

Saving Special Places workshop—Transition to an Ecological Civilization

Why an Ecological Civilization? Here is our situation. We are rapidly exhausting earth's natural resources upon which we all depend. If all on our planet used natural resources at the rate we do in America we would need three more planets. Add to this that we are in the midst of the sixth great extinction, one thousand forms of life going extinct every year, compared to not more than ten before the modern era. Then there is climate disruption: temperature rise, up now to a perilous 2 degrees centigrade which will trigger catastrophes such as melting of permafrost and release of tons of methane into the atmosphere. Then there are rising seas, a ravaging of food crops, environmental refugees and warming and acidification of oceans.

I read about and listened to the Native American Tribe's water keepers in the vigil at Standing Rock in North Dakota this fall and took special notice of their description of their relationship to land, water and soil. It is a spiritual relationship they declared: "we are the land, the water and the air. Whatever happens to it happens to us. The Great Spirit commands us to hear and obey." I then consider what we in Western cultural and religious traditions say about land, water and air. Nature for us has been an externality, an it, something to use and exploit. The great religious text from Genesis, "you shall dominate," has a long history of providing the basis for exploitation and misuse of both land and peoples, though a more exact translation of that Genesis text is not dominate and use, but to "tend and keep." Certainly there have been alternate strains and themes which have called for respect and even reverence toward nature, but it is only in the last thirty or forty years that religious people have even a cursory knowledge of eco-theology and in American culture of eco-justice, eco-economics, and eco-psychology. High regard for the integrity of soil, water and atmosphere is increasing among the vast populations of America and the world, but extractive capitalism and the malfeasance of the consumer economy militate against that integrity.

What then is an Ecological Civilization? One basic definition would be that we live within the limits of earth processes, that we live in harmony with nature and with one another. Has this not been the dream of seers, reformers and dreamers throughout history, you might add, and look where we are: war and ravaging of the planet confront us continually. But this time, as in the deterrent of mutually assured destruction in relation to the threat of nuclear war, a nuclear freeze, of sorts, was achieved. Could not the same compelling urgency that emboldened the nuclear freeze movement now be an even greater compelling urgency to build the kind of structures of earth and human care that would work for sustainability and enough for all?

Key elements of an Ecological are:

1. Ecological civilization is the next stage of human civilization after agricultural and industrial civilization.
2. It involves dramatic changes in the political, social, spiritual, economic and geo-biological sectors of society. The transition can take 200 years. We must act in faith that this can happen beginning now.

3. Ecological civilization requires greater attention to local and regional geographies, ecosystems and communities than industrial civilization. It must draw upon the wisdom of all humanistic and religious traditions.
4. It will be measured by the integral functioning and flourishing of the earth community as a whole. For this “geologist” Thomas Berry has given us the word “ecozoic” (house of life) i.e., *oikos and zoion* combining economics and ecumenics (ecology). Berry speaks of the Ecozoic era as “a time of mutually enhancing relations of humans and the larger community of living things.”

The term “Integral Ecology” has come to my attention since June 2015 in a conference I attended in California on “Seizing the alternative: Building an Ecological Civilization”, with 1400 persons in attendance from all disciplines from theology to physics and economics. Then again in Pope Francis’ Encyclical *Laudato Si* last year, we were acquainted with the term integral ecology. The phrase gives special recognition to the premise that climate disruption and consequent threats to the natural processes that enable earth to thrive is inextricably linked to social dislocation and inequality. Climate disruption and the growing misery of the poor have similar causes and solutions. We have reached or are reaching a point of no return, a critical juncture in the evolution of our societies that both necessitate such a turn and makes possible such a turn—the building of an ecological civilization.

Just a few of the many areas that call for our turning: Vandana Shiva travels the planet and her message is soils. When facing the threat of peak oil, forty years ago Nobel laureate Wood would quip, “Before petroleum, there was civilization.” Vandana would add, “but without soils there is no civilization!” Her narrative starts with the green revolution in India. Norman Borlaug brought to the subsistence farmers of India monoculture crops, fertilizer, pesticides and herbicides and it was an astounding success, at least for the multinationals. But after fifteen years, for the farmers and the soil it was a disaster. Over 250,000 farmers in India committed suicide. The people without money could not afford to buy the new crops, and the small farmers could not compete with the consequent lower prices they received for their crops. Then the soil began to deplete. Commercial fertilizer can in no way replace the diverse cropping and rich compost of the traditional farm, which had more than fifty vegetables, grains and fruits. John Augustus Voelcher visited India in 1891 and concluded, “There are more ways India can improve agriculture than we in England can.” In 1905 Albert Howard visited India and seeing no pest in the fields and no commercial fertilizer then helped initiate the whole organic Ag movement.

