

## TO SPEAK A WORD FOR NATURE

Remarks delivered at the Mills College Convocation

by Stephanie Mills '69

October 2, 2009

President Holmgren, learned faculty, members of the Mills community, my fellow alumnae, and most importantly members of the classes of 2013, '12, '11, and '10: Thank you for the very great honor and for the opportunity to address you. It's a real testimony to the value of a liberal arts education that a woman whose eyes glazed over the moment amino acids were mentioned in biology class could be speaking to you today on matters concerning the Earth's ecosystem.

In preparing this talk, I made several stabs at a forty-year gloom and doom update. I wrote reams about some of the critical, quite physical, problems bearing down on not only the human race, but myriad other life forms.

Among the gravest of these problems are overpopulation, climate destabilization, depletion of nonrenewable resources—especially of oil and other fossil fuels—water scarcity, and the extinction crisis. All of them are predictable outcomes of our economic paradigm, the trajectory of civilization, and our beliefs about the world. They have wrought essentially irreversible changes in the biosphere. Needless to say, we must do all that we can to limit further damage, and make our transition to living within the planet's ecological limits, with all due speed.

Thinking hard about what would be useful to do today, I felt that hammering away at the many manifestations of the ecological reckoning bearing down upon us to shatter the natural-enough denial of them would not be a kindness. Rather, like Thoreau, I would speak a word for nature. I would honor her prophets, Rachel Carson among them. I would hearten you for the challenges ahead with Carson's promise: "Those who contemplate the beauty of the earth will find

reserves of strength that will endure as long as life lasts."

During the August and September weeks while I struggled with this writing, daily walks around my neighborhood sustained my sanity. I now live in a very different kind of place than the Bay Area, a semi-rural county outside of a small city in northwest Lower Michigan. Since I left San Francisco twenty-five years ago, I have occupied the same piece of land. I helped build my house there. I've pulled up, cut down, and planted trees there. In good years my attempts at vegetable gardening in the beach sand that passes for soil at my place have yielded up to a pound of string beans. No sustainability coming from that quarter.

The bioregion where I live once was covered with the great North Woods, a hardwood forest dominated by sugar maples and beeches, interspersed with streaks of white and red pines as well as a score of other tree species. This forest was peopled by wolves, bear, cougar, flying squirrels, the late passenger pigeon, two dozen species of warblers; by an incredible host of beings. Although the terrain has been worked over by modern settlement, it remains a beautiful place to live, but not for sissies. There are four dramatically distinct seasons including a real winter. Last year's total snowfall in some places, not to brag, was 170 inches.

Living there has been an extended education. I'm a slow learner, but in relationships with land, most of what's worth knowing can only be learned slowly. One thing I do know is that if I go outside and open my senses, I will meet up with a marvel or two.

On one of my mid-September walks I decided to filch some apples from an abandoned

orchard nearby. The old fruit trees there are various, hardy and prolific, camouflaged by trees and shrubs that have grown up since the orchard was left to its own devices.

There is also an enormous ash tree in that tract of so-called vacant land. Its size isn't obvious from a distance, but up close you discover that its trunk is more than three feet in diameter at breast height. Before my apple heist, I made a pilgrimage to the ash tree, wading through the old-field vegetation of knee-deep dried grasses, bouncing bet, knapweed, and Canada golden rod. There's a hedge of autumn olive, an exotic plant, around the ash tree's base. In disturbed landscapes autumn olive grows in dense thickets wherever birds can perch and excrete its seeds. I bashed my way through the alien shrubbery just to touch the great old ash tree. This ash might have been growing there a hundred years. That's a massive life experience, worthy of deep respect.

Meetings with ash trees can be melancholy, though. Midwestern ashes may succumb to an invasive insect, the emerald ash borer, arrived here as an unintended consequence of world trade. Just as the Dutch elm beetle killed off the elms, and the blight the chestnuts, the emerald ash borer may administer the *coup de grace* to the ashes, already stressed by deforestation and air pollution. Yet ash seedlings proliferate along the nearby roadside. Here and there are some ash saplings. With lucky genes, a few of them might resist the infestation. This mighty tree's will to live is in evidence all around.

Aldo Leopold, another prophet of nature, famously said, "one of the penalties of an ecological education is that one lives alone in a world of wounds." My encounter with the ash tree did not exactly contradict the gloom and doom. It gratified my sense of wonder, though, and was a sermon on steadfastness.

My ecological education has been at least as rewarding as it has been dismaying. The opportunity to get out and about with naturalists—scientists and laypeople who are living for something more than just a human agenda—has

repeatedly renewed my hope for my own kind. Meeting people who are dedicated to saving species, witnessing their valor and their tenderness towards the fate of other creatures brings me tears of joy.

