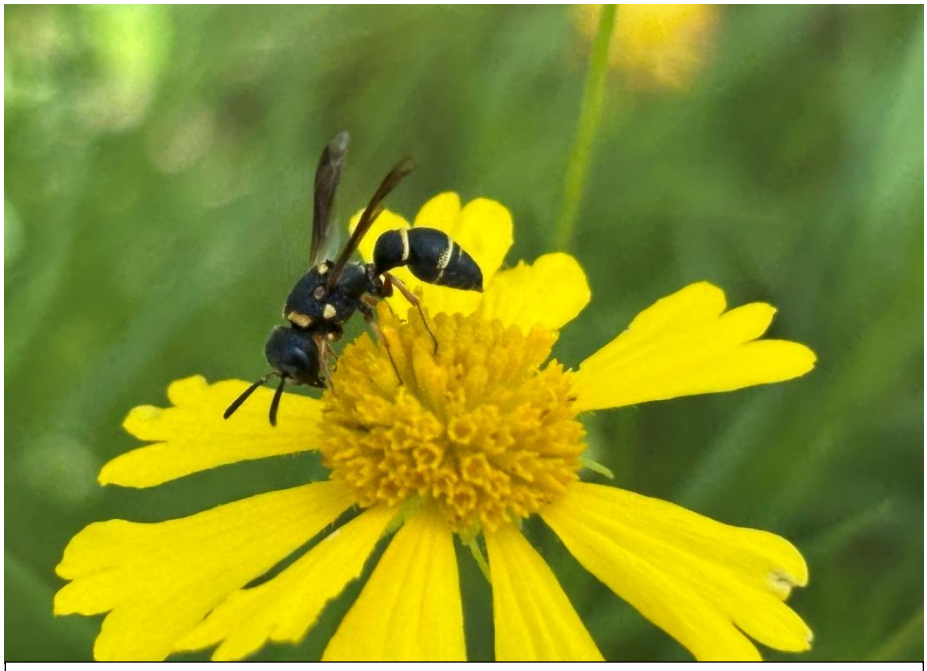
Observing, Journaling, and Sharing

Following a trail through the woods, we notice the sunlight and its warmth, the musical call of a wren, and many other things. We use all our senses to be aware of the world around us. We observe a northern mockingbird on the tree branch, who is observing us in return and deciding whether it's time to fly away. Noticing the full range of things makes our time in nature more interesting and fun. It also forms the basis for nature study. What I want to do in this chapter is to talk about how you can notice things in more detail, and then how you can (if you wish) preserve some of those moments in a nature journal. Additionally, you can contribute to what we know about the natural world through community science.

Paying attention is an active process that takes mental effort and resources. It's hard to observe that bird while at the same time talking, consulting field guides, and listening to music. We might think we're great at multitasking, but neuroscience tells us we are not really doing two things at the same time. It's more like rapidly switching back and forth between tasks.[1] Turning off gadgets and stopping talking for a while frees up the energy and attention that lets us experience beauty, makes us more curious, and might trigger feelings of awe.



A potter wasp visiting a bitterweed flower

So let's say we set aside some time to walk or sit quietly, noticing as much as we can without talking and without getting absorbed in distracting thoughts. A summer tanager might call from above us in the trees, or we notice a crab spider within a flower, waiting to ambush its prey. We could momentarily notice these things and move on, and sometimes we

[1] Madore, K.P., & A.D. Wagner. 2019. Multicosts of Multitasking. Cerebrum. https://pmc.ncbi.nlm.nih.gov/articles/PMC7075496/ (accessed 9/1/25)

all do that. But it is valuable to stay with it for a while. Maybe we can sit and listen to that tanager (and other birds as well), watching for flights to different levels of the tree and interactions between birds. Watching the crab spider, we might notice how well it may be camouflaged within the flower, how it positions itself, and what happens when an insect comes to visit the flower.

I don't mean that time in nature must always be highly focused in that way. There can be time for talking with companions and the typical things we do on a hike or when camping. But setting aside time for focused awareness will lead us more deeply into an appreciation and understanding of nature.

