Nature Journaling with Project Learning Tree
Basics of Nature Journaling

Through the ages right into today's creative world, journals have been the working-thinking place of the world's greatest thinkers, inventors, and artists. Artist-scientist Leonardo DaVinci was among the greatest. Scientists and social scientists like Albert Einstein, Charles Darwin, Margaret Mead, Rachel Carson, and Aldo Leopold, were great journal keepers as were philosophers Henry David Thoreau and Ralph Waldo Emerson; naturalists like John Muir, Gifford Pinchot, and Earnest Thompson Seton; prominent government leaders such as Gandhi, Eleanor Roosevelt, Winston Churchill, and Thomas Jefferson.

Every journal is uniquely shaped by its keeper. Every journal is designed by its keeper and is a powerful creativity tool which in turn helps to continue to redesign the designer! This is exactly why there can be no “best” way to do journals. You as the designer must design not only the journal techniques and approaches you wish to use but you must understand YOUR purpose for journal keeping and design a journal keeping system which will nurture that purpose.

From Dr. William Hammond, Florida Gulf Coast University

Nature journaling is the regular recording of observations, perceptions, and feelings about the natural world around you. That is the essence of the process. The recording can be done in a wide variety of ways, depending on the individual journalist’s interests, background, and training.

It is important to note that whereas a diary or personal journal records your feelings toward yourself and others, a nature journal primarily records your responses to and reflections about the world of nature around you.


A Nature Journal deepens perceptions of the outdoors. It encourages students to make a record of what is observed by writing it down or drawing it, or both. It differs from a science notebook, a diary, or a response journal. While a science notebook records questions, thoughts, and data derived from laboratory investigations, a nature journal records questions, thoughts, and data from the field. While a diary focuses on the person, a nature journal focuses on the environment. And while both a response journal and a nature journal stimulate reflection, a response journal examines the content of a lesson or a passage from a book, while a nature journal captures the immediate experiences and observations noted outdoors. A nature journal forges the connection between the author and the pulses of life he or she witnesses in nature.

From Nature Journaling Discovery Kit, Acorn Naturalists
Journaling with Children

At a public lecture, the renowned evolutionary biologist Ernst Mayr was asked by a high school biology teacher what he could do to teach his students the most important things they needed to know. Without hesitation Dr. Mayr replied, “The most important thing we can teach our young people is to observe well.” That is what nature journaling is designed to do. As adults, taking up nature journaling with the children in our families and communities is one way we can help teach them about the world, and experience the world fully, with them. We have much to learn if we are to protect our home, Earth. (The word “ecology,” comes from the Greek word oikos, meaning house. Ecology is the study of our home. We can live nowhere else!) Teaching an appreciation for nature may save a marsh, a river, a beach, a town, a child!

Encouraging Ongoing Journal Keeping

There is no magic way to getting your kids in the journaling habit, but the following tips may be helpful:

- Keep a journal along with the kids. You are a mentor and if you find and take the time to overtly maintain your journal, the kids are more likely to as well.
- Use the journals regularly as learning aids. The more you have kids turn to their journals both to record and reflect, the more they will see the need to keep them going.
- Help kids see that setting up nature journals ties them to a long tradition of science and history study – a way of learning that is still of value today. Other types of journaling are also widely used in various professions – ship captains, plots, and explorers keep detailed logbooks of their activities; artists keep detailed sketchbooks to refer to; scientists keep journals of their observations and experiments; writers keep journals of their observations and feelings about people and places, which they draw upon in their work.
- Encourage kids to have a private corner of their journals, a section they might call Inside ME. Here they can write down their innermost feelings in safety. The Inside ME section is never to be reviewed by a leader. It is that quiet, safe place reserved to them alone. This section will help the youngster strengthen the notion that “nature is part of me; I am part of nature.”

Involving Adults in Journaling

Engaging a group of adults in nature journaling is often more challenging than working with young people. Adults have generally developed more reserve and have unwarranted expectations of themselves. They don’t want to seem ignorant or unskilled, even when they’re doing something totally new to them.
Adults may also bring negative remembrances of school and previous art classes into a group with them, even though they have enrolled in your workshop. As a leader/mentor, you invest the time to develop a real rapport with the group members. Help them see that you are not out to embarrass them or criticize their efforts. You will need to show them your own enthusiasm and joy in doing nature journaling, and share with them your roughest as well as your most polished efforts. Confirm their efforts from the beginning; reaffirm their work continually.

**Give an Open-Journal Pop Quiz**

Based on questions you create while observing the group journaling at a site, give a pop quiz later in the week or marking period. Let enough time pass that their short-term memory of the activity will have faded. Tell the learners they can use their journals to research answers to the quiz. This will help them see how journaling supports and builds memory.