Although it's uncommon, human devotion to the survival of a rare plant, an endangered insect, or big wilderness bespeaks a deep understanding that in the community of life on Earth we are absolutely interdependent. The loss of any member of the community diminishes us all.

We human beings are in the continuum of life, subject to its rules, available to its splendors. Our membership in this community is not a romantic idea, but a fact of evolution. We are biological organisms. We exist because for five billion years life on this amazing planet has been developing, diverging, and colonizing niches -- from the deep sea floor to the ice of the world's rapidly melting glaciers. No species lasts forever, but every creature embodies an inimitable saga of existence and adaptation. All life forms have moral standing and a necessary role in the order of nature. There is of course no life without the taking of life, but wanton destruction of other beings is a crime against life itself.

While climate destabilization rightly commands much attention, and human overpopulation as a driving force in the erosion of the biosphere deserves more attention, of all the calamities we face, perhaps the worst is the Earth's sixth great extinction crisis, which humanity is precipitating. Direct and indirect effects of climate change alone, say Stuart Pimm and his colleagues, will result in the extinction of some 15 to 37 percent of species by the year 2050. Because of what we are doing and how we are living, the rate of extinctions is now between 100 to 1000 times greater than prehuman levels, moving toward a rate on average 10,000 times greater than normal.

The World Conservation Union assesses that one in four mammals, one in eight birds, one in three amphibians, one in three conifers and other gymnosperms, up to fifty-one percent of

reptiles, fifty-two percent of insects, and seventy-three percent of flowering plants are at risk of extinction. It is a holocaust. The life and beauty of the Earth are at stake.

Nearly fifty years ago, love for the living world drove Rachel Carson to sound the alarm about industrial civilization's chemical assaults on nature. Carson was a zoologist and peerless writer (educated by the way, at a women's college, Chatham). Carson never married or bore a child of her own. Beginning in the depression years, by the work of her pen, she supported her widowed mother, her sister, nieces, and grandnephew Roger. In 1962, after years of scrupulous research and masterful writing, her historic book *Silent Spring* was published. In it, Carson reminded the world that life is whole. She amply documented that pesticides and herbicides were killing or sickening all kinds of organisms, not just their intended targets. The decimation of bird populations caused by the then widespread DDT spraying against Dutch elm disease was particularly poignant. Carson's title invoked the terrible possibility that these chemicals could poison so many birds that their songs and calls would no longer herald the spring.

*Silent Spring* unleashed a storm. The pesticide manufacturers' and chemical companies' PR apparatus swung into action to slander the author. Carson's science was solid, though, and she braved the onslaught. Industry attempts to discredit her work didn't avail. Rachel Carson's powerful argument against the wanton destruction of other beings struck a chord. In 1972 the U.S. banned DDT and a number of other persistent pesticides, making a gesture towards regulating the introduction of these chemicals into the environment. Rachel Carson emboldened countless people who shared her understanding of nature's integrity, thus launching the modern ecology movement. Alas now climate change is disrupting the timing of bird migrations, and habitat destruction goes on apace, so the musics of spring are still imperiled.

Rachel Carson found her sources of courage and determination in deep communion

with nature. This heroic woman spent her happiest hours at the edge of the sea, and wrote three highly acclaimed books about marine and shore life before *Silent Spring*.

Carson would take her nephew Roger, even as a toddler, on her walks along the shore in Maine. The tide pools, the ghost crabs at the surf line, the periwinkles, whelks, and mussels all were there to entrance him. For Carson, fostering a child's love of nature was a paramount responsibility. Knowledge and concern would follow. She drew on these outdoors experiences with Roger in a lovely essay, "The Sense of Wonder."

"If I had influence with the good fairy who is supposed to preside over the christening of all children," she wrote, "I should ask that her gift to each child in the world be a sense of wonder so indestructible that it would last throughout life...."

Years later, completing *Silent Spring*, then calmly facing the controversy that followed the book's publication, all the while suffering from the cancer that would cause her death in 1964 at age 56, Carson's own sense of wonder sustained her. As long as she was physically able, she walked in the woods or by the shore, or gazed long at the night sky.

Aldo Leopold also was a scientist and a great writer who confessed himself unable to live without wild things. Trained as a forester in the early teens, Leopold and others campaigned, with some success, for wilderness preservation, not just to protect unspoiled landscapes, but because there should be places where a person could know solitude, awe, and wonder in the presence of untrammelled nature. Although he would have been unlikely to couch it in those terms, Aldo Leopold's lifelong study of wild beings and wild places was a great work of love.