Wes Jackson of the Land Institute in Selina, Kansas forty years ago looked out at the Great Plains now covered with monoculture, irrigated, fertilized, and pesticized and eroded crops and envisioned a perennial grain that would copy the native grass that fed the buffalo and Native American culture. That vision is being achieved today. His institute has grains with roots of fifteen feet needing no irrigation or fertilizer and suffers no erosion.

A quick look at money: after the 2008 recession and all the books written on money it is no surprise to hear many of the authors saying that our money system is a con game or confidence trick. It comes as a surprise to many of us that the Federal Reserve is not owned by the government but by private banks! The congress has the authority to print money but then hands it over to the Federal Reserve who then loan it to the government, and collects the interest. If we had state and national banks that interest money would fill up our treasuries. Various times in American history attempts have been made to print and distribute money, under Stonewall Jackson and during the Civil War under Lincoln. They were called greenbacks. It worked famously, but when Lincoln was assassinated it was the end of the greenbacks. Bankers simply have too much control. North Dakota has a state bank and it works wonderfully. Twenty states are looking into it, but legislatures fear resultant inflation, a fear undeserved.

Our communities need to reclaim the commons. Schumacher (Institute for a New Economy) preaches such. If a business takes from the land or forest, they should pay for it. Fossil fuel companies who pollute the air should pay for it. Mining companies should pay for the minerals they uncover. The fees should be fed back into the national and state and local budgets or given as a rebate to the citizens. Many Christian churches issued pastoral letters in the eighties and nineties stating the purpose of the economy is to produce useful products and services that promote the common good. So how is it that the manager of a corporation can be punished or fired by the stockholders if he does not maximize profits? Was it not just one or two generations ago that firms took pride in giving back to the communities in which they were located? In fact in our early republic a corporation could have its charter revoked if it did not serve the common good.

John Cobb, Methodist process theologian, says modern economic theory has its roots in the triumph of individualism in the Reformation's freeing the individual from the hierarchical authority of church and state embodied in the feudal system. This combined with the myriad technological breakthroughs and inventions provided an abundance of goods and services which blinded consideration of the negativities—what Thomas Berry calls visions of a wonderland turning into a wasteland. Modern economic theory is based on the satisfaction of individual needs as opposed to the communities needs. There is a sense of economics having lost its moorings now, and in need of a paradigm shift. Economics used to include sociology, politics, and even theology. Now it is often just mathematics. Homo economicus as person in community is the proposal. For capitalist societies, instead of economy being embedded in social relations, social relations are embedded in the economic system.

The fact that no other society has so spoiled its nest rests in our metaphysics. If you say you have no metaphysics then the one you have operates unacknowledged. Before Descarte and the consequent separation of mind and matter every understanding of economics was oriented to the whole society. When evolutionary theory came it could have considered both mind and spirit, but did not. Pierre de Chardin was ignored in our universities. In physics it was a major shock when the atom was seen as particles in motion or waves. Physics as a result is incoherent. One

option now is to develop a better metaphysics. Einstein said he couldn't just talk about matter, so he called it energy. If the world is made up of energy, then it is more than matter. It is acts, so one must think of relationships. Alfred North Whitehead, father of process thought turns from energy to creativity.

Then comes the difficult question of theism. We learn that in just the last ten to fifteen years the nones—those who identify with no religion, have increased to fifteen percent of Americans. A supernatural deity is less convincing to more and more of us, and yet reductionist materialism is also not satisfying. David Korton introduces the term “integral spirituality” for those who call themselves spiritual but not religious. Drawing upon mystics and wisdom traditions, he sees a middle ground. We are integrally woven into the web of life and bounded together by spirit. Traditional and ancient thought was substance based, every thing in its own sphere and stable. Process thought is movement based. All is connected and all is evolving. Theism has God transcendent to the world breaking in at rare times, whereas pantheism sees God wholly in the natural processes. Pan en theism, a new conception sees God both in, but transcendent to nature simultaneously.

