

A WHOLE BUNCH OF QUOTES RELATED TO MAKING OBSERVATIONS

"Anything will give up its secrets if you love it enough." —George Washington Carver

"A useful definition of love is sustained compassionate attention." —John Muir Laws

"The more I wonder, the more I love." —Alice Walker

"Names are useful and important, but there's some sort of switch that can go off in our head once we have figured out the name for a species we are observing. That's why when teaching, instead of leading with the name, I 'trail' with it." —John Muir Laws

"Curiosity is not a trait that you have or don't have, but a skill that you can develop." —John Muir Laws

"They drove 150 miles to the intertidal, but they didn't go the last four feet. In order to observe in the intertidal you have to put your feet in the lowest place they can go, and then put your face down where your feet are." —Todd Newberry

"There is almost never a reason not to be slow. Nature will not speed up just because you have arrived." —Todd Newberry

"Naming and making lists of animals and plants is 'Glance & Go' nature watching. It might be a fun sport, but it's not natural history or science." —Todd Newberry

"Without questions, natural history is a stand-off. You stare at nature and nature just stares back." —Todd Newberry

"I come here to listen, to nestle in the curve of the roots in a soft hollow of pine needles, to lean my bones against the column of white pine, to turn off the voice in my head until I can hear the voices outside it: the *shhh* of wind in needles, water trickling over rock, nuthatch tapping, chipmunks digging, beechnut falling, mosquito in my ear, and something more—something that is not me, for which we have no language, the wordless being of others in which we are never alone." —Robin Wall Kimmerer

"Never take more than half. Leave some for others. Harvest in a way that minimizes harm. Use it respectfully. Never waste what you have taken. Share. Give thanks for what you have been given. Give a gift, in reciprocity for what you have taken. Sustain the ones who sustain you and the earth will last forever." —Robin Wall Kimmerer

"Gifts from the earth or from each other establish a particular relationship, an obligation of sorts to give, to receive, and to reciprocate." —Robin Wall Kimmerer

"Might science and traditional knowledge be purple and yellow to one another (putting them together makes each more vivid; just a touch of one will bring out the other), might they be goldenrod and asters? We see the world more fully when we use both." —Robin Wall Kimmerer

"It's a sign of respect and connection to learn the name of someone else, a sign of disrespect to ignore it. And yet the average American can name over a hundred corporate logos and ten plants . . . Learning the names of plants and animals is a powerful act of support for them." —Robin Wall Kimmerer

"I see no more than you, but I have trained myself to notice what I see." —Sherlock Holmes

"The world is full of obvious things which nobody by any chance ever observes." —Sherlock Holmes

"Let me keep my mind on what matters, which is my work, which is mostly standing still and learning to be astonished." —Mary Oliver

"Instructions for living a life: Pay attention. Be astonished. Tell about it." —Mary Oliver



A WHOLE BUNCH OF QUOTES RELATED TO MAKING OBSERVATIONS (continued)

"From my boyhood, I have observed leaves, trees, and grass, and I have never found two alike. They may have a general likeness, but on examination, I have found that they differ slightly. It is the same with animals . . . it is the same with human beings . . ." —*Okute Sica*

"Our job is to be an awake people . . . utterly conscious, to attend to our world." —*Louis Owens*

"It's not just a matter of grit or mindset . . . We have to help dependent students develop new cognitive skills and habits of mind that will actually increase their brainpower. Students with increased brainpower can accelerate their own learning, meaning they know how to learn new content and improve their weak skills on their own" —*Zaretta Hammond*

"On his own, a dependent learner is not able to do complex, school-oriented learning tasks such as synthesizing and analyzing informational text without continuous support. Let's not misunderstand the point—dependent doesn't mean deficit. As children enter school, we expect that they are dependent learners. One of our key jobs in the early school years is to help students become independent learners. We expect students to be well on their way to becoming independent learners by third grade, but we still find a good number of students who struggle with rigorous content well into high school, mostly students of color." —*Zaretta Hammond*

"The only true voyage of discovery consists not in visiting strange lands, but in having new eyes." —*Marcel Proust*

"Human beings have a strong, strong, strong tendency that if we see an animal do something that's analogous to what we do, like use a tool or answer an arithmetic question, we assume that the animal is doing it and understands the situation in the same way we do. And sometimes that's true but more often it's false." —*Alan Kamil*

"One way to open your eyes is to ask yourself, 'What if I had never seen this before? What if I knew I would never see it again?'" —*Rachel Carson*

"My world is full of holes . . . The way I see is a little the way a blind man taps along the street: he knows just that one spot where his cane touches down, and he hopes he can pretty much guess the rest." —*James Elkins*

"Much of the grand tradition of natural history falls somewhere in the valley between science and poetry." —*David Rothenberg*

"Hands-on experience at the critical time, not systematic knowledge, is what counts in the making of a naturalist. Better to be an untutored savage for a while, not to know the names or anatomical detail. Better to spend stretches of time just searching and dreaming." —*Edward O. Wilson*

"Every kid starts out as a natural-born scientist, and then we beat it out of them. A few trickle through the system with their wonder and enthusiasm for science intact." —*Carl Sagan*

"The best teachers are those who show you where to look but don't tell you what to see." —*Alexandra K. Trenfor*

"The most dangerous person is the one who listens, thinks, and observes." —*Bruce Lee*

"You can observe a lot by watching." —*Yogi Berra*

"The more opinions you have, the less you see." —*Wim Wenders*

"People generally see what they look for, and hear what they listen for." —*Harper Lee*

"In an age of acceleration, nothing is more exhilarating than to go slow. In an age of distraction, nothing is more luxurious than to pay attention. In an age of constant movement, it has never been more urgent to sit still." —*Pico Iyer*

A WHOLE BUNCH OF QUOTES RELATED TO MAKING OBSERVATIONS (continued)

"The most effective way to save the threatened and decimated natural world is to cause people to fall in love with it again, with its beauty and its reality." —*Peter Scott*

"Your eyes can deceive you. Don't trust them." —*Obi-Wan Kenobi*

"It is fortunate, perhaps, that no matter how intently one studies the hundred little dramas of the woods and meadows, one can never learn all of the salient facts about any one of them." —*Aldo Leopold*

"My parents were the best scientists I knew because they were always asking questions" —*Mae Jemison*

"The world shows up for us, but it doesn't show up for free. We must show up, too, and bring along what knowledge and skills we've cultivated. As with a painting in a gallery, the world has no meaning—no presence to be experienced—apart from our ability to engage with it." —*Alva Noë*

"Explore the world. Nearly everything is really interesting if you go into it deeply enough." —*Richard Feynman*

"The moment one gives close attention to anything, even a blade of grass, it becomes a mysterious, awesome, indescribably magnificent world in itself." —*Henry Miller*

"We do not see things as they are. We see them as we are." —*The Talmud*

"Shh. Listen to the sounds that surround you. Notice the pitches, the volume, the timbre, the many lines of counterpoint. As light taught Monet to paint, the earth may be teaching you music." —*Pete Seeger*

"To develop a complete mind: Study the science of art; Study the art of science. Learn how to see. Realize that everything connects to everything else." —*Leonardo da Vinci*

"I think if you look at any facet of nature in enough detail, you find it fascinating. How could you not?" —*Diane Ackerman*

"When books and animals disagree, as they often do, the animal is always right." —*Donald Abbott*

"Every observation . . . is a result of a question we ask nature, and every question implies a tentative hypothesis." —*Ernst Gombrich*

"What we observe is not nature itself, but nature exposed to our method of questioning." —*Werner Heisenberg*

"Empathy is a stimulated emotional state that relies on the ability to perceive, understand and care about the experiences or perspectives of another person or animal." —*Ashley Young, Kathayoon A. Khalil, and Jim Wharton*

"... the brain's chemistry changes when we become curious, helping us better learn and retain information." —*Brené Brown*