In his masterpiece, *A Sand County Almanac*, Leopold recorded his epiphanies. One of the most pivotal occurred in Arizona, where he first worked for the Forest Service. It was there, after shooting a wolf from the Blue River rim rock, that he learned how to think like a mountain.

“We reached the old wolf in time to watch a fierce green fire dying in her eyes,” he wrote. “I realized then, and have known ever since, that there was something new to me in those eyes—something known only to her and the mountain. I was young then and full of trigger-itch. I thought that because fewer wolves meant more deer, that no wolves would mean a hunter’s paradise. But after seeing the green fire die, I sensed that neither the wolf nor the mountain agreed with such a view.” A humbled Leopold went on to describe what became of wolfless mountains. Burgeoning deer herds browsed every edible bush and seedling to death and defoliated every edible tree “to the height of a saddle horn.” Predator control destabilized these ecosystems. “The world is green because carnivores eat herbivores,” as the contemporary writer Julia Whitty puts it. To this day efforts to protect, and reinstate wolves to their wild habitats meet with fierce resistance. Wolf hunting still goes on.

As well as pioneering wilderness preservation, the science of ecology and the field of game management, Aldo Leopold helped develop the land-healing practice of ecological restoration. “A rare bird or flower,” he wrote, “need remain no rarer than people willing to venture their skill in *building it a habitat.*”

Learning about the restoration work he did, first at the Arboretum at the University of Wisconsin at Madison, and then with his family at their retreat—a blown-out depression-era “Sand County” farm near Baraboo, Wisconsin—brought me tears of joy. In 1992 I was able to roam around the Leopolds’ place and see what nearly sixty years of intelligent attention and careful labor could accomplish in the way of land healing. There were pine forests, oak savannas, prairie patches, and wet meadows. Life’s diversity had been welcomed back and its pleasure was manifest.

In *The Book of Common Prayer* the Collect for Peace says the service of God is “perfect freedom.” I titled my book about ecological restoration *In Service of the Wild* to evoke that. Restoration work is service to the

wild, a way of doing something to combat extinction. Wherever I looked, I saw it liberating its practitioners from despair and sowing landscapes of hope.

At our natural foods co-op recently I ran into my friend Richard, a gifted flautist and adept typesetter, who I had not seen in a few years. When I asked him what was new, he fairly beamed. He told me that he had been working for the last seven years on a Michigan monkey flower restoration along the eastern shore of a large inland lake. The Michigan monkey flower, a demure riparian plant with buttery yellow blossoms, is a state and federally listed endangered species. It likes lakeshores but so do people, hence the monkey flower’s territory has been diminished and degraded.

Most of what Richard and his partners were doing was weeding. “You take the bad stuff away and the good stuff comes back,” he said.

Shortly after our encounter in the co-op, we met at the lake shore, donned muck boots and sloshed along the water’s edge to visit the resurgent monkey flower which was cohabiting with jewel weed, cardinal flower, turtlehead, liverworts, frogs, great blue herons, raccoons, possible spotted sandpipers (guessing at the tracks), and maybe even a mink. That field trip reminded me—and I often need reminding—that no matter how dismal the auguries, Earth’s myriad creatures are eager to live. They will hail the life force within us when we meet them halfway.

Over the next century or so we are bound to go through some hard times. We will either choose or suffer drastic changes in our way of life. We will perforce consume far less and produce locally more of what we do consume. And our responses to these exigencies must amount to more than just techniques for human survival. For as the late conservationist David Brower remarked, “You can survive in jail.”

We hear a lot these days about doing the right thing, but our conception of rightness is often self-concerned and incomplete. We have tried to evade the laws of nature.

Aldo Leopold expanded ethics to include the living earth thus: “Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”

If the future is not to resemble a cellblock, then in addition to learning how to meet human needs within straitened ecosystems, we must do right and dedicate ourselves to preserving the integrity, stability, and beauty of the living world.

Nature, humbly observed and rightly served, reveals the truths to steer by. If we can have the wisdom and the will to care for other forms of life, if we can have the vision to sustain wild beings and wild places, we will know joy and future generations may bless our memory. For as Henry David Thoreau declared, “In wilderness is the preservation of the world.” There could be no greater purpose than rescuing what we can of the Earth’s biodiversity.

Gather the resolve by connecting with nature, even in a vacant lot. Spend time with undomesticated creatures, go to places where human beings are few and wild things are many. Listen to the voices of the insects and the leaves. Watch the seasons change, sense life’s great patterns. Join the wonder of it all.

Thank you.