Observing During a Nature Walk

I know you're already an observer of nature. I want to offer some ideas to add to and sharpen what you are already doing. I've suggested that staying with something you notice is a good idea, maybe sitting for a while and focusing on it. And I have suggested limiting distractions. In addition, consider these ideas:

Use all your senses. We rely on our vision so much that we often talk as if that is our only sense, asking "what did you see?" when we mean "what did you see, hear, touch, smell, or taste?" So in addition to vision, make sure you use your hearing and other senses. Notice the sound of wind and water, listen for birds, insect calls, or frog calls. What touch does your skin and body register? The feel of sunlight, breeze, the softness of sand or the hard rocks you stand on, and the feel of leaves, acorns, feathers, or shells – these are parts of your experience of nature. See if you can smell anything. In autumn it may be the smell of damp earth and decaying leaves, or the aromatic smell of juniper crushed between your fingers.

Welcome all of it. Greet everything that happens as relevant and meaningful. Be present as at least a temporary member of the community of living things in that place. In that way you are open to more things and do not filter out as much of your experience. You're not there on a narrow mission, to look for just a small list of things to find. Lots of things are worth noticing. One is weather, including such things as temperature, cloud cover, wind, and precipitation. Another is soil, rocks, and water. The soil might be sandy, clay, or dark with organic stuff like decayed leaves. If there is water, is it a creek, river, pond, lake, marsh, or other wetland? What about vegetation, including grasses, forbs (herbaceous broadleaf plants), woody shrubs, trees, and so on? Notice various kinds of animals, from insects and spiders to mammals and birds.

Notice near and far. It is easiest to think of this in terms of vision. From where you stand or sit, notice what you see farther in the background and then bring your attention to what is closer. You might get a similar sense of distance with things that you hear. Think of the rustling of leaves near your feet as a small lizard moves away, and then imagine the calling of a group of coyotes in the distance.

Practice mindfulness. When I am out somewhere, often I will spend time just noticing what is in the present moment, not thinking about what I want to see or remembering something about other visits. When I think about things that take me away from what's happening right now, I let those thoughts go and come back to just experiencing this moment. As we discussed in a previous chapter, this is mindfulness. I might be walking somewhere, but I encourage in myself a quality of "stillness," meaning an unhurried and quiet way of being where I am.

Train Your Brain

Noticing the details that let you recognize a particular kind of plant or animal can be hard at first. On a walk with a friend, I stopped and pointed to the trunk of a post oak tree, saying I saw a Texas spiny lizard. The lizard was so well camouflaged, she wondered how I had been able to see it. I could pick out this lizard because I've spent years looking at such critters. All that practice has trained my brain how to notice something that seems hidden in its surroundings.

A Texas spiny lizard on the trunk of an oak tree

Some of my naturalist friends refer to this recognition ability as having a "search image" for the species, as if we create and store a kind of template that helps our brain quickly recognize an animal that seems hidden. Having seen many Texas spiny lizards from the side, facing head-down or from various other angles, I'm better able to spot them. And in the same way, birders can pick out a warbler that is partly hidden behind leaves, botanists can quickly spot the patterns of

leaves, stems, and other features that define a plant species. Basically, when you train your brain on many different examples of a species, you get better at spotting them.

I think it is helpful to know how practice makes some kinds of observations easier. For someone just starting out, the plants on either side of the trail might look like a wall of green stuff. That person might be looking directly at a mouse within a clump of grasses and fail to see it, or think all bugs look alike. If any of that sounds like you, don't be discouraged. With practice you will be able to see all kinds of hidden wonders. Go out in the field with someone who can point out some of the things you are interested in. When you are looking for it and then suddenly you see it, it feels amazing.

Nature Journaling

During our observation, or at the end of it, we can write some notes and perhaps draw some of what we experienced. Not only will it help preserve the memory of our time in nature, it broadens and deepens what we get from our walk. We get a chance to think about what we noticed again, see it from different angles, draw connections to other ideas and experiences, and create more detailed memories.

One version of this is to keep a notebook with concise, fact-oriented entries. Such entries include the date, time, location, perhaps a note about the weather conditions, and what species of interest were observed. These notes might also include a sketch of something, or rough map of the area covered. Later, we could look back and review what we found or remember some of the specifics of what happened. These notes are the basics of a nature journal.

