Bird Field Guides

Oregon State Standards

Grade 3: 01,04,05-L.S.
Grade 5: 01-L.S.

Common Core Standards

RI.3.1
RI.3.2
RI.3.7
RI.3.8
RI.3.9
RI.4.1
RI.4.2
RI.5.1
RI.6.1
RI.6.2
RI.7.1
RI.7.2
RI.8.1
RI.8.2
RI.9-10.1
RI.9-10.2
RI.11-12.1
RI.11-12.2
RST.6-8.1
RST.6-8.2
RST.6-8.3
RST.9-10.1
RST.9-10.2
RST.9-10.3
RST.11-12.1
RST.11-12.2
RST.11-12.3

Vocabulary

- Field guide
- Range map

Summary:
Students will explore field guides by identifying local bird species and their characteristics.

Time:
- Preparation: 15 min
- Activity Time: 50 min

Grade Level: 3rd-12th

Goals
- To increase awareness of local birds and their habitats
- To increase awareness of how birds' beak shapes differ and how this influences what birds eat
- To increase knowledge of how field marks and other characteristics (beak shape) can be used to classify and identify bird species
- To gain skills of comparing and contrasting similarities and differences among bird species
- To increase skills in using scientific tools and resources
- To increase knowledge of tools used to identify birds (sketching, field marks, beaks, field guides)

Learner Objectives
Students will… .
- Explore and interpret field guides
- Use field guides when searching for a focus bird
- Describe why a field guide is a critical tool in birding

Materials
- Field Journal worksheet packet (4 pages)
- Bird focus cards
- *Birds of Oregon* Field Guides

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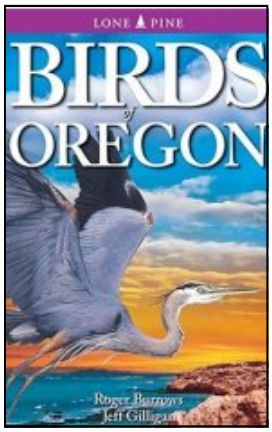
Bird Field Guides

Background Information

Field guides are indispensable when it comes to identifying and studying birds in the field (outdoors). A field guide is a book that carefully describes and illustrates different species so they can be easily identified. Just like binoculars, ornithologists (scientists who study birds) or birders (people who watch birds for recreation) are never in the field without this critical tool. They are typically compact and light enough to put in a backpack and provide a wealth of information on birds.



Field guides tend to be created for a particular region and include information about the organisms found there. There are a variety of Oregon bird field guides available, and many are adult or children appropriate. *Birds of Oregon*, a Lone Pine Series Field Guide, is good for beginner birders and beyond. For this reason, this resource is included in the Klamath Basin Birding Trail kit. This field guide contains species account for 374 birds that have been officially recorded in Oregon with in-depth species descriptions, range maps, and illustrations. Information about Oregon bioregions, bird activities, top birding sites, birding tools, and bird behaviors is also included.

This activity will help teach students how to use the *Birds of Oregon* field guide. It can also be adapted to other styles of field guides.

Getting Ready

- Read background information and review *Birds of Oregon* field guide.
- Make copies of Bird Field Guides Worksheet packet (4 pages).
- Prepare laminated Bird Focus Cards (cover or remove bird species names from the bottom right corner)

Discuss!

1. Ask students if they know (or can figure out by its name) what a bird field guide is and what it is used for. *A field guide is a critical tool biologists use to identify organisms when outdoors (in the field).*
2. Let students know they will become Bird ID experts by using an exciting and critical tool used in bird studies.
3. Assign one field guide to each student
4. Have students spend about 2-3 minutes to look through this exciting and critical tool used in bird studies.
5. Discuss the following questions as a class: How is the field guide organized? (Birds are grouped based on evolutionary order)
6. How would you locate more information about a bird you didn't recognize in the field? (Reference in the front, quick reference on the back, index, and flipping through.)

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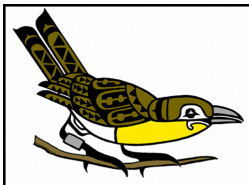

Bird Field Guides

Investigate

1. Give each student a Bird Field Guides Worksheet packet and a *Birds of Oregon* field guide.
2. Have students spend about 5-10 minutes looking through the field guide and answering questions in their journal sheet.
3. Give each student or groups of students a bird focus card (or use study skins if accessible).
4. Have students sketch their focus bird on page 1 of the Bird Field Guides worksheet packet.
5. Have students spend about 10-15 minutes looking up their species in the bird field guide. Students may use the "identification by Beak Shape" handout to identify their bird.
6. Ask students to learn as much as they can on their focus bird so they can become the expert on their bird! Have them record information on the journal sheet (page 3 of worksheet packet). Encourage them to practice note taking skills instead of copying information from the field guide verbatim.
7. After the time has elapsed have students show their bird card and share some interesting facts they learned about their species.
8. Direct students to page 32 to look at the provided range map key.
9. Have students fill in information about their species' range map and answer the related questions on page 4 of their worksheet packet.

Conclusion

1. Ask students to share information they found about their bird.
2. Ask students 2-3 questions to recap the lesson: (1) What information can you gather from using a bird field guide? (2) What color on a range map indicates a summer resident? (3) What is one way to look up a bird in a field guide?

Link to KBO lessons:

Study Skins: Students learn about the uniqueness of birds, how to identify and describe field marks, how to identify birds using a field guide, and make scientific predictions based off of their own research.

Outdoor connections

- **Bird Walk:** Take students on a bird walk in the school yard or to nearby park or local birding area. Have students practice identifying field marks on the birds that they see. Bring field guides and have students practice using them too!

