

Introduction

We are a landscape of all we have seen.

—Isamu Naguchi

My most vivid childhood recollection of lake came the day Mother rented a rowboat at the municipal dock in the town where she was born, loaded my sister and me, oars and lunch, bathing suits and towels, and rowed us up a long stretch of shore to a beach at the city's park. Mother was not an expert with oars, and my sister and I were too young to help with the rowing.

We made slow, zigzagging progress over the placid water—and that made all the difference. I leaned into the side of the wooden boat and peered overboard into sharply clear water, and lake filled the sensory slate of my young mind. I had names for few of the fascinating things I saw. A mysterious forest of skinny green stems with broad wrinkled leaves reached up out of the yellow-brown depths toward the boat. Tiny fish darted to hiding places within the greenery. Spotted leeches, longer than my hand, undulated in purposeful fashion through the green forest. A tiny red globe of an insectlike creature rested on the tip of a submerged leaf. But, above all, I remember the crystal clarity of the water.

Much time passed before I returned to this lake of my childhood. A murky essence has replaced the lake's once vibrant clarity. Other lakes of those growing-up years also show deterioration. I am not alone in my disappointment. Others tell me of standing in water up to their waists in their own lakes of youth, and of seeing the whites of their toes. Now they cannot see deeper than mid-thigh. I hear of beaches closed, fish consumption advisories in over thirty states, and lakes becoming pea soup or choked with impenetrable masses of aquatic plants. Why? How?

We say we “love” our lakes, and crowded shores and the crush to buy lakeshore at astronomical prices suggests we speak truth. Yet our lakes deteriorate, and much of the deterioration results from our own actions. In healthy relationships we care for and protect what we value. What explains the paradox?

Starting with Thoreau in the 1840s, scientific understanding of lake systems has advanced in increments for over 150 years in America. A series of researchers in Illinois, Wisconsin,

Minnesota, and New England filled in many of the gaps in lake ecology, giving us a general framework of understanding. Although more details are yet to be discovered, we understand the basic framework of lake ecology well enough to avoid their degradation. Lack of scientific knowledge does not explain the paradox, though lack of understanding of that knowledge by the public might.

Might human perception play a role in the paradox? We can see and hear and touch only a lake's surface and shallow shores. Most of the lake lies hidden from our senses. We are a highly visual species. Can we form accurate perceptions of these bodies of water that we can see so little of? Behavior is the child of perception. Perhaps the paradox is entangled with how we perceive lakes, with how we form understandings.

Thoreau, with his acute power of observation and tendency to record much of what he saw, made a significant early contribution to the emerging science of terrestrial ecology when he worked out the concept of forest succession, notwithstanding his lack of formal training in science.

Ironically, despite his intense love of lakes and the considerable amount of time he spent observing and writing about them, to the point of being called by some ecologists America's first limnologist, Thoreau never got beyond a very rudimentary understanding of lake ecology. Was it because he could not see lakes in the same sense he could see the forest, could not "see" what he could not see?

Our choice of metaphor may also influence how and what we perceive. We talk of time as the river flowing. I never questioned the implications of that metaphor until I was struck by the words of Professor Dave Edmunds, Native American, on a display in the Indian-Western Art Museum in Indianapolis. Edmunds wrote, "Time as a river is a more Euro-American concept of time, with each event happening and passing on like a river flows downstream. Time as a pond is a more Native American concept of time, with everything happening on the same surface, in the same area—and each event is a ripple on the surface."

If I think of time as a river, I predispose myself to think linearly, to see events as unconnected, where a tree branch falling into the river at noon is swept away by current to remain eternally separated in time and space from the butterfly that falls in an hour later and thrashes about seeking floating refuge.

But if I think of time as a lake, I see ripples set in motion by one event touching an entire shore and then, when reflected back toward the middle, meeting ripples from other events, each changing the other in their passing. I think of connectedness, of relationships, and interacting events that matter greatly to lakes.

My puzzlement over the deterioration of lakes, despite our love for them, finally bubbled over. I resolved to undertake a journey of exploration to investigate the relationships between people and lakes. I also set out to get a glimpse of our lakes' future.

This book is my account of that journey. It is a cut-off blue jeans and soggy tennis shoes journey, a journey of paddling and wading, listening and sniffing, turning over stones and touching, and reflecting and examining the birthing chamber of perceptions. A journey that takes us to large lakes and small, lakes in my home landscapes of Minnesota and Wisconsin, but also to Canada, Illinois, New England, and, ultimately, Walden Pond.

This journey must begin for me on Rainy Lake, a large lake on the Minnesota-Ontario border. My canoe and I have launched and tasted lake water together uncountable times, and each time the exhilaration is unbounded. How glorious to be *under way!*