



Bird Observations

Setting: Any outdoor space

Theme: Observing birds and their behaviors can give clues to their preferences and what species they might be.

Description: Naturalists explore a natural space with binoculars and field guides to observe behaviors and characteristics of different species of birds.

Environmental Education Outcomes:

Age: Middle and high school students

Recommended Time: 30 minutes- 2 hours

MATERIALS LIST:

- A pair of binoculars for each naturalist
- A “Backyard Birds” field guide for each naturalist

ENGAGE

1. Ask if anyone has noticed birds today. Listen to responses. Are people naming birds or describing how they look or what they are doing? Ask follow up questions to see if the person noticed any behaviors, location, time of day, size of bird. Don’t offer any clarifying or corrections. Just listen. Make space to allow group members to respond and build on other’s comments (“Does anyone have anything to add to what they said?”).
2. This time together is about observation. Naming birds can be important but this experience is more about what the birds are doing and what they look like.
3. Set up group expectations for being able to observe. The following are suggestions:
 - Be quiet.
 - Point out birds to others with motions.
 - Stay together.
 - Sometimes keep the group still.
4. Hand out binoculars and give directions on how to use them.
 - Always use neck strap.
 - Adjust the distance between your two eyes. With the right spacing your view will be a perfect circle for both eyes.
 - Next, find something to focus on, such as a dark tree branch against the blue sky, a street sign, or an overhead wire. Focus with both eyes open by turning the central focus wheel.
 - Now it’s time for the fine focusing. Close your right eye and, using only your left eye, adjust the focus wheel. Next, close your left eye and, using the diopter adjustment, bring your view into sharp focus. The diopter is often part of the right-hand eyepiece on a binocular.



- Now open both eyes and see if your focus is crystal clear. If the image is not clearly focused, repeat these steps, making small adjustments using one focus wheel or the other.

EXPLORE

1. Head out on your hike; while beginning your hike explain our goal for bird watching is to observe both
 - **characteristics** and
 - **behaviors** of the different birds.
2. While hiking, ask the group questions to get them thinking about what the birds are doing and **why**:
 - **Ask** about a bird's size- smaller, bigger or about the same size of a robin?
 - **Ask** if there are any noticeable characteristics? Bright colors, big beak, long legs or tail
 - **Ask** if the birds you observe are alone, with other of the same kind, with others who are a different kinds of birds?
 - **Notice** where the bird is and what it is doing- roosting in a tree, soaring, flirting about in bushes, running, hopping on the groups, swimming, etc.
3. Allow plenty of time for the group to bird watch. Keep the group together to minimize noise and movement, and to maximize potential for sightings.

EXPLAIN (BACKGROUND INFORMATION)

Use the field guides and/or books if the group can notice key identifying characteristics of any birds.

ELABORATE

The behaviors of animals and plants can reveal changing trends in the earth's climate. Being able to record observations of animals year after year, decade after decade, can help us understand to what effect climate change is affecting natural systems. Birds depend on certain insects, flowers, and prey to be available on migration routes. These food sources may or may not be available if temperatures or moisture changes.

Bird observation can be a calming, restorative activity that can connect us to the natural world. 😊

EVALUATE

1. **Ask** the group what birds, behaviors, or characteristics of birds they observed today.
 - Discuss how observations like what they did today could be useful in other areas? Could you observe mammals the same way? People? Insects?
 - What is the benefit for naturalists to have keen observation skills?