

What We Can't See in Nature

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"It was something amazing and beautiful, but I couldn't name what it was!" Many of us have had this experience while meandering through a wooded area or waterway. Some of us research sources and even contact experts to help us identify what we witnessed. But others of us simply accept that we have witnessed something extraordinary and can relish the moment without defining what it was. Our interactions with nature sway between the scientific modes of interaction and the artistic and spiritual.

Here in the Miramichi and most of New Brunswick, we are blessed with a rich bounty of forests, rivers and ocean environments. There are so many wonders surrounding us from the Bay of Fundy to the sightings of rare animals thought to be extinct in New Brunswick, to the new arrivals of plants, animals and fish as our climate continues to change. A simple outing to our preserved lands and waterways can be a source of adventure, learning and mystery.

Not so long ago, our forebears toiled to harvest the bounty of the forests, to farm food from the lands, to raise livestock, hunt for meat, fish the rivers and oceans, and harvest seaweed and mollusks. Their lives were interwoven with the cycles of nature as well as its unpredictable storms, draughts, and fires. Henry David Thoreau wrote: "Most men, ... through mere ignorance and mistake, are so preoccupied with the factitious cares and superfluously coarse labors of life that its finer fruits cannot be plucked by them." Who then had time for appreciating the sublime aspects of nature? Most transcendentalists of the time were armchair philosophers, not people who had worked on the lands and waters to survive. But today, the same could be said



about our current attitudes about nature. Though many of us are not so burdened by the "coarse labors of life", we are instead confined to indoor environmentally controlled work spaces. Our inattention has caused us to take for granted the relationship with nature that has sustained us.

Today, scientists and environmental specialists are making discoveries that are enabling us to better understand just how intricately we are a part of nature. When we walk through a forested area, we see only what is on the surface. What we don't see or appreciate is the complex community of microbes underground that nourish and support all that is above. And this is true of our oceans and waterways as well. Microbes on this earth make up about half the weight of all life on earth, but they are too small to see. They consist of bacteria, fungi, viruses (though not defined as a living organism), archaea (single celled organisms lacking a nucleus) and protists such as alga, amoebas, and diatoms. So many of nature's microbes live both on us and in us. Many of the microbes that help restore soil fertility are similar to the microbes in our gut that help reduce modern chronic diseases. The tiniest creatures on earth have a vital role in the interconnected systems supporting all life on earth. And the atmosphere surrounding this beautiful earth makes this life possible.

What we know about all of life on earth can fill millions of volumes of books, but what we have yet to learn could fill many more millions. And as Thoreau once wrote, "I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived."