

# Deep Ecology, New Conservation, and the Anthropocene Worldview

---

*George Sessions*

The celebration of the 30th anniversary of *The Trumpeter* is a good time to take another look at the deep ecology movement and its development. A so-called “new conservation” movement has recently emerged that claims the traditional conservation/environmental movement (and deep ecology) had it all wrong. I will offer an informal summary of the deep ecology movement, while referencing more detailed analyses of the issues. Finally I will refer to a powerful new critique of the “new conservation” movement, inspired by the leading conservation biologist Michael Soulé: *Keeping the Wild: Against the Domestication of Earth*.<sup>1</sup>

## I.

In his original 1972/73 deep ecology paper, Arne Naess claims the deep ecology movement arose from *scientists* – ecologists who were out in the field studying the biodiversity and wild ecosystems throughout the world. They were also doing the work of philosophers, laying the foundations for the Age of Ecology and a new ecological worldview to replace the anthropocentric, mastery of Nature, and modernist worldview arising in the 17<sup>th</sup> and 18<sup>th</sup> centuries. Three of the most influential ecological spokespersons of the 1960’s were Rachel Carson, David Brower, and Paul Ehrlich.

Rachel Carson is usually given credit for giving birth to the modern environmental movement, but I am also arguing that she was also the mother of the deep ecology movement. For example, Arne Naess pointed out that “Rachel Carson’s *Silent Spring* (from which we can date the beginnings of the international deep ecology movement) insisted that everything, not just politics, would have to be changed.”<sup>2</sup> John Burnside claimed that she became the “unlikely founder of the radical [deep] ecology movement.” Indeed, Carson demanded “a new way of thinking about the world” and our relationship with the natural world, which encapsulates the fundamental intuition of deep ecology.<sup>3</sup>

---

<sup>1</sup> George Wuerthner, Eileen Crist, and Tom Butler, eds., *Keeping the Wild: Against the Domestication of Earth* (Washington: Island Press, 2014).

<sup>2</sup> Arne Naess, “Politics and the Ecological Crisis,” in George Sessions, ed., *Deep Ecology for the 21st Century* (Boston: Shambhala, 1995).

<sup>3</sup> John Burnside, “Rachel Carson,” *Resurgence & Ecologist*, <http://www.resurgence.org/magazine/article527-rachel-carson.html> (accessed 4 December 2014); extracted from an article in *The Guardian*, 18<sup>th</sup> May 2002.

The leaders of the deep ecology movement were not only ecologists, but some were also mountain climbers who spent a lot of time in wild Nature. David Brower was a Sierra backpacker and mountain climber who, when he became the first executive director of the Sierra Club in 1952, was handed a copy of Aldo Leopold's *A Sand County Almanac* to read. Leopold was, of course, one of the first major ecologists of the 1920's and 1930's, and a leading proponent of protecting wilderness. While environmental ethics theorists tend to concentrate on his "land ethic," Leopold's thinking fundamentally challenged the anthropocentric world view, claiming that humans were just *plain members* of the biotic community, and that we should learn to "think like a mountain." Such thinking goes back to Thoreau with his emphasis on wildness and John Muir's rejection of the anthropocentrism of "Lord Man" as he overcame his fundamentalist Christian upbringing.

Brower has been called "Muir reincarnate." At the Sierra Club Wilderness conferences throughout the 1950's and 1960's, ecologists convinced him of the need to curb human overpopulation to protect the Earth's remaining wilderness, and to see the primary value of wilderness areas as protecting wild ecosystems and biodiversity. In 1967, he placed a full-page ad in the *New York Times* calling for an Earth International Park to protect what was left of the Earth's wild species and ecosystems.<sup>4</sup>