Further Resources

North American Bird Field Guides:

- Sibley, David Allen. (2000) The Sibley Guide to Birds. Knopf
- Dunn, Jon L and Jonathan Alderfer. (2001 6th Edition) National Geographic Field Guide to the Birds of North America. National Geographic

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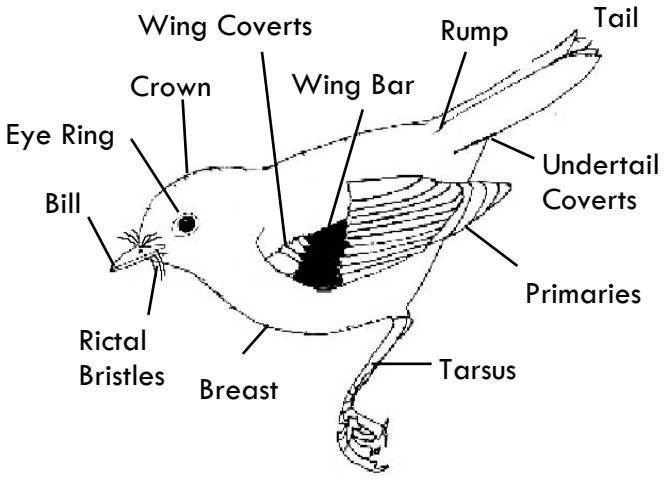
Field Markings and Parts of a Bird

Sketch your focus bird (or bird specimen). Use the diagram below to help label and describe field markings.



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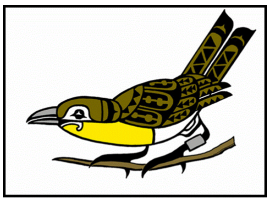
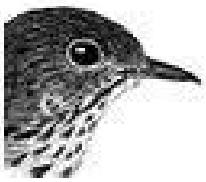


Identification by Beak Type

Instructions: Use the beak shape to determine what group of birds it belongs to. Use the field guide to identify your bird.

Beak Shape	Food Type	Page Number and Group
Multi-purpose Beak 	Seeds, Fruit, & Insects	**251-258** Jays & Crows; **287-294** Bluebirds & Thrushes
Long, Skinny Beak	Nectar	**213-217** Hummingbirds
Short, Curved Cone Beak	Seeds	**114-123** Ground Birds: Quail, Grouse
Straight, Long Chisel Beak	Insects	**219-230** Woodpeckers
Flat Beak with "Whiskers"	Insects	**232-244** Flycatchers; **301-302** Waxwings
Straight, Short tweezer Beak	Insects	**267- 283** Chickadees, Nuthatches, & Wrens; 284-285 Kinglets; 303-317 Warblers
Cone Beak	Seeds	**318-341** Sparrows, Towhees, Buntings, & Grosbeaks; **350-361** Finches

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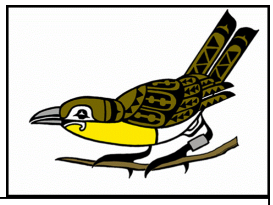

Using Bird Field Guides

What are five ways the field guide is organized?

1. 4.
2. 5.
3.

On what pages would you find the following bird groups? (write first and last page)

1. Waterfowl: 2. Woodpeckers: 3. Wood-warblers:

Summarize the following information found in the field guide about your focus bird:

Common Name: _____ Scientific Name: _____	
ID/Field Marks	
Size **W=Wing Span** **L=Length, head to tail**	
Habitat Preference	
Nesting Behavior	
Food Preference	
Song Description	
Interesting Fact	

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Name:_____
Date:_____

Field Guides and Range Maps

As you search through the field guide, answer the following questions about range maps.

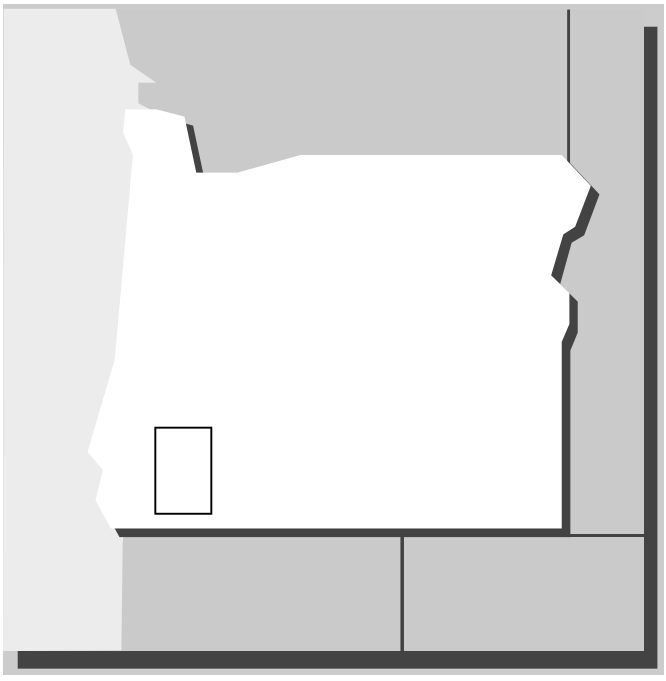
1. What does each color indicate on a bird's range map (see key on page 32)?

   Purple:
   Blue:
   Pink:
   Yellow:
   No color:

2. What information does the range map tell us about birds?

3. During what season(s) do you find <u>your focus bird</u> in your area?

4. Fill the range map of your focus bird using the correct colors or create a key with shading.



<u>Key</u>

☐ = Rogue Valley

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