



Activity: Creating a Field Journal

Appropriate Grades: 3-12

Oregon Content Standard: Scientific Inquiry: COLLECTING AND PRESENTING DATA
Conduct procedures to collect, organize, and display scientific data.

National Science Standard: Content Standard A -
Abilities necessary to do scientific inquiry: use appropriate tools and techniques to gather, analyze, and interpret data.

Background Information: Keeping a field journal is critical in field biology. A field journal is a scientific tool, just as binoculars and compasses are. It is the most important tool for a field biologist and one that is used on every trip into the field. Having your students create a field journal will be giving them a tool they can use on every field-trip.

The system outlined in this activity is based on a journal keeping system established by Joseph Grinnell and his colleagues around the turn of the century. Grinnell was a naturalist, ecologist, and professor whose system for careful note keeping has become famous in the field of natural history.

A field journal is used to write observations, data, notes, and drawings to document what was seen in the field. This is important for

- identifying unknown species,
- documenting and recording observations, and
- learning more about the natural world.

Learner Objective: Students will create, use, and describe why field journals are a critical tool of conducting field study projects.

Procedure:

Three methods for preparing field journals are described here. Grade level and resources of teachers and students will likely determine which method you use.

Materials Needed:

If creating your own journals (grades 3-5):

- 12 sheets of 8.5" X 11" graph, or solid white paper
- 1 sheet of heavy cardstock cover paper 8.5" X 11"
- Heavy Duty Staplers Ruler
- Pens and Pencils
- 1 copy of page 3 and 4 per student
- Colored pens/pencils
- Glue sticks
- Scissors

If creating 3-ring journals (grades 6-12):

- 1 3-ring binder per student, size 10" X 7.5"
- 1 package lined filler paper per student 9.5" X 6"
- 1 copy of page 3 and 4 per student
- Hole punch

If using store journals (grades 6-12):

- one journal per student, approx. 5" X 7" or 10" X 7"
- 1 copy of page 3 and 4 per student
- Scissors
- Glue or glue sticks



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Procedure:

1. Introduce students to field journal format. Begin by constructing a brainstorming web to build a discussion on field journals as outlined in the background section.
2. Present the field journal layout as shown on page 3. Go over data fields.

Creating your own journals (grades 3-5):

3. Create the journal by folding 12 sheets of the paper in half (select plain or graph paper).
4. Fold the cover sheet and staple it to the pages with 3 well placed staples in the middle
5. Have students copy or cut and paste journal layout (page 3) into the inside cover of the field journal. **Each** page of journal observation should contain these fields.
6. Have students personalize the cover with pencils and pens. Don't forget to include name and start and end date! (ex. Joe Bird started: 09-13-05 ended: __)
7. Add reference pages at the back as needed, see page 4 for a sample reference page for bird identification tips. Have students cut and paste it into the front or back of the journal. Do the same with any additional reference pages your students may need.

If using store bought journals (grades 6-12)

3. Have each student bring in a field journal, approximately 5" X 7", or purchase a set of journals (ex. Rite in the Rain brand journals www.riteintherain.com/notebooks.html).
4. Have students copy or cut and paste journal layout (page 3) into the inside cover of the field journal. **Each** page of journal observation should contain these fields.
5. Add reference pages at the back as needed, see page 4, for a sample reference page for bird identification tips. Have students cut and paste it into the front or back of the journal. Do the same with any additional reference pages your students may need.

If using the 3-ring binder "Grinellian" journal format (grades 6-12)

This is the most similar to the Grinell style of journal keeping. Using this method, students may write observations directly into the 3-ring binder in the field or make notes in the field in a smaller notebook and then transfer observations neatly into the 3-ring binder back in the classroom.

3. Have each student purchase (or purchase a set for the class) a 3-ring binder measuring 10" X 7.5" and one package lined filler paper per student measuring 9.5" X 6".
4. Have students cut and hole punch the journal layout template page 3 into the front of their binder. **Each** page of journal observation should contain these fields.
5. Add reference pages at the back as needed, see page 4, for a sample reference page for bird identification tips. Have students cut, hole punch, and include in the front or back of the journal. Do the same with any additional reference pages your students may need.

Further Study: Use field journals to make observations and collect data in Activities X and X.



√ Pre-Visit

Field Site

Activity: Creating a Field Journal

Journal Page Template

Name

Date

Location

Weather

Observations/Data/Activity with time of day

Sketches

List a few questions generated from your observations:



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Journal Resource Page

A detailed line drawing of a bird in profile, facing left. The bird is shown from the side, with its wings partially spread. Various parts of the bird are labeled with lines pointing to them. The labels are: Bill, Rictal Bristles, Eye Ring, Crown, Wing Coverts, Wing Bar, Rump, Tail, Undertail Coverts, Primaries, Tarsus, and Breast.

Some Common Bird Behaviors

Foraging: Another word for feeding
Preening: Cleaning their feathers with their bill
Flying: Is it soaring, flapping, hovering?
Flocking: More than 3 birds together in a group
Calling: One or two short notes, both males and females call
Singing: Only male birds sing a song, many notes together to make a long musical song