**Practice: Seeking Understanding by Observing Life's Web**

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As a beginning graduate student in ecology at Michigan State, I took a field ecology course with Dr. Patricia Werner. On the first day of class, Dr. Werner took us out to a meadow and invited us to just look around. Then she asked, "What's going on here?" We waited for her to elaborate. She did not. I no longer remember my response, but I do remember Dr. Werner's wonderful question.

When the water condenses on the inside of a window or when a ribbon of fog sits above a stream in the early morning, "What's going on here?" When earthworms appear on sidewalks after an evening rain, "What's going on here?" When you come upon a cluster of oak seedlings in a pine forest and no mature oaks are anywhere in sight, "What's going on here?"

Nonscientists often regard science as mysterious and scientists as aliens, but this is a misperception. As we saw with the monarch story, science is the art and practice of observing, asking questions, and then figuring out ways to answer those questions. Good field scientists share two qualities: They are good observers, and they are curious. Walking with them through a field is akin to walking with a child—everything is fresh and new. They stop often here to marvel at a beautiful flower, there to note a bee pollinating a plant, further along to muse over some fresh tracks in the soil. Questions tumble forth from each observation: Why do the flowers of some plant species last only one day while those of other species persist for a week or more? Can bees tell if a flower will have nectar before they land? Can animals "read" tracks the way humans do? To exercise such curiosity requires that we be willing to slow down to nature's pace.

One of my favorite field practices for slowing down and cultivating observation skills is called Fifty Questions. All that is required is a nice spot in a field, in a patch of forest, by a stream, or even in your own backyard. Find your spot and simply sit quietly for an hour, carefully observing the life around you: the smells, the quality of the air, the sounds, the insects, and the plants. As you observe, questions will inevitably arise: What bird is that flitting around in the bushes? Does it have a nest close by? What is that ant carrying? Where is it going? Why is there moss on this rock but not on that rock over there? Why do the leaves of oaks, pines, and maples have different shapes? What will the mosquito do with the blood it is sucking from my arm?

Stay in the present moment, observing and writing down questions as they come to you. After an hour, you will have accumulated dozens of questions, perhaps even fifty. Some of your questions will have probably already been answered by scientists, but perhaps a few on your list have never been answered. Perhaps you yourself could answer them with some guidance from a mentor or on your own by simply using common sense.
This practice can be repeated again and again in different places and at different scales. For example, you might want to take a ten-foot length of string and lay it out as a circle in a meadow or forest; you can then get down on your belly and spend an hour carefully examining the life bounded within this little circle of string. If you give yourself over to the experience, you will find that questions cascade forth. You will also learn things about the way that you "sense" the world—for example, the senses that are most active for you, the colors that most attract you, and the kinds of organisms that most garner your attention.

Fifty Questions gets us in the habit of observing; it cultivates curiosity. We can carry the spirit of this practice into our daily lives. For example, the next time you sit with someone, look at the person carefully. Note their hair, the way they hold their hands, the curve of their mouth, the inflection of their voice. I don't mean to suggest that you should sit there and gawk at the person. Just try to be fully present, fully aware. Note how they hold their head, the movement of their eyes, their breathing. In other words, cultivate your interest in the other person—not in a judgmental way, but simply as an expression of your curiosity.

You can go further and cultivate the practice of observing and sensing the natural world from the interior of your being. This practice is more advanced, and as such it may seem a bit far out. If you are game to give it a try, start with a tree, trying to look at it from the center of your being. In other words, let go of the category "tree" and behold this organism as if for the first time. As you allow yourself to extend out to this new being, you might feel as if something from "tree"—a kind of "feeling–energy resonance"—is coming back and entering you:

This is very analogous to what happens if you play a note on a guitar and there is another guitar leaning against a chair nearby. The second guitar will start to sound the same note as the one you struck on the first guitar. This is resonance. And there is actually a transfer of energy from the first guitar to the second, and then back from the second to the first. This principle of resonance runs throughout the universe.

Indeed, "the world you perceive is not just there, it is a relationship between you and what is there."

Whether sitting with another person or with an oak, practicing curiosity—extending our attention and interest out beyond our personal boundaries—opens us up and expands ecological consciousness.

Christopher Uhl, Developing Ecological Consciousness