Many people like to include more, making your nature journal a personal, introspective record of your time in nature, where you include your impressions and feelings. You can also draw a plant, insect, bird, or something else you encountered. In the process of creating it on paper, you study it and notice more details, committing more of it to memory. I can't offer instruction about drawing and painting, but I recommend it both for the beauty and detail that it adds to your pages and for the way it focuses your attention on a plant, animal, or a feature of the place you are visiting.

Words are also important in your journal, and writing can capture more than a visual image of what you saw or photographed. You can describe what you heard and talk about how things felt. Putting your experience into words helps you remember it and also creates opportunities to reflect on it and consider what those moments meant to you. Your journal might include:

- Interactions with companions – like in September, 2023 at LBJ National Grasslands with three Master Naturalists who, I noted, *"…were delightful, curious, and fearless. [We] found a young rough green snake. It was nearly Sheryl's first time holding a snake, and she did fine."* Or January of 2024 when, after an outing with Elijah, I wrote, *"As we walked, I pointed out the [tree] trunk of a Hercules' club, and he asked 'How do you join?' and laughed."*

- Recollections and impressions – In June, *"On a walk to the boulders, a dove's call came through the woodland. Is it mournful? Or does it just bring the pace of things down to a slowness and contemplation? Lonely? Presumably not to the dove."* And on a bright, warm April day at Fort Worth Nature Center and Refuge, *"A sulphur is flying just above the ground. Is the magic that invokes – the scene of butterflies making their way across a space with flowers and grass – partly culturally conveyed? … it seems like the archetype of spring renewal."*

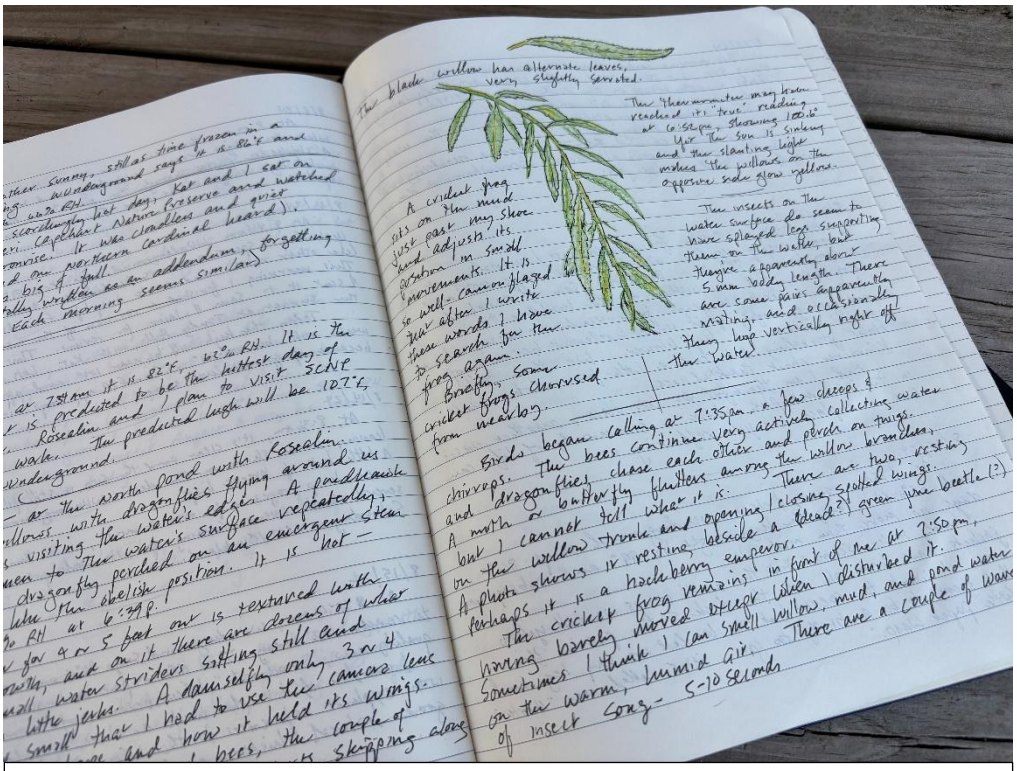
- Emotions – on an early February walk when the temperature was 71°F and plants were beginning to bloom, I wrote, *"What do we do with climate grief? Take a walk and give it to the woods? Is there a way to share it and draw on some of their resilience? Or is it ours to bear alone, since we live not just in the present but also the future and past?"* Or in September of 2023 when I wrote again about the climate, *"Who decided to walk away from the old summers that brought so much joy? Who invited in the drunken, abusive season that is ending? And like kids that are trapped and made to live with this out of control climate, we wonder if he'll come back next year?"*

- Gratitude – at Fort Worth Nature Center and Refuge, I wrote, *"I'm grateful to have seen no one in the past hour. The connection and sharing come later, through writing and photos, but this solitude is peaceful."* And, *"I am here, thankful for all this life and the chance to be a part of it during these visits. … My hope is for the place to survive intact and be resilient year after year."*

Taking time to think about what we've experienced, how it made us feel, and what it means to us is an example of self-reflection, and it is very beneficial. It is valuable when we are out somewhere in nature just as it is any other time. Self-reflection is part of being awake to ourselves, understanding who we are and how we respond to emotions, challenges, and losses, as well as the good things that happen. Journal writing that focuses on such self-reflection as part of counseling can reduce anxiety and persistent,

depressed thoughts. For many people it helps them manage their emotional reactivity, and it sometimes even helps with physical healing[2].

We are discussing journaling about experiences in nature, so perhaps self-reflection plays a smaller role than it would in counseling. However, a visit to nature involves how you feel about it and what thoughts come to you, and it is good to reflect on those things. Being awake to ourselves is valuable in any context.



An example of nature journal pages

It's not unusual for people to tell me that they're not good at writing, and sometimes they dislike writing. My answer is that you don't have to be good at writing, but if you write in a journal regularly you will get better at it. (The same goes for drawing.) And as you get better, it is likely to be more enjoyable. Journaling should not be a chore, so start with short entries in your journal if that works better.

In the space below, there are some prompts to remind you of things you could include in a journal entry. If you were sitting on a bench somewhere, you could look over the prompts and see which ones trigger something you would like to say. Treat these prompts only as nudges, not as a checklist or assignment. If the prompt does not make you think of something, then pass it by. Chances are, on any outing you would think of something in response to at least some prompts.

[2] WebMD. Mental Health Benefits of Journaling. https://www.webmd.com/mental-health/mental-health-benefits-of-journaling (accessed 12/29/25)

Some Writing Prompts for Nature Journaling

Prompts for noticing:

- After being quiet and still for a time in this place, I am drawn to…
- If I close my eyes, I notice…
- If I pick up or touch something, I notice…
- Some living things I notice are…
- What would the living things here notice about me?

Prompts for reflection:

- What does this place bring up for me?
- One (or more) specific emotion I feel in this place is…
- What is it like to be by myself – or be with my companion(s)?
- I wonder about (why or how) …
- About my sense of connection or relatedness to this place…

Prompts for gratitude:

- Among the gifts this place offers…
- In this moment and place, I feel grateful for these specific things…
- What do the plants, animals, water, and land give to each other?
- A way that I could give back to this place and to the living things here…
- What am I grateful for about myself in connection with this place?

Now let's consider what to use in creating a nature journal. You may want to use a paper notebook, perhaps one small enough to fit in a pocket of your backpack and hold comfortably in the field. You could buy a blank book that will keep all your pages together or get a wire-bound notebook that will lay flat or can be held so that one page is exposed. My experience is that wire binding gets in the way of my hand when writing on the left-hand page. You might find that the cheap composition books that are about 7.5 by 9.5 inches are a good size, or you could buy a more expensive book like the ones from Moleskine. Pick something that is durable, but not so fancy that you're afraid to mess up a page.

For your writing it is helpful to have pages that are ruled or perhaps have a dotted grid. Get what will fit your needs - if you do lots of drawing, then blank pages and a bigger book might be better. You could use a pen with permanent black ink, because at some point when you are out in the field, the paper might get damp and you don't want the ink to run. Some people may prefer to write with a pencil, which is also handy (along with a set of colored pencils) if you do much drawing.

