



Bird ID Experts!

Overview

Students will identify and sketch birds using field marks such as coloration, size, and shape.

California Science Standards

Grade 1: 4.a.-I &E
Grade 2: 4.c.-I&E
Grade 3: 3.b.-L.S.

Oregon Science Standards

Grade 3: 01-L.S.
01-S.I.
Grade 5: 03-L.S.
01-S.I.
Grade 8: 01-S.I.

National Standards

Content Standard A:
Scientific Inquiry
Content Standard C:
Life Sciences

Materials Include

* Bird focus cards
* *Common Birds*
PowerPoint
* Student Journal
* Clipboards

Activity Time

Preparation: 15 min.
Activity Time: 45 min.

Best Season

All Season

Vocabulary

* Field Marks
* Ornithologist
* Nape
* Rump
* Flank

Grade Level: 1st-12th (O.S.S: 3rd-8th) (C.S.S: 1st-3rd)

Learner Objectives

Students will:

- Determine why field marks are important in identifying birds
- Describe bird field marks using correct names of body parts
- Identify five field marks on a focus bird

Background Information

Identifying birds in the field can be a tricky and at times a challenging task.

Birds are mobile, well-camouflaged, sometimes very small, and often seen from a distance. However, birds are well-adapted to their environments and have special characteristics and lifestyles that can aid in their identification. Three characteristics ornithologists (scientists who study birds) look for when identifying and studying birds are field marks, habitat, and behavior.

Field Marks: Field marks are a great way to identify birds in the field. A field mark includes any physical characteristics such as coloration, size, and shape. Keep in mind coloration can be misleading because it can change with the light and the time of the year. On the other hand, size and shape work well when comparing and identifying birds.

Habitat: Many birds are specially adapted to specific habitats. For instance, waterfowl live in water areas and woodpeckers in wooded areas. In addition, there are birds that are specific to a location within a habitat as a result of their feeding behaviors. For example, Spotted Towhees are almost always found in the underbrush looking for worms; woodpeckers on the trunk of a tree drilling for insects; and hawks perched on high branches searching for small mammals. (See *KBBT Habitats* for more information).

Behavior: Birds engage in incredible and, at times, bizarre behaviors. Knowing the bird's flight patterns, feeding mechanisms, nest building techniques, mating displays, and/or sounds will help distinguish them from others. (See *Birding By Ear* for more information about bird songs and calls).

Lesson Plan

Getting Ready!

1. Read the background information & teacher tips.
2. Make copies of *Student Journal: Bird ID Experts*.

Discuss!

1. Ask students if they know what an ornithologist is. (Hint: mammalogists study mammals; herpetologists study reptiles and amphibians). *An ornithologist is a scientist who study birds.*
2. Have the students describe the differences between two bird focus cards. They should come up with habitat, behavior and appearance differences.
3. Explain to students that an ornithologist identifies “field marks” to identify and study birds.
4. Ask students if they know what a field mark is? *Field marks are physical characteristics that make bird species unique and different from another bird species. For example, most people have hair, but the length and color might be an important clue for identifying each person. Clues like color and length are also used to identify birds. For example, the length of the tail and shape of the bill are critical field marks.*
5. Explain to students that field marks describe a bird body part by using adjectives such as color (red, yellow), size (small, large, short) and shape (round, blunt, sharp). You may have to write adjectives on the board to help explain.
6. Show students the Golden-crowned Kinglet focus card and ask them to share different field marks they see using adjectives.

Investigate!

1. Hand-out Student Journal and have students circle 3-4 body parts that are similar to humans (e.g. belly, back, leg, etc) and 2 that are unique to birds (nape, rump, and flank).
2. Ask students to describe 2-3 body parts on the bird shown using adjectives.
3. Give each student a focus bird card.
4. Let students know they will become bird ID experts on their focus bird and will be able to help everyone else learn how to identify it.
5. Ask students to carefully examine their bird and its “field marks” (colors, size, and shape) that make it unique.
6. Ask students to sketch their bird & label 5 important field marks.
7. Give students 10-15 minutes to sketch.



