

Rewilding in the Northern Forest

Cultivating Sustainable Membership in the Forest Community

by Alexandra Murphy

Introduction

In short, a land ethic changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it.

—Aldo Leopold, *A Sand County Almanac*¹

Forests are amazing communities, astoundingly resilient. They have an enormous capacity for self-renewal. Here in Vermont, forests covered an estimated 95% of the state before European settlement². By the mid-1800s, about 75-80% of the state was cleared for agriculture, charcoal and potash production, and lumber. Today, forests once again cover about 80% percent of the state—more than four million acres—a transformation made possible by the forest’s innate ability to restore, or re-wild, itself.

Yet the forest’s capacity to re-wild has limits. It’s all too easy, particularly when armed with tools and machinery that allow us to make big impacts in short order, to compromise the forest’s restorative capacity and undermine the building blocks of self-renewal. Many timber harvests in Vermont’s forests fall short of a “green” standard, resulting in soil compaction and erosion, stream siltation, increased invasive exotic species, and many other conditions that compromise the health of the forest community.

And like forests around the world, Vermont’s forests face stress from climate change and acid rain; invasive exotic plants, insects, and disease; and soil depletion. Looking for alternatives to non-renewable energy sources, Vermonters are turning to local forests on a large scale for wood to produce chips, pellets, and cordwood to heat and power homes, businesses, and communities.

In 1949, pioneering ecologist Aldo Leopold noted, "Health is the capacity of the land for self-renewal. Conservation is our effort to understand and preserve this capacity."³ The long-term success of conservation hinges on a fundamental change in our perception of and relationship with what ecologist and philosopher David Abram refers to as the “more-than-human” world.⁴ For centuries, we’ve acted on the belief that the world is divided into “nature” and “humans.” Each technological innovation deepens the faulty perception that we are somehow separate from and a notch above the rest of nature. That misperception, and resulting degradation of the natural world, now threatens the systems and functions that sustain life on Earth.

Yet, humans have not always interacted with other organisms in this way. Tens of thousands of years of human habitation on Earth testify to sustainable membership in natural communities. Our species name

¹ Aldo Leopold, “The Land Ethic.” *A Sand County Almanac*. (Ballantine Books: New York, 1966) (originally published 1949) 240.

² Elizabeth H. Thompson and Eric R. Sorenson, *Wetland, Woodland, Wildland*. (The Nature Conservancy and the Vermont Department of Fish and Wildlife, 2000) www.vtfishandwildlife.com/books/Wetland,Woodland,Wildland 18.

³ Leopold. *A Sand County Almanac*, 258.

⁴ David Abram, *Spell of the Sensuous*. (Vintage Books: USA, 1996).

within the animal kingdom, *sapiens*, comes from the Latin *sapere*. One meaning of this root is “to know;” another is “to taste.” We have the capacity to taste and savor, rather than devour—to act with humility and restraint. “Humility,” like “human,” comes from the Latin root *hum-*, meaning earth, ground, soil. Forest community membership begins with the recognition that we are of the earth, up from the clay for a short while, as the Irish say, before returning to humus once again.

What does forest membership look like? What does it require of us? In the words of architect and author William McDonough, “All sustainability is local.”⁵ We can’t singlehandedly save the world, but we can take responsibility for our own home place, and trust that others, similarly rooted in their own home places, are doing the same. Poet, environmental activist, philosopher Gary Snyder put it this way in his landmark book, *Turtle Island*, “Find your place on the planet, dig in, and take responsibility from there.”⁶ What does that mean in the context of forest conservation?

Find your place on the planet. We’re a transient culture, we Americans, our national identity built on the notion of westward expansion, of newer, greener pastures just beyond the sunset. It’s all too easy to excuse ourselves from the demanding details of sustainable community life with the excuse that we’re not from this place where we live now, and we may be moving on before too long. This transience is by no means limited to Americans. In today’s global economy, corporations around the world routinely set up shop in foreign lands, use and degrade the resources, unravel community cohesion and balance, and clear out when the resources are depleted. Snyder suggests a different course of action—wherever you find yourself, stay put and make it your place.

