write a description of the different groups of birds in Waterville.	Use artwork to show the differences between birds	
5. Discussion (Use Evidence to Support an Explanation) Why do you think you got the results that you did?		In future years, more birds will be added to show the diversity of the habitats in Waterville.	The history of introducing species to combat weeds or other species.