There is much fascinating debate and exploration around each perspective, but it is certain that the future of earth's soils, waters and air can only benefit the greater we perceive the divine invested in them, as our Native American water keeper brothers and sisters do. Whitehead's vision is not of a controlling or punishing deity but of one who calls, urges, and draws us toward beauty, truth, justice and sustainability.

John Carroll

“The value of nature. The value of the land. It all starts there.”

Wendell Berry, December, 2016

An ADDRESS by John E. Carroll, Professor of Environmental Conservation, University of New Hampshire, and Member, Durham Agricultural Commission and Durham Land Stewardship Committee, to New Hampshire’s 2017 SAVING SPECIAL PLACES WORKSHOP:

#### OF SPIRITUALITY AND LAND CONSERVATION

“No fortuitous concourse of elements working blindly through any number of millions of years could quite account for why warblers are so beautiful.”

Aldo Leopold, 1948

To the Champions of New Hampshire’s Conservation Lands,

I speak today for the many daughters and sons of Henry David Thoreau. Yes, Henry David had many children and they have occupied my Environmental Conservation classrooms at UNH for over four decades. I also speak for those many children of Thoreau who have additionally accepted the spiritual gift of Aldo Leopold, he of the “land ethic”. I speak today, as well, for those who have received with open arms the inspiration of scientist Rachel Carson, a woman of action who unselfishly stood up and tackled the forces of destruction. This is the Holy Trinity of Henry David, Aldo and Rachel that my by now thousands of UNH Environmental Conservation, Environmental Science, Forestry, Wildlife Ecology, Soil and Water Conservation, and Sustainable Agriculture students use, and have used, to guide their spiritual thought. They are the keepers, some might say, of the spiritual foundation of my students’ ecological thinking, in coming to understand and embrace ecology as a spiritual value. Thus, this trio is, in an important way, the spiritual inspiration and guide for my students.

I know of you participants in this annual Special Places Workshop as champions of our ecology and ecosystems, of land conservation, of the protection of New Hampshire woods and waters; you who are champions of easements, of land law, and of land use change taxes; of acquisition of land rights and acquisition of land in fee simple; of trail blazing and trail maintenance; of bird books and binoculars; of pristine natural areas and of habitat in recovery; of protectors of the wild. And I know the fundamental desire of my students to become worthy to be among you, engaging and interacting with New Hampshire’s woods and waters, fields and, increasingly, pastures, to understand the magnificence and holiness of trees and grass, of streams and wetlands, of hills and mountains, swamps and bogs, of birds, bears and bobcats. (Yes, I do like alliteration!)

During the past few years I have been writing extensively and publishing in distinguished academic presses about a document from far away, written by a man who has never been to New England (and

hardly at all even to the United States), a man who has little grounds for understanding the American culture – and yet a man who seems to understand my UNH Environmental Conservation students in their deepest spirituality. And I have read and analyzed the writings of this deeply religious and spiritual man from away and, as I did that, I thought I was reading Thoreau on the intrinsic value of the natural world. I thought I was reading the pragmatic ecological science and practice, as well as the wisdom, of Leopold. And I thought I was reading the biological science and the call to action of Carson. But, no, I was reading the passionate outpouring of a deeply spiritual, deeply religious man from far away, in his formidable letter called an encyclical, a document that adopts the voice of whom some call the patron saint of ecology, St. Francis of Assisi. I refer, of course, to *“Laudato Si: On Care for Our Common Home”*, the papal encyclical of Pope Francis, the so-called “environmental encyclical”, one of the most remarkable statements of ecological thought in modern times – right up there with those seemingly secular voices of Thoreau, Leopold and Carson. And Pope Francis’ idea of “integral ecology”, the subject of one of the chapters of the encyclical, ranks with the finest of ecological literature. In fact, parts of “Laudato Si” are similar enough to be mistaken for Aldo Leopold’s authorship!

In looking at your own Leopoldian-inspired work, you lovers of trails through woods and fields, and in keeping with the admonition of all of these deeply spiritual voices, may I say that one of the more spiritual things you can do as land conservationists is to properly place at many specific points along your trails “Aldo Leopold Benches”. (You might google “Aldo Leopold Benches” for diagrams, pictures, and assembly instructions.) The placement is up to you and they can be periodically moved.