**A Writing Project**

Give the learners a creative writing challenge that relates in some way to journaling activities you have provided for them. This may be an essay, short story, haiku, or other poem. Encourage them to use material in their journals as inspiration for the writing challenge. Ask them to include a note at the end of the writing assignment indicating what materials from their journals they used. Ask them to indicate what they couldn’t find in their journals that they wished they had noted when journaling.

You can also challenge the students to create a place in their journals for their own poetry, personal responses to things observed, or quotations they like from writers on nature.

Teenagers and young adults especially are seeking answers often found in the writing of others such as Rainer Marie Rilke, Henry David Thoreau, Rachel Carson, Robert Frost, or Haiku poets like Basho. *Earth Prayers from around the World*, edited by Elizabeth Roberts and Elias Amidon, contains works of many good writers to expose students to.

Then ask them to try one or more of the following tasks in their journals:

- Write a poem about fall: colors, smells, sounds, feelings.
- Write about a little experience you just had while being outdoors – playing soccer, bicycling, noticing the moon, or sitting by water that is reflecting the fall colors, for example.
- Describe in poetry or prose a flower still blooming near you.
- Copy into your journal poems or prose that you like and that speak to the season or your feelings.
An Art Project

Ask the learners to create a detailed drawing or painting based on sketches and notes they created in their journals. Ask them to indicate what they couldn’t find in their journals that they wished they had noted when journaling.

A Science Project

Have the students create a science research project based on observations and questions they recorded in their journals. They should indicate the question they want to explore, the observation strategy or research activities they plan to follow in doing so, and the kinds of data they expect to record in their journals as they proceed.

A History Project

Have learners select a particular area – school site, vacant lot, farm, housing development, or industrial park – and then find out what the area was like before its present use. What was there before? What did people do there? What other things lived there? If students perceive problems in the current land use, have them determine how the problem came about. Who were the players involved? What was going on in society that led to the decisions that caused the problems?

Check out such things as stone walls, glacial boulders, or giant trees on the site. Are any of these mentioned in property deeds? How did the walls and boulders get there? Can you find foundations of old buildings on the site? Are there plants like lilac, apple trees, or lily-of-the-valley that are clues that homesteads once occupied the site?

A Math Project

Have your students choose a local area, and then locate old maps of that spot. What system of measurements was used? Investigate such terms as rod, chain, acre, mile. What are the relationships among such measures? How do the measurements on the map translate into metric system? How can you measure objects you find without a standard ruler? Develop a measuring system using your own body parts. Figure out your own pace and stride. Translate these field measurements into standard units.
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A Music Project

Record all the sounds you can hear from a particular observation point. Do the same at several other observation places. Can you develop a picture of a place based solely on the soundscape? Develop landscape drawings based on the soundscape. Create a song based on a particular soundscape, adding musical sounds that evoke that soundscape.

A Curriculum Web for Nature Journaling

**EARTH SCIENCE**
- Plants
- Insects
- Birds
- Other animals
- Trees and shrubs
- Habitats and seasons
- Weather
- Observing
- Identifying
- Measuring
- Comparing
- Listing

**SOCIAL STUDIES**
- Local history
- Natural and human communities
- Environmental health in history
- Mapmaking

**PHYSICAL EDUCATION**
- Walking and exploring
- Outdoor activity
- Hiking

**MATH**
- Measurements
- Charts
- Graphs
- Mapmaking

**ART**
- Observational drawing versus imaginative drawing
- Different forms of art expression
- Mapmaking

**LANGUAGE ARTS**
- Written: poetry, prose, fiction, nonfiction
- Oral: description, problem solving, communication
- Listening: group communication, group sharing, oral learning

**HAND- EYE SKILLS**
- Self-confidence and social skills
- Learning to compose work supportively

Basics of Nature Journaling

So, what goes in a Nature Journal?

Usually a nature journal will include both words and sketches about the places and events we observe. If the idea of sketching in a nature journal seems appealing but also daunting, you are not alone. As adults, and even and children, we may believe we can’t draw or can’t write or don’t know anything about the things we’re seeing. We do not know how to begin. As adult leaders we may feel we certainly can’t teach such a thing without refined skills of our own.

Remember, first of all, that the goal of nature journaling is not to create great literature or frame-worthy art, but to observe, experience, and record the world around us. At its simplest, the goal of a nature journal is to answer the question, “What is going on outside today?” With a few basic skills and an inquisitive attitude, you and your young companions can set out to discover the answer.

From: Nature Journaling for Everyone. Audubon Adventures

The answer to the question “What goes in a nature journal?” is simple — anything you want!!

For writers - it is useful for generating ideas and first drafts. Observations can find their way into natural history essays, poems and other writings.

For artists - it can contain field sketches, detailed drawings and photographs that can be use to base finished works on.