Dig in. Root down. Get to know the particulars of your place. Forest community membership is not simply about knowing more *facts*. It’s not about becoming an expert in soil horizons or forest types. That’s not to say that these facts aren’t interesting and enlightening—we’ll attend to many such details in the chapters that follow—but these are not the most important ways of knowing your home place.

The knowing of forest membership is the knowing of long-term familiarity and affection, like a deep-rooted friendship. When you spend enough time in a particular forest, you come to know, for instance, that in *this* particular part of the woods, you tend to hear a wood thrush on springtime hikes. That *these* sugar maples yield the sweetest sap of any in this forest. That along *this* curve of the streambank, you surprised a mink one winter morning leaping out of the ice-crusting creek.

Take responsibility from there. Cultural critic, writer, and professor Wendell Berry—a fifth-generation farmer from Kentucky—describes the consequences of this process of digging in and connecting with our home place: “We know enough of our own history by now to be aware that people *exploit* what they have merely concluded to be of value, but they *defend* what they love.”⁷

With connection and love comes responsibility. Take care of the home place in which you are rooted. In your local forest, do what you can to keep the water clean, nurture the humus, and keep native biological diversity rich. Get dirty. As Henry David Thoreau advised in *Walden*, “Beware of all enterprises that require new clothes, and not rather a new wearer of clothes. . . . If you have any enterprise before you, try

⁵ McDonough, William, and Michael Baungart, with Paul Anastas and Julie Zimmerman. *Cradle-to-Cradle Design and the Principles of Green Design*. 2003. http://www.mcdonough.com/writings/c2c_design.htm.

⁶ Gary Snyder, *Turtle Island*. (New Directions Books: USA. 1974) 101.

⁷ Wendell Berry, *Life is a Miracle*. (Counterpoint: New York, 2000) 41.

it in your old clothes. All men want, not something to *do with*, but something to *do*, or rather something to *be*.⁸” We offer plenty to *do* in this book—from digging a soil test pit and building an earth oven to setting up a community firewood bank—with the aim of cultivating a new way to *be* in the forest community that is not only healthy for people and for the rest of the forest, but plenty of fun as well.

We know that forests are, within limits, phenomenally capable of self-renewal. Our key job is to allow them to do what comes naturally, to re-wild. The forest in which you live, like most of the American landscape, has likely been strongly shaped by human enterprise. In the Northeast, whole forests were leveled for their lumber and bark and wood chemicals. Steep roads and cleared hillsides exposed soils that were millennia in the making, and rain and snowmelt washed them away. Animals vanished from the landscape. Entire forest communities were, literally, uprooted.

Since then—as happens in the wake of any disturbance, however large or small—these forest communities have been in the process of re-wilding, reassembling their natural structure. Remembering. Building humus. Pushing up wildflowers and ferns, mushrooms, shrubs, and trees. Laying down branches and logs. Spreading roots.

Forests can do this without our help. And there is a great deal we can learn from *not* doing anything that we judge to be helpful, from simply witnessing the forest and noticing its scars and its healing process. But after careful observation, we may want to act as engaged community members to encourage the forest’s restoration and re-wilding.

Let’s say, for instance, there’s an old roadbed in your forest that’s actively eroding, sucking soil and water away from the land and into a nearby stream. How to help? How to act? As Wendell Berry notes, “...We humans cannot live without acting; we *have* to act. Moreover, we *have* to act on the basis of what we know, and what we know is incomplete.... And so the question of how to act in ignorance is paramount.”⁹

We look to the forest for clues about how to take part in the restoration process. We notice how the forest is, in places, healing that wound of its own accord. Trees fall across the roadbed and form barriers that slow the passage of water and redirect it into the forest. Soil builds behind these logs, which, in turn, slowly decay, adding water-absorbing humus. Mosses and ferns anchor the new soil.