That mild-mannered revolutionary, Aldo Leopold, had something far more significant in mind than rest for the weary when he designed those benches: they are points and places for contemplation of the natural world around us, both inspiring us and peaking our curiosity to better understand nature and our place within the natural system, within the universe itself. And, by prompting quiet contemplation, those benches have the power to help mature us as spiritual creatures and ready us for revolution, the revolution that is needed if we are to protect and maintain our local and global ecosystem. These Leopold Benches strengthen us, they give us fortitude for the task at hand, and Aldo Leopold, author of the revolutionary essay, “The Land Ethic”, understood this power – which itself is the power of conservation. These same benches also support Henry David’s sauntering (don’t just walk from bench to bench – saunter!), and Rachel’s deep respect for the scientific wonders of the natural world. Sitting on these benches – with senses wide open – will soon yield that appreciation (as well as Rachel’s grieving for its loss). Sitting on those benches can change peoples’ minds and hearts, and prepare them for the challenges that lie ahead. For our sense of oneness with nature is a gift of grace. And, as Wendell Berry has told us, it all turns on affection. Indeed, it all turns on affection.

There are, of course, many, many others who can help us deepen our understanding of, and our appreciation for, spiritual values in nature, the spiritual value of the land. Some of my favorites are the Berrys – essayist-poet Wendell Berry and “geologist” Thomas Berry, as well as poet-essayist Gary Snyder and ecological farmers and heroes of truly sustainable agriculture Joel Salatin and Gene Logsdon. And many more, including all those who saunter and contemplate here at home in New Hampshire.

And there are also, not the least, those preparing the way to a thriving and more secure local food system built on sound organic grass-based principles of ecological agriculture. Let us not forget that, here in New England, market gardening and backyard farming are among the most effective and potent tools we have to achieve the goals of open space protection and land conservation. You of the land conservation community must now learn to use those agrarian tools, tools which perhaps have been a little outside your domain in the past. Naturalists and pastoralists, naturalists and agrarians, need to seek common cause.

Let me conclude by saying that you of the local land conservation movement play a vital role in making that spiritual contemplation, that so pure pleasure, that grace, that affection, possible. You are, therefore, the foundation upon which so much of ethical behavior, so much of ethical decision-making, is dependent, now and in the future.

Aldo Leopold has told us “No fortuitous concourse of elements working blindly through any number of millions of years could quite account for why warblers are so beautiful”. You work with such mystery every day.

Know that your work, and the spirituality which you engender by that work, is vital and appreciated. Thank you.

John E. Carroll

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#### Suggested Readings:

For those interested in Pope Francis’ papal encyclical, in addition to the very readable document itself, you may wish to read my three published analyses of the encyclical:

“The Environment is a Moral and Spiritual Issue”, A chapter in *SPIRITUALITY AND SUSTAINABILITY: NEW HORIZONS AND EXEMPLARY APPROACHES* (Springer Publishers, 2016) – on the whole encyclical.

“Pope Francis’ Encyclical, Food and Agriculture” in the *ENCYCLOPEDIA OF FOOD AND AGRICULTURAL ETHICS* (Springer Publishers, 2016) – on the food and agriculture aspect of the encyclical.

*THE GREENING OF FAITH: GOD, THE ENVIRONMENT AND THE GOOD LIFE*, Twentieth Anniversary Edition, edited by John E. Carroll, Paul Brockelman and Mary Westfall, with Foreword by Bill McKibben (University Press of New England, 2016) – on the environmental conservation aspect of the encyclical.

For a broader take on my own ecological thought in its relationship to spirituality, I suggest:

SUSTAINABILITY AND SPIRITUALITY, by John E. Carroll, with Introduction by Bill McKibben (State University of New York Press, 2004).

ECOLOGY AND RELIGION: SCIENTISTS SPEAK, edited by John E. Carroll and Keith Warner (Franciscan Press, 1998).

THE GREENING OF FAITH: GOD, THE ENVIRONMENT AND THE GOOD LIFE, original edition, edited by John E. Carroll, Paul Brockelman and Mary Westfall, with Foreword by Bill McKibben (University Press of New England, 1997).

EMBRACING EARTH: CATHOLIC APPROACHES TO ECOLOGY, edited by Albert J. LaChance and John E. Carroll (Orbis Books, 1995).