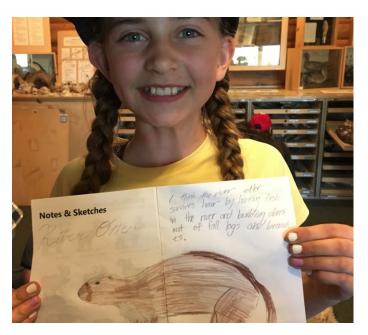


Age Range & Audience: Field journaling activities are great for learners of any age, and can be simplified or expanded for younger and older audiences. While itself a solitary practice, we encourage learners to share their experience journaling in nature with others.

Materials: Field journal (notebook or piece of paper okay), pen or pencil, colored pencils, crayons, or other materials for coloring (optional), a 6 ft piece of string or other item such as a hoola hoop to delineate a 3x3ft patch of ground (activity #1), magnifying lens (optional - activity #2)



LESSON OVERVIEW:

Connect to your world with a pen and paper. Field Journaling—the practice of observing what we see in nature and recording it on paper—can be a great tool for scientific discovery and for deepening our understanding and connection to the natural world. "Seeing" happens when we draw and write—and by regularly engaging in field journaling practices we start to notice and observe more. We might become more aware of where we live, and more considerate of how we want to share this awareness with others.

When beginning this practice, it is important to remember that observation is at the heart of field journaling, just as it is at the foundation of good science practices. Our goal is to make accurate observations and to record information about what we see. It is not necessarily to draw a pretty picture, although field journaling can certainly be a creative, as well as a scientific, exploration of our world.

CONNECTIONS TO:



Place-based Education Principles:

Learner-centered, community as classroom, interdisciplinary approach, inquiry-based



Cross Cutting Concepts in Next Generation Science Standards:

Patterns, Stability and Change, Structure and Function



Social Emotional Learning:

Field journaling can help learners to build an emotional connection to nature and themselves through focused study.

For more information on Place-based Education Principles and Next Generation Science Standards, email fieldeducation@tetonscience.org

LEARNING OUTCOMES	EVIDENCE
Explore field journaling as a practice in observation	
Experience field journaling as a tool for learning and discovery, as well as connection to the natural world	 Completed field journal entries utilizing a combination of writing and drawing to interpret the world
 Build science literacy by investigating surroundings and recording accurate, detailed observations using a combination of drawing and writing 	writing and drawing to interpret the world

ACTIVITY #1 - IT'S ALL IN A FRAME



This activity focuses the journaler's attention by asking them to record all their observations of one place.

Mark your spot. Identify a spot in nature that looks interesting and mark a patch of ground using a piece of string or hoola hoop to delineate a roughly 3'x3' area.

Focus on the frame. Sit down on the edge of your marked area and begin to familiarize yourself with everything inside of it. Slowly scan the entire area, paying attention to every detail you observe. You will likely be surprised at what you see!

Keep a record: Record all of your observations in your journal using a combination of drawing and writing. Be specific and descriptive in what you record. Consider that your descriptions and drawings could help someone else explore that same place in the future.

ACTIVITY #2 - ZOOM IN, ZOOM OUT



This activity encourages the journaler to look at a plant from different perspectives.

Pick a plant! Find a plant in nature about the size of your journal. Be careful not to pick it! Instead, take notice. Look at the plant and create a simple life-size drawing in your journal. Add in some written details to build a complete description of your plant.

Zoom in. Now pick one plant part - a leaf, a flower or petal, the stem, the fruit - and sketch what you see. If you have a magnifying lens, you could use this tool to look more closely. To notate this in this journal, you might draw a line from the part of the plant you've zoomed in on to a different section of the page, make a big circle to indicate a magnifying lens, then draw that plant part inside the circle. Make sure to describe your observations in words, too.

Zoom out. Now start to look at everything around your plant. Are there other individuals of the same species nearby? Where is the plant growing? Where is it not growing? Where are the leaves on the plant - all along the stem or just around the base? Is there any evidence of an animal or insect eating your plant? What do you think this plant might look like in a different phase of growth? Record what you learn using both drawing and writing.

ACTIVITY #3 - EARTH TO SKY



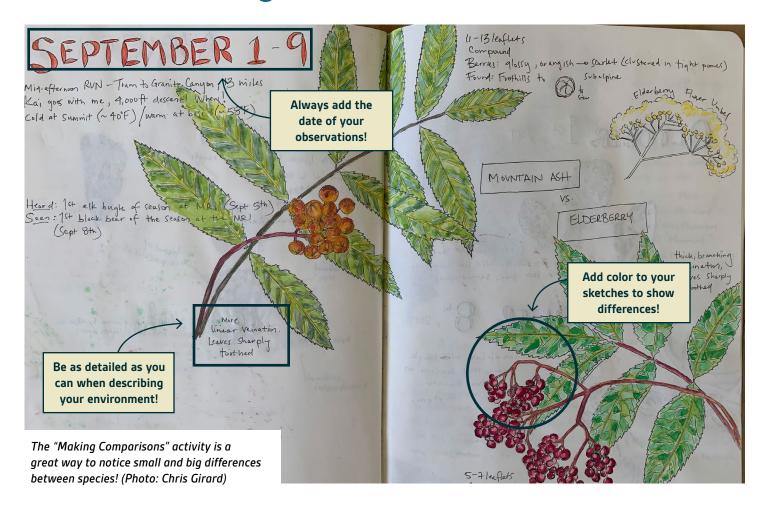
This activity is a sequence of observations that prompts the journaler to pay attention to different parts of the landscape one at a time.

Ground observations. Take a look at the ground in front of you. Draw 2-3 things that you notice, and label them if you know what they are. To indicate scale, give size measurements. Write down any questions that you have.

Eye Level observations. Stand up so you are free to move around and draw what comes into view at eye level, particularly any leaves, tall plants, shrubs, perhaps a bird. Don't worry about your ability to draw these objects realistically, but do add descriptions and label what you see.

Overhead observations. Look up and choose a tree to draw, or make a quick sketch of the sky. Add in any colors that you see. Illustrate any objects such as birds, rooftops, or planes in your view. Draw the shapes of clouds or the moon if you see it. Write some words about how watching the sky makes you feel.

Landscape-level observations. Now zoom out and look all around you. What is the general feel of this place you are in? It can sometimes feel overwhelming to draw an entire landscape. Instead, try dividing the landscape into simple shapes and label what you see as a little "vignette" in your journal.



Other ideas for focusing your awareness on the page:

As you begin building a field journal practice, it can be helpful to give yourself a specific focus to hone your attention and encourage the discovery of new things.

Make a collection or a field guide. Create a local field guide that highlights the diversity of plant and animal species in your environment. Or pick a subject or organism that interests you and journal about every example of it you find in different areas. Maybe you really like insects and want to learn more about them through this focused practice.

Play the alphabet game. Pick a letter of the alphabet - let's say "F" - to focus your observations. Now think about everything in nature that begins with that letter: frogs, forests, fire scars, frost, flowers, fruit... You'll be surprised by how many things related to "F" there are to notice and journal about.

Look for patterns. Pay attention to the patterns in plant structures, animal behaviors, landform features, or any other part of the natural world that interests you. Investigate any similarities, and allow yourself to wonder. If you see any exceptions, make note of these and ask why.

Make comparisons. Compare two individuals of the same species (of plant or animal) or two different species. Thoughtfully describe any differences or similarities between them. Be as detailed as you can.

Record or map an event. Observe a group of organisms and combine drawing and writing to describe what you see. Or, take a walk in nature and then record what you notice on your journey as a mapped sequence of events. With both, tell a story.

REFLECTIONS:

Whether you do one field journaling activity or two, whether you engage in this practice one time, for one week, or for a season, consider the following prompts as you reflect on your experience journaling in nature. This can be a personal reflection or shared with a group:

- What did field journaling about nature make you notice or wonder?
- What questions do you have now that you did not have before, and are there resources you can access to seek any answers?
- What journaling strategies (drawing or writing) helped you to convey what you were observing most effectively?
- How might scientists and naturalists use field journaling as a tool for discovery and wonder?
- How does the practice of field journaling make you feel, and how does it change your own connection to the natural world?

The benefits of using a combination of drawing and writing: Drawing and writing engages different parts of our brains. When we combine these two methods for recording information in our journal or notebook, we are prompted to think in different ways and engage with our surroundings from multiple perspectives and senses. This leads to a fuller and more accurate understanding of what is going on in the world around us. Journaling in nature also gives us the freedom to choose how we explore those avenues of learning (whether drawing or writing) that come most naturally to us while challenging ourselves to try new things.

AGE ADAPTATIONS:

Younger audiences: Any of the activities or journaling prompts described above can be simplified to match age and attention spans. For example, in the "Zoom In, Zoom Out" activity, a young learner can focus on a simple object such as a leaf and be prompted to draw general shapes instead of fine details. When they zoom out, they can focus on what the leaf is attached to or have one simple question to answer that leads them to bigger picture thinking. Doing quick field journaling activities and sharing a simple, open-ended journaling prompt will encourage young learners to practice basic recording skills using both drawing and writing and will lead to the deepest engagement. It can also be helpful to outline some introductory prompts in a young learner's field journal ahead of time so they have a reference guide as they go. For example, a magnifying lens could be drawn on a page to help the learner follow prompts during the "Zoom In, Zoom Out" activity.

Older audiences: Increase the amount of time spent engaging in each journaling activity. Challenge older learners to draw what they see with great scientific accuracy, and to demonstrate a variety of strategies to record their observations. Spend more time in reflection around effective journaling techniques, and encourage older learners to experiment with these in their journals over time so that they can build a larger toolkit for recording information in nature.

EXTENSIONS:

Field Journaling and Sit Spots. Explore our sit spot lesson for ideas on how to build a progressive field journaling practice focused in one specific place.

Many of these activities are the original genius of <u>BEETLES</u> and <u>John Muir Laws</u>. The activities described in this lesson, and many more like them, can be found by visiting their websites. You will also find a rich database of additional resources on practicing and teaching field journaling to others..

Visit <u>tetonscience.org/diy-field-education</u> for more lessons and resources!