So we observe all this, and we learn from the forest how we might act to spur on the healing process at hand. We fell a few trees across the old roadway. Rain falls. The logs, placed just so with our careful handiwork, guide running water off the road and into forest humus and rootlets. Erosion lessens. We participate in re-wilding.

From this re-wilding frame of mind, we start to think differently about the materials we draw from the forest. We think less in terms of “What can I take from this forest?” and more in terms of “What do I need to leave behind to keep this community whole, to further its re-wilding?” Let’s say we want to cut our winter’s wood supply from the forest. Maybe we want to help start a community firewood bank. How do we do so in a way that leaves the forest as healthy, or even healthier, than before? Acknowledging the limits of our understanding of the complex processes and relationships that

⁸ Henry David Thoreau, “Economy.” *Walden*. (The Pebbles Classic Library: New York, ND) (Originally published 1854) 19.

⁹ Berry, *Life is a Miracle*, 10.

constitute a healthy forest system necessarily limits the scope of our actions. We ponder carefully, work conservatively, consult the forest.

What does it mean, to consult the forest? Aldo Leopold noted that “a science of land health needs, first of all, a base datum of normality, a picture of how a healthy ecosystem maintains itself.¹⁰” Wilderness, he said, provides that base datum, offering “a laboratory for the study of land-health.” If our forest has re-wilded sufficiently to offer this laboratory of forest health, we can look to it for guidance. Or we can look to older, wilder forests in pockets of the nearby landscape. We can observe the qualities that foster resiliency and stability in wild forests, then do our best to nurture those qualities in the forest of which we are a part.

It takes a practiced eye to observe ecological processes and relationships in the field, so in this book, we draw upon the observations of a team of scientists studying one particular re-wilding forest on the flanks of the Green Mountains in Lincoln, Vermont—a forest that has been the subject of on-going ecological monitoring for more than 15 years. The story of this land is both universal and unique—its human and natural history are typical of countless New England hill farms, with the notable exception of its current situation, as will come to light in the first chapter. Throughout the book, this forest serves as our laboratory for the study of forest health, our base datum of normality.

While we’ve written this book for anyone interested in cultivating a deeper, more sustainable relationship with the forest in which they live, we’ve designed it for a particular segment of that audience—engaged, inquisitive, energetic upper-level high school students in advanced biology and environmental science. Because of this we’ve organized the book to coincide with the academic school year, from September to May.

Each chapter of the book links with a month of the school year, and each explores a particular aspect or element of the forest community. This organizational structure—covering one element per month—is, of course, just one possible way to utilize the book. You can condense the readings and activities of the chapters into a semester or draw from them here and there to supplement an existing curriculum. There is, however, a method to our madness in the sequence of chapters, with later chapters building on the discoveries of earlier ones.

Throughout the book, we suggest hands-on ways for readers to explore, experience, apply, and integrate what they discover about key elements of the forest community. We do not presume to have created a definitive how-to book, but rather a guidebook of possibilities for cultivating a new understanding of and connection with the forest community.

“Find your place on the planet, dig in, and take responsibility from there.” In your home place, do what you can to keep the water clean, nurture the humus, and keep native biological diversity rich. Before taking, celebrate the tree and consider what you can give in return. These ideas form the foundation of forest membership and the guiding intention this book.

At its heart, membership begins with gratitude. Gratitude for the gifts of the forest, which we only begin to fathom. Beauty. Clean water and air. Berries. Bears. Wood for hearth and home. Bird song. Humus. The chapters that follow are an invitation to step out the door and into the forest of which you are a part,

¹⁰ Leopold, *A Sand County Almanac*, 274.

meet the neighbors—from earthworms to sugar maples—observe and engage, and participate in the art of re-wilding.

*the world offers itself to your imagination,
calls to you like the wild geese, harsh and exciting—
over and over announcing your place
in the family of things.*

—from *Wild Geese*, by Mary Oliver¹¹

¹¹ Mary Oliver, *New and Selected Poems*. (Beacon Press: Boston. 1992) 110.