Brower also encouraged Stanford ecologist Paul Ehrlich to write *The Population Bomb* (1968),<sup>5</sup> which sold 3 million copies, and brought to wide public attention what ecologists had been saying about human overpopulation since the 1950's. In the book he also agreed with historian Lynn White's classic 1967 critique of Christian and modernist anthropocentrism, and claimed that "we've got to change from a growth-oriented exploitive system to one focused on stability and conservation. Our entire system of orienting to nature must undergo a revolution." Johnny Carson invited Ehrlich onto the Tonight Show about twenty-five times to air his position. Ehrlich became the main spokesman for the scientific ecological community. But beginning with Ronald Reagan's presidency, he was attacked mercilessly by conservative Republicans and right-wing think tanks. Nevertheless, Ehrlich has been backed by top scientists and, in the 1990's, received the first AAAS/Scientific American Prize for Science in the Service of Humanity.<sup>6</sup>

---

<sup>4</sup> See the PBS documentary *For Earth's Sake: The Life and Times of David Brower*, DVD, directed by John de Graaf (Seattle: KCTS, 1989) and my own historical review, "Ecocentrism and the Anthropocentric Detour," in Sessions, *Deep Ecology for the 21st Century*.

<sup>5</sup> Paul R. Ehrlich, *The Population Bomb* (New York: Ballantine, 1968).

<sup>6</sup> See the PBS documentary *Paul Ehrlich and the Population Bomb* (San Francisco: KQED, 1996) as well as Anne and Paul Ehrlich, *Healing the Planet: Strategies for Resolving the Environmental Crisis* (Boston: Addison-Wesley, 1991) and *One with Nineveh: Politics, Consumption, and the Human Future* (Washington: Island, 2004).

II.

Along with Arne Naess, the top deep ecology and bioregional theorist has been the Zen Buddhist, mountain climbing poet, and English professor Gary Snyder. As the momentous ecological 1960's came to a close, which led to the mass demonstrations and teach-ins of Earth Day 1970, Snyder's 1969 widely distributed paper "Four Changes"<sup>7</sup> was the first comprehensive statement of a deep ecology position. Snyder discussed human overpopulation, chemical pollution, overconsumption, and the need to protect wildness. He made the radical claim that:

If man is to remain on earth he must transform the five-millennia-long urbanizing civilization tradition into a new ecologically-sensitive harmony-oriented wild-minded scientific-spiritual culture.... To achieve the changes we must change the very foundations of our society and our minds...economics must be seen as a small sub-branch of ecology...nothing short of total transformation will do much good. What we envision is a planet on which the human population lives harmoniously and dynamically by employing various sophisticated and unobtrusive technologies in a world environment which is 'left natural.'<sup>8</sup>

Essentially we've got it backwards. Overwhelming technologies now rule the roost, despite the warnings of George Orwell, Aldous Huxley, Jacques Ellul, and others.<sup>9</sup> And our worldview is basically dominated by economics and endless growth, what Lewis Mumford called "The Megamachine," and what Snyder calls the "Growth Monster." The ecologist David Ehrenfeld went on to characterise our contemporary worldview in his now classic *The Arrogance of Humanism* (1978).<sup>10</sup>

By way of summary, the leading environmental historian Donald Worster claimed that

back in the 1960's and 1970's, the goal [of the most thoughtful leaders] of environmentalism...was to save the living world around us, millions of plants and animals, including humans, from destruction by our technology, population and appetites. The only way to do that...was to think the radical thought that there must be limits to growth in three areas...limits to population, limits to technology, and limits to appetite and greed. Underlying this insight was a growing awareness that the progressive, secular, materialist philosophy on which modern life rests, indeed on which Western civilization has rested for the past three hundred years, is deeply flawed and ultimately destructive to ourselves and the whole fabric of life on the planet. The only true, sure way to

---

<sup>7</sup> Published in Garrett De Bell's *The Environmental Handbook* (New York: Ballantine, 1970).

<sup>8</sup> Ibid.; see also Gary Snyder, *The Practice of the Wild: Essays* (New York: North Point, 1990).