Mountain
Chickadee

What are Field Marks?

Field marks are physical characteristics such as coloration, size, and shape that a birder or ornithologist notes to identify/differentiate one bird species from another.

Suggested Questions

What is field mark?

What are some examples of field marks?

What are others ways to identify birds?

Teacher Tips

Follow-Up!

1. Have groups of students share their focus bird field marks with each other.
2. Ask 2-3 questions to re-cap lesson (see previous page).

Bird Identification Tips!

Use the following information for activity and extension located on right panel.

Bird Field Marks— What did the bird look like?

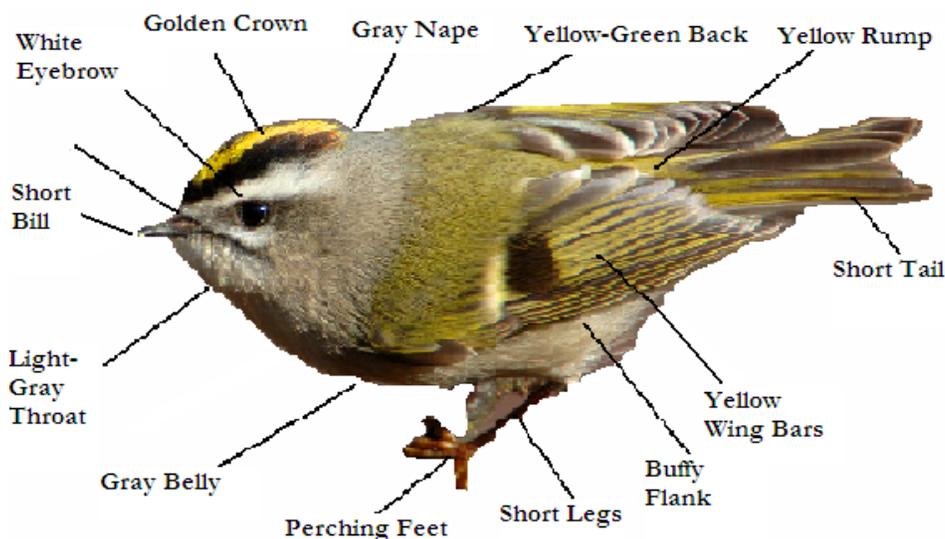
1. *Silhouette*: Body and tail shape, length of bill, etc.
2. *Plumage*: Feather coloration, wing bars or patches.
3. *Posture*: Was the bird sitting upright or perching horizontally?
4. *Size*: Was the bird small like a finch or large like a hawk?

Bird Behavior— What was the bird doing?

1. *Foraging*: Another word for feeding. Describe what it is feeding on.
2. *Flocking*: More than three birds together in a group.
3. *Preening*: Cleaning its feathers with its bill.
4. *Flying*: Describe soaring, hovering, flapping, or gliding.
5. *Singing*: Long, complex musical notes sung only by male birds.
6. *Calling*: Short, simple notes made by both males and female birds.

Bird Habitat— Where was the bird located?

1. Riparian area (along streams, rivers, creeks)
2. Wetland or marsh
3. Open field, meadow or grassland
4. Conifer forests
5. Sagebrush steppe



Take a Hike

After the lesson, take students on a hike or walk to use their new bird expertise. Have them help other students identify their focus bird in the field by pointing out its field marks.

Outdoor Extension!

Ask students if they can think of other ways to identify birds in the field. Direct students to two other commonly used identification methods: bird behavior and habitat. Then take students outside on a hike or schoolyard walk to identify birds using the three methods: field marks, behavior, and habitat. Have students use the Student Journal to check-off information about one bird seen (they can try to locate their focus bird). Discuss journals and field marks at the end of the walk.

Using Adjectives!

Adjectives are important when identifying field marks. Some examples of “field marks” for the Golden-crowned Kinglet include:

- * Golden Crown
- * Short Bill
- * White Wing Bars
- * Buffy Flanks