



Birding Economics

Overview

Students will research birding trails using various resources as well as analyze birding statistics and graphs.

California Science Standards

Grade 6: 7.b.-I&E
Grade 7: 7.a.c.-I&E

Oregon Science Standards

Grade 6: 3S.2
Grade 8: 3S.2.
High School: 3S.4

National Standards

Content Standard A:
Scientific Inquiry

Materials Included

* Student Journal

Materials Needed

* Research materials
(computers, books, etc.)

Activity Time

Preparation: 15 min.
Activity Time: 45 min.

Best Season

All seasons

Vocabulary

* Birding trail
* Economics

Grade Level: 7th-12th (O.S.S.: 6th, 8th-12th) (C.S.S: 6th & 7th)

Learner Objectives

Students will:

- Research Birding Trails using books, internet, other resources
- Analyze birding statistics and graphs based on birding data

Background Information

Over the past 50 years, birding has become one of the fastest growing outdoor recreational activities, U.S. Fish and Wildlife Service reported that the number of bird watchers in 2006 was 71 million! Unlike some other recreational outdoor sports, birding generates little ecological impact or wildlife disturbance. In addition, birding can provide substantial economic benefits to local communities. Not only do birders invest large amounts of money on birding gear such as binoculars, field guides, and spotting scopes, but they also support local businesses during their birding trips. They stay in hotels, dine in local restaurants and cafes, and join local birding tours.

For example, according to the National Survey on Recreation and the Environment (NSRE), birding related expenses nationally amounted to over \$45 billion in 2006, and in Oregon bird related expenses equaled \$243 million. Also, 293,000 out of state visitors came to Oregon to bird watch. During their travels, birders typically search for birds along birding trails. For instance, the Klamath Basin Birding Trail includes a variety of different habitats supporting a range of bird populations (see KBBT Crater Lake National Park Education Kit Introduction). Birders from all over the country come to the Klamath Basin to stay and dine while searching for birds.

Birding trails are scattered across North America. Some are complete, others are in development. In general they provide opportunities for birders, naturalists, biologists, and students alike to explore diverse habitats near or away from home. They also offer distinct scenery and cultural history of the area. People of the Klamath Basin are fortunate to have a birding trail in their backyard. It is accessible and offers students a great place to study birds and their habitats.

Lesson Plan

Getting Ready!

1. Read the background information & teacher tips.
2. Determine a research site for students (computers, books).
3. Make copies of *Student Journal: Birding Economics* for each student.

Discuss!

1. Ask students if they know what “birding” is. (Hint: also called birdwatching). *Why would someone want to watch birds? Where would “birders” go to watch birds?*
2. Explain to students that “birders” or “birdwatchers” often visit birding trails because they typically have a variety of different habitats supporting many bird populations. *For instance, there is a birding trail right here called the Klamath Basin Birding Trail. This trail stretches throughout forests, wetlands, meadows, streams/ rivers, and sagebrush. Birds such as the Bald Eagle, American White Pelican, Northern Flicker, and Yellow-rumped Warbler frequent these areas.*
3. Ask students if they ever have been on a birding trail. If so, have students share experiences. Explain that Moore Park, Veterans Park, Big Springs Parks, and Tulelake National Wildlife Refuge, and Crater Lake National Park are all part of the birding trail.
4. Ask students why birding trails are built in the first place. *Birding trails are built to introduce communities to educational and recreational opportunities, to increase awareness of local bird species and habitat conservation, and to provide substantial economic benefits to the local community.*
5. Ask students what are some things birders may need when looking at birds. *“Birders” often need binoculars, spotting scopes, field guides, field journals, a place to stay, food to eat, etc.*
6. Discuss economics (see right panel).

Investigate!

1. Let students know they will be investigating “birding” and “birding economics” and how bird watching can stimulate the economy.
2. Give each student a Student Journal to complete.
3. Let students know they will be doing a research project on Birding Trail Economics.
4. Have students pick from the list of birding trails.
5. Have students use different resources during their research.
6. Give students an ample amount of time to complete research.
7. Have students create a poster and share their project with the class.

“Economics”

Economics is the study of the production, distribution, and consumption of goods and services.

Suggested Questions

What is birding?

What kind of tools do birders use when looking at birds?

What are some activities Birding Trails offer?

Teacher Tips

Follow-up!

1. Ask students 2-3 questions to recap lesson. (See right panel on previous page.).



Birding Trails* Around the Country

1. Basin and Range Birding Trail
2. Oregon Cascades Trail
3. Great Texas Wildlife Trail
4. Great Florida Birding Trail
5. Alabama Coastal Trail
6. Oregon Coast Birding Trail
7. Maine Birding Trail
8. North Carolina Birding Trail
9. California Central Coast Trail
10. Eastern Sierra Birding Trail
11. Virginia Birding and Wildlife Trail
12. Washington State Birding Trail



*Some of these are birding trails within a network and some are the network.

What is birding?

Birding is the observation or study of birds with the naked eye or by a visual enhancement such as binoculars. Birders, the people who participate in birding, generally use field marks, habitat, nesting, behaviors, and songs to identify birds.

Klamath Basin Birding Trail

The Klamath Basin Birding Trail is a winding auto route 300 miles long highlighting birding sites throughout the Cascade Mountains, Great Basin, and Modoc Plateau. Along the way view birds that call this diverse area of high mountains, expansive grasslands, marshes, conifer forests, sagebrush and juniper woodlands, and numerous lakes home. During the winter months the Klamath Basin hosts the largest number of Bald Eagles in the lower 48. This is the perfect place to view hundreds of birds species-from songbirds and shorebirds, to waterfowl and raptors due to the many habitat types that can be found along the Klamath Basin Birding Trail.