I can imagine some readers thinking, "Paper is so 20th century. What about our phones?" Maybe you are thinking about using the phone app iNaturalist as your nature journal; it has the advantage of automatically recording date and time, as well as location. But it is not organized to describe a time you visited some place and telling the story of that visit. Instead, it contains specific observations, like a butterfly or a prairie grass that you photograph. If you want a record of your walk in the woods, you will simply have those isolated photographs or sound recordings. And the phone app isn't good for writing about impressions, emotions, and the like.

One alternative is to use an app like Microsoft's OneNote (free but requires a Microsoft account). You can create a notebook, like "Michael's Journal" for example, and within it you have tabbed sections that might be labeled for each year. Within a section you can create pages - one for each month, or maybe one for each outing. On your phone's screen, you can write with the tiny keyboard or dictate text using the microphone. Photographs can be inserted and you can record sound which will be included as a file.

Be careful when considering recording entries using a sound or video recorder. I know folks who thought recording spoken notes would be incredibly convenient in the field, but later they have the chore of transcribing those notes. Often it never gets done, and they're left with audio (or video) files within which it is hard to find a particular observation. A visually organized notebook is much easier to scan later on if you want to know what happened on that particular April outing to some place in North Texas.

An important question is this: who is the audience for your journal? One person might record themselves in a video blog with the intention of sharing this vlog on social media. Vlogging might change the content you include, maybe affecting how much self-reflection you do. I would suggest that vlogging for social media doesn't work as nature journaling. The vlog is likely directed toward audience engagement while journaling is focused on you and your experience. Nature journaling brings you more deeply into the place you're visiting, while social media products take you somewhere else.

So do you journal for an audience of one (yourself)? I think that is the starting place, but you could share your writing and your drawing with others. Would the thought of sharing it with your spouse, kids, or a friend make you self-conscious about what you write or draw? If that is the case, give yourself permission to make it a private journal, for your eyes only. That may give you the freedom you need in order to journal without mentally looking over your shoulder and write (or draw) whatever comes to mind. At some future time you may look back over your journal to re-live some of those experiences, and you might or might not decide to share parts of your journal with someone.

Who Has Time for This?

During many of my sixty years of interest in field herpetology, I wanted to maximize the number of animals seen. Finding things often took priority over understanding all the working parts of nature, and sometimes I kept little in the way of notes, let alone a nature journal. I could stop and observe the big picture for a while and write notes, or I could turn more discarded boards or flip more rocks. Choosing the latter meant finding more animals but as a result I believe I understood and remembered less.

A growing interest in mindfulness shifted my emphasis toward slowing down and observing in a broader way rather than searching for specific things. I still love seeing reptiles and amphibians and I still quickly notice good refuges and basking spots where I might look. My favorite times are when I can stop to quietly observe. I may get to watch the animal as it forages and eats, swims across a pond, or does some other interesting thing. And taking time to write journal entries is part of my strategy for good observation - it makes me more likely to notice things.

My suggestion is for you to ask yourself what you want to get out of your time in nature. If you want to find as many birds as possible, or mushrooms or anything else, you might find more of them by skipping the note taking and just actively hunting. But in my experience, observing and journaling makes my visits in nature richer and more detailed. We learn more about what these species do by sitting quietly, observing them when they are relatively undisturbed. It is a wonderful experience to watch a lizard hunting down a grasshopper or watch the aerial gymnastics of dragonflies. And then if we want to, we can follow up with some reading or searching out information about the things we observed.

Community Science

We know a lot about the natural world, and at the same time there is a great deal that we do not know. Especially in the more richly biodiverse places in the world, we are still discovering species previously unknown to science, such as the vampire hedgehog[3], a furry mammal from Vietnam with fang-like teeth. As much as biology and ecology have contributed to our knowledge, there is more to learn, and our observations can add to that knowledge.

[3] Adkins, F. 2024. Vampire hedgehogs, pirate spiders and fishy fungi - the strangest new species of 2024. BBC. https://www.bbc.com/future/article/20241224-the-new-plant-and-animal-species-discovered-in-2024 (accessed 9/3/25)

Science is a way of looking at the world and answering questions based on what has been observed, either in the lab or in the field. Getting all those observations requires a lot of people out there working a lot of hours documenting what they find. The truth is that there are only so many researchers and so much funding to go around. Many questions like, "how is this species doing?" and "where can it be found?" cannot be fully answered at this point.

For example, no one knows for sure if the Louisiana pine snake, which used to occasionally be found in a few places in East Texas, still exists in Texas. The golden-cheeked warbler, listed as endangered under the Endangered Species Act, has seen its population increase recently around Fort Hood, Texas[4]. And yet, development has resulted in habitat loss in Central Texas where it nests. The species is vulnerable to parasitism by the cowbird (which lays its eggs in this or other species' nests), and logging in Mexico and Central America have taken a toll. The Texas General Land Office has called for the bird to be de-listed, which would open more of its habitat to development (and likely further threaten it). The issue still isn't settled, partly because more information is needed.

Science gets some help from nature lovers who may not be scientists. There are many people out there doing what we have been talking about, observing and documenting species, without it being their job. Their observations, when shared with researchers, add a great deal to what we know. This has been called "citizen science" and more recently "community science," recognizing that everyday folks can contribute to science when they see something and document it.

To be useful to science, the observation has to be accurate. That includes correctly identifying what species was seen. Many of us amateurs can be pretty good at identifying some species, but "pretty good" is a lousy benchmark for science. Luckily we have some technology that the average person can use that helps with this. Our observation also needs to be associated with the exact place where the species was seen, and the day and time it was observed. The technology that can take care of all that is available for free, on our computers and phones, in the form of several different apps and programs.

The program I want to describe is iNaturalist[5], a community science app that is also part social media for nature lovers. It uses photos or sound recordings made using a smartphone (or uploaded to the

[4] NatureServe Explorer. Golden-cheeked Warbler. https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104938/Setophaga_chrysoparia (accessed 9/3/25)

[5] iNaturalist. https://www.inaturalist.org/home (accessed 9/3/25)

website on your desktop computer), taking advantage of the phone's metadata that shows date, time, and GPS location. If the observation is uploaded later on a desktop instead of your phone, that information can be entered or adjusted manually.

The program takes the photo and analyzes it to suggest an identification, so that if what I observe is just a flower to me, iNaturalist could suggest that it appears to be Engelmann's daisy. I could go with that identification, or maybe I just want to share the observation as a "flower." I can upload the photo, with the date, time, and location, and other iNaturalist users will be able to see it as well. At least some of those others may be plant experts, and they could help identify my flower. If there is agreement among users that the plant is indeed Engelmann's daisy, the observation becomes research grade. It is a verified observation that this species was present in this location on this day.

Users can set up iNaturalist projects to group observations for some purpose. Plants of Texas is one such project, and so far I have added twelve observations of Engelmann's daisy to that project. The preserve where most of my observations of that plant were made has a project: Sheri Capehart Nature Preserve. If someone wanted to see how often and at what time of year people see Engelmann's daisy in that preserve, they could search within that project.

A two-striped mermiria

If we want to share among friends, users can follow each other. By doing that, I see that my friend Meghan documented a zebra jumping spider in Minneapolis on August 28th, at 4:28pm. And she can see that I documented a two-striped mermiria (a type of grasshopper) at Sheri Capehart Nature Preserve on August 24th, at 3:29pm.

There are other similar apps that are more specialized. For birders, there is eBird[6], which allows users to track the date and time of bird outings along with the distance covered. The birder adds identifications of birds seen, which contribute to the

[6] Cornell Lab. eBird. https://ebird.org/home (accessed 9/3/25)

birder's life list. Observations can be shared with other birders and with researchers, and you can look at the records in a particular area to predict where you might find a particular bird. Also from the Cornell Lab of Ornithology is Merlin[7], a downloadable app that can be used to identify bird calls (as the app "listens," it suggests which bird you may be hearing). You can also take a photo using the app, and it will suggest possible matches.

What's Next?

Perhaps this has expanded your frame of reference for how you might observe nature in all its depth and complexity, and then perhaps writing about your experience and sharing it with community science. Now as you read more of what I've written about wandering through the Cross Timbers, I hope it will inspire you to do more of your own observing and writing or drawing.

[7] Cornell Lab. Merlin. https://merlin.allaboutbirds.org (accessed 9/3/25)