For craftspeople - a book filled with bark or leaf rubbings, prints and pressed flowers and plants can be quite satisfying.

For gardeners - it can record the bloom times, insect hatchings, and harvest times of fruits and vegetables.

For naturalists with a scientific bend - it can follow the Grinnell Naturalist’s Field Journal system which consists of a field notebook, field journal, species account and catalog.

There are many ways to format a nature journal. The following is one that is used by Clare Walker Leslie.

Basic Information - in the upper corner of the page, record the following:

- Name
- Date
- Place
- Time
- Weather
- First Impressions
- Wind Direction
- Cloud patterns and cloud cover
- Ground observations
- Eye-level observations
- Overhead observations
- Whole-landscape observations

Begin Drawing - look at different distances from where you are standing or sitting:
Exercise 1

In advance of this activity, gather and cut out images of wildlife or wild places from magazines. Each image should be 4x4” or smaller. Distribute the student journals. Have each student select one image and create an entry in their journal about it. Encourage them to use descriptive writing, including similes and metaphors to describe not only what they see but also how they feel about it. Have them tape their image on the facing journal page. Let volunteers share their work. This activity helps students become familiar with the nature of nature journaling.

Next, pass out basic art supplies, including fine-tipped pens, pencils, colored pencils, and facial tissue (for softening pencil strokes). Have students create a diagrammatic drawing of their magazine image. This can be as simple as a basic line drawing — the point is to learn how to quickly capture an object that can be identified later. If they are drawing a plant or animal, they can add comments, or “field markers” to their descriptions if those help (e.g., “bright red cap on head” or “black and white striped tail”). Spend five minutes on this exercise. Next, have students polish the drawings so that they are “finished.” Add shading with the graphite and charcoal pencils and color with the colored pencils. Let students experiment with tissue to soften the strokes. Spend 15 minutes on this activity. Things in nature tend to move, so it is important to capture their essence quickly and know you can always return to your sketches later to polish them.

Once they are comfortable with their basic journaling skills, lead your students outdoors. Cluster them in one area and have them record what they see in writings and drawings. After 15 minutes, reconvene and have students share their journal entries. The difference in entries will be remarkable. Each student will likely notice things that others passed by.

If they need a prompt, have students select one color and place a swatch of it in their journal with watercolors or colored pencils. Once outdoors, challenge them to find three objects in nature that share that same color. Have them write about and sketch the objects.

Have each student “adopt” a tree or an individual study plot. Allow time each week for them to visit it and record their observations over days, weeks, or even seasons.
Beginning Drawing Exercises

Exercise 1: blind contour.
This exercise is very good to try when you first see an object, and to get your hand onto the paper. It's a good warm-up for loosening and getting focused.

*Without looking at your paper at all,* keeping your eyes only on your object, "trace" in a continuous line across your paper everything you see. *Don't look, lift your pencil, or stop until you have drawn all lines, outlines, markings, bristles, veins, eyes, feathers, and so on.* You can go around the form from left to right, or right to left; just complete the form. Go slowly and look very carefully at your form. Don't peek at your paper! Think of yourself as a spider threading out a line. Complete in one to two minutes.

Exercise 2: modified contour.
Draw the same form that you made the blind contour of, allowing yourself to look at the paper, but be sure you do not lift your pencil off the paper. Draw with one continuous unwinding line, as before. Go slowly and stop only when you feel you have fully read your object. Complete in one to two minutes.

Compare the blind and modified contour drawings. Do you prefer one to the other? You may find a confident and strong line and a form surprisingly like what you are observing.

Exercise 3: quick gesture sketches.
This technique is very useful for field artists because much of what we draw moves quickly!

Looking at your paper and the object at the same time, lifting your pencil as needed, now scribble down the whole form as fast as you can for five seconds; then try doing it in ten seconds; finally, take fifteen seconds to get your sketch down. Try to get the major sense of the form by looking hard and drawing the large, identifiable shapes. In art schools, this exercise is done by having the model move in timed sequences. With each move, the students try to capture the "gestalt" or essence of what they see.

If you want, try first a five-second, then a ten-second, then a fifteen-second sequence all on one drawing. We use this method, for example, if a bird comes to a feeder and keeps returning to the same posture.

Exercise 4: diagrammatic drawing.
This technique is useful when you spot something you want to identify, but you don't have a field guide with you, can't take a specimen home, or are with a group that's hiking too fast for you to linger. We call these "proof-in-court" drawings, because they can prove invaluable evidence of things seen but not collected. This is the most common technique used by beginning nature journalists.

Make a simple line drawing, as if for a field guide identification. Add written notes of the object's size, color, shape, and name if you know it. Record enough to help you identify it later. Complete in three to five minutes.

Exercise 5: finished drawing.

Use this technique to produce a more complete drawing. Now add volume, shading, and the various surface details of the shell, leaf, banana, rabbit, or whatever it is you are drawing. Often these lengthier drawings are done indoors from photographs, or from animals that do not move very much — owl, zoo animals, or museum mounts. You may use one of the sketches from your journal as a basic reference for a finished drawing. What begins as a quick sketch may end up as a finished drawing if, for example, the cow lies down, or the hen stalks closer. But, more often, the desired finished drawing ends as a half-sketch, when the hawk flaps off or the cat leaps away!

Set a time for yourself — fifteen minutes, one hour, two hours, however long you wish. Draw a natural object or an assemblage of objects. Try one drawing in pencil and one in pen. Try one in colored pencil, and another in watercolor. Experiment!
**Beginning Drawing Exercises**

When you are sketching something in nature, you need to focus and quickly capture the object. The best way to do this is to choose a very simple subject and create a thumbnail sketch. You can return to your sketch later and embellish it.

Most objects can be captured as one of four basic shapes:

- circle
- square
- triangle
- rectangle

Lightly sketch the most appropriate geometric shape to capture the object’s general form. Add other geometric shapes to complete the outline. Next, connect the outlines of the shapes to capture the overall shape. Then begin to add to your sketch to create a three-dimensional object. What once was a triangle could become a cone. What once was a circle becomes a ball. Continue working in pencil and keep your sketch marks very light.

Jot notes down about key features you want to remember later on — the colors of a rock, the feather arrangement of a hawk’s tail, the color and texture of a leaf. When you add color later on, these notes will be important.

For example: to sketch a bird, start with a basic egg or oval shape, then add other geometric forms to build the fundamental structure of the bird.
Improving Observation Skills

Exercise 1: Draw a Leaf
Choose a leaf (preferably one off the ground or from a place that will be pruned). Study your leaf for a full 3-5 minutes. Look at the detail, venation patterns, edges, size, width, length, and color. Then, place the leaf out of sight (resist the temptation to peek at it as you carry out the next step). Make a line drawing of the leaf full size. When you have completed your line drawing, lay the original leaf next to your drawing. Examine how your drawing compares to the leaf... how it differs from the original. Write a reflection on what your brain-eye-hand observation processes were good at seeing and what they edited out or missed. Repeat often! You will continue to improve no matter how skilled you already are.

From Dr. William Hammond, Florida Gulf Coast University

Exercise 2: Living Camera
This is a combination observation and trust activity. Pair up participants before going out. Take them to a site and individually have them roam it for about five minutes, searching for something that excites them and upon which they want to focus, such as an insect on bark, a colorful plant, a fallen seed, or an interesting leaf shape. Allow each participant to sit for five minutes and describe the selected object in his or her journal.

Now break off into pairs. Have partner number one wear a blindfold or close her eyes while partner number two guides her carefully to the object the he chose for his journal study. Partner number one then stands, kneels, or assumes whatever position is needed so that when she is allowed to look, she will be focused on the object.

She is then told to remove her blindfold or to open her eyes and observe. She should try to remember everything she sees. No talking about what is seen. The two people then reverse roles.

When both participants have seen the other’s special object, ask both to add descriptions of this new observation to their journals. When the exercise is completed, either outside or back in the classroom, have the pair exchange journal entries and compare what each saw and described.

From: Keeping a Nature Journal by Clare Walker Leslie and Charles E. Roth.
Materials Needed
- 1 large paper grocery bag with handles
- Ribbon or twine
- Blank paper
- Scissors
- Tape
- Hole punch

1. Cut the bag down one side, across the bottom, and back up the other side. Do the same on the other side of the bag. You will end up with 2 flat pieces, each with a handle. These pieces will form the front and back cover of the journal.

2. Fold up each piece from the bottom toward the top. The placement of the folding line will vary depending on the original size of the bag and what size of blank paper you are using. You want the front and back covers to completely cover the interior pages of your journal.

3. Tape the edges forming a pocket on the inside of the front and back covers.

4. Decorate the outside of the front and back covers.

5. To assemble your journal, stack your pieces in the following order:
   a. Back cover
   b. Blank paper
   c. Front cover

6. Make sure all of the edges are lined up and then punch 3 holes (or more if desired) along the edge.

7. Using ribbon or twine, tie the booklet together.

Options:
- If you want a more stable writing surface for your journal, you can place a piece of cardboard or chipboard in the back cover pocket. You will need to do this before you punch the holes so that it will be tied into the journal and won’t come out.
- If you want somewhere to keep your pencils, eraser, sharpener, etc., you can put them in the pocket on the inside of the front cover or you can use a pencil bag that is made for a 3-ring binder. Just include the pencil bag when you assemble your journal so that it is also tied into the journal and won’t come out.