<sup>9</sup> See Wayland Drew, "Killing Wilderness," in Sessions, *Deep Ecology for the 21st Century*.

<sup>10</sup> David W. Ehrenfeld, *The Arrogance of Humanism* (Oxford: Oxford University Press, 1978).

the environmental goal, therefore, was to challenge that philosophy fundamentally and find a new one based on material simplicity and spiritual richness.<sup>11</sup>

What Worster is describing is basically what the deep ecology movement has been all about since Rachel Carson, leading further back to Aldo Leopold, and the key insights of Muir and Thoreau. But we have failed to change, and almost all aspects of the global ecological crisis have dramatically worsened since the 1960's and 1970's. Species and wild ecosystem loss have radically increased to the point where biologists are now talking about the Sixth Mass Species Extinction Event. In the 1980's we became aware of ozone layer depletion, and by the time the UN Intergovernmental Panel on Climate Change was established in 1988, the evidence convincingly showed that human caused global warming was underway (a powerful account of ozone layer loss and climate change is provided by journalist Diane Dumanoski's *The End of the Long Summer*.)<sup>12</sup> In November 1992, 1,575 of the world's leading scientists from sixty-nine countries signed the *World Scientists' Warning to Humanity*, which claimed that "Human beings and the natural world are on a collision course [...] A great change is required, if vast human misery is to be avoided and our global home on this planet is not to be irretrievably mutilated [...] No more than one or a few decades remain before the chance to avert the threats we now confront will be lost[...]." Also in 1993, fifty-eight of the National Academies of Science throughout the world came together to draft a similar statement.<sup>13</sup>

### III.

*So, given all this, why haven't we acted?! And why has America, the birthplace of the modern environmental movement, become the main global stumbling block in the way of effective environmental action? Part of the answer can be found in Kirkpatrick Sale's excellent history of environmentalism, *The Green Revolution* (1993),<sup>14</sup> which calls the 1970's the "Doomsday Decade" and the 1980's the "Reagan Reaction." In a recent interview (wherein he discusses his interaction with David Brower), Paul Ehrlich calls Ronald Reagan "the worst president in the history of the United States" in that he did more than anyone to destroy and reverse the progress the environmental movement had made up to that point. Ehrlich also points out that the ecologically maximum number of people that the planet can support is 1.5 to 2 billion and*

---

<sup>11</sup> Donald Worster, "The Shaky Ground of Sustainability," in Sessions, *Deep Ecology for the 21st Century*.

<sup>12</sup> Diane Dumanoski, *The End of the Long Summer: Why We Must Remake Our Civilization to Survive on a Volatile Earth* (New York: Three Rivers, 2009).

<sup>13</sup> See Anne and Paul Ehrlich, *Betrayal of Science and Reason: How Anti-Environmental Rhetoric Threatens Our Future* (Washington: Island, 1996).

<sup>14</sup> Kirkpatrick Sale, *The Green Revolution: The American Environmental Movement, 1962-1992* (New York: Hill and Wang, 1993).

we're now headed toward 10 billion.<sup>15</sup> The Democrats have not addressed the dramatic changes that need to occur, but the Republicans since Reagan have continued to deny the reality and seriousness of the ecological crisis, and now climate change. Spending huge amounts of money, they have shaped the views of large numbers of Americans through media disinformation and propaganda efforts. Given what's at stake – the survival of humanity and the future ecological viability of the Earth, this undoubtedly constitutes the most horrendous scandal of all time.

#### IV.

The development of various ideologies and movements that expand upon the West's dominant human "mastery over Nature" worldview are also contributing to this failure to deal with the global ecological crisis. For example, the New Age movement arose in the 1960's and 1970's and appealed strongly to Silicon Valley technophiles. Its guiding lights were the Jesuit priest Pierre Teilhard de Chardin and Buckminster Fuller. Teilhard believed that we should totally transcend the natural world and replace it with a human-controlled technological artificial environment. Humans envelop the world – the "noosphere." Teilhard's vision of humans totally taking over the world and eliminating wild Nature is actually the underlying theme of most of these anti-ecological ideologies and anthropocentric visions. For Fuller, the Earth is not an organism (like the Gaia theory), but rather a machine – a "spaceship" – and humans should be the astronaut-pilots. For both Teilhard and Fuller, humans are to technologically dominate and transform everything on Earth. Fuller claimed that technology has given us the power of God – he actually proposed that the Amazon rainforest literally be "bombed open" and totally developed by the Brazilians.<sup>16</sup>

Recently, a so-called "Bright Green Environmentalism" has arisen which has much in common with the New Age movement. Michael Shellenberger and Ted Nordhaus, of "The Death of Environmentalism" fame, appear to identify with the Bright Greens, when they criticize the goals of the traditional environmental movement.<sup>17</sup> Such critics reject the "Dark Green" (i.e., deep ecological) position that civilization has to be scaled down, and the Earth's wildness and biodiversity protected. For Bright Greens, global warming doesn't require major changes in society – we can technologically engineer our way past it, with alternative energy and by redesigning industrial society – and keep our high levels of consumption, endless growth, and all the rest.

---

<sup>15</sup> Kenneth Brower, *The Wildness Within: Remembering David Brower* (Berkeley: Heyday, 2012).

<sup>16</sup> See my "Deep Ecology and the New Age Movement," in Sessions, *Deep Ecology for the 21st Century*.

<sup>17</sup> Michael Shellenberger and Ted Nordhaus, "The Death of Environmentalism: Global Warming Politics in a Post-Environmental World" (2004), [http://www.thebreakthrough.org/images/Death\\_of\\_Environmentalism.pdf](http://www.thebreakthrough.org/images/Death_of_Environmentalism.pdf) (accessed 4 December 2014).

The Bright Greens see the basic problem not with our current civilization (the “Growth Monster”), but with traditional environmentalism. Paul Wapner’s new book (*Living Through the End of Nature*) attempts to defend the Bright Green position, but I find his concepts and reasoning thoroughly confused.<sup>18</sup> (I also critique the Bright Greens in “David Rothenberg, Pragmatism, and the Crowley/Deep Ecology Controversy,” as does Fred Buell in his excellent chapter “The Culture of Hyper-Exuberance.”)<sup>19</sup> Referring to postmodern deconstruction, Wapner claims that Nature is at an end, but elsewhere he says that he likes wildness, and Nature is not at an end! He argues that the Bright Greens are a “middle way” position, rejecting both “naturalism” (Dark Green deep ecology?) and “mastery over Nature” positions. But then he turns around and claims that “one does not leave Nature behind when one embraces technology, human ingenuity, or human’s ability to control Nature...bright greens certainly flirt with, if not get in bed with, the dreamers of mastery.”<sup>20</sup> Buckminster Fuller would applaud. Wapner says he wants to avoid the “gloom and doom” of traditional environmentalism, but this seems to result in a “feel good” position which is ultimately incoherent and inconsistent. And by refusing to accept the all-encompassing ecological worldview and social changes required, don’t Bright Greens fail to face the ecological realities the world scientists have increasingly tried to warn us about?

Another contemporary architect of the human “mastery over Nature” position is the ecologist Daniel Botkin.<sup>21</sup> Botkin claims that the ecologists of the 1960’s and 1970’s were too disapproving of modern civilization, with its high consumption and unending growth and development. Like Teilhard and Fuller, Botkin proposes that “Nature in the twenty-first century will be a nature that we make.” Botkin also recently testified at a Congressional hearing that scientists were exaggerating the seriousness of global warming/climate change. In Botkin’s book on Thoreau, he has a chapter criticizing deep ecology which displays very little comprehension of the position. He also claims that Thoreau would have gone along with the almost total humanization of the Earth, as long as a few swamps were left near cities where he could have a wild experience.<sup>22</sup> Botkin displays very little understanding of what Thoreau meant

---

<sup>18</sup> Paul Kevin Wapner, *Living Through the End of Nature: The Future of American Environmentalism* (Cambridge, Mass.: MIT Press, 2010).

<sup>19</sup> George Sessions, “David Rothenberg, Pragmatism, and the Crowley/Deep Ecology Controversy,” *ISEE Newsletter* (Spring 2008): 39-50; Frederick Buell, *From Apocalypse to Way of Life: Environmental Crisis in the American Century* (London: Routledge, 2004).

<sup>20</sup> Wapner, 211-212.

<sup>21</sup> Daniel B. Botkin, *Discordant Harmonies: A New Ecology for the 21<sup>st</sup> Century* (Oxford: Oxford University Press, 1990).

<sup>22</sup> Daniel B. Botkin, *No Man’s Garden: Thoreau and a New Vision for Civilization and Nature* (Washington: Island, 2001).

by wildness (on the other hand, Jack Turner does, in *The Abstract Wild*).<sup>23</sup> Most ecologists don't have much sympathy with Botkin, either. In Donald Worster's response to Botkin, he says that our first ecological priority must be to preserve "all the species, sub-species, varieties, communities, and ecosystems that we possibly can."<sup>24</sup> Otherwise, so much for the Earth's wildness, wilderness, and biodiversity! Yet even the environmental ethics theorist J. Baird Callicott has critiqued the wilderness concept, and seems to have little concern for wildness. (The responses by conservation biologist Reed Noss and others in Tom Butler's *Wild Earth* are excellent,<sup>25</sup> and I have discussed Callicott in my "Wildness, Cyborgs, and Our Ecological Future" paper as well.)

## V.

Postmodern deconstructionism entered the debate in a big way with the environmental historian William Cronon, who promoted major conferences at the University of California campuses in the mid-1990s with Donna Haraway to argue that Nature (and wilderness) needed to be "reinvented."<sup>26</sup> Cronon claimed that wilderness protection poses a serious threat to environmentalism, and that "responsible environmentalism" should be directed toward protecting the urban environment (the view taken by most of these anti-ecological theorists). While Cronon and Haraway both call for "reinventing" Nature, Haraway also calls for reinventing humans as cyborgs – part human and part machine.<sup>27</sup>

Paul Shepard, however, provided a powerful critique of postmodern deconstructionism. Shepard claims that postmodernism is the final step in the historical progression of anthropocentric human solipsisms, "a continuation of an old anti-natural position...It seems more like the capstone to an old story than a revolutionary perspective."<sup>28</sup> The postmodernists also claim that theoretical science doesn't describe anything that is real. Its descriptions of the universe (and the ecology of the planet) are "just another story" no more objective than any

---

<sup>23</sup> Jack Turner, *The Abstract Wild* (Tucson: University of Arizona Press, 1996). For an extended discussion of Turner, Thoreau, and wildness, see George Sessions, "Wildness, Cyborgs, and Our Ecological Future: Reassessing the Deep Ecology Movement," *The Trumpeter*, 22 no. 2 (2006): 121-182.

<sup>24</sup> Donald Worster, "The Shaky Ground of Sustainability," in Sessions, *Deep Ecology for the 21st Century*.

<sup>25</sup> Tom Butler, ed. *Wild Earth: Wild Ideas for a World Out of Balance* (Minneapolis: Milkweed Editions, 2002).

<sup>26</sup> See William Cronon, ed., *Uncommon Ground: Rethinking the Human Place in Nature* (New York: W.W. Norton & Co., 1995).

<sup>27</sup> The most powerful critiques of deconstructionism as applied to Nature and wilderness that I am aware of are David Kidner, "Fabricating Nature: A Critique of the Social Construction of Nature," *Environmental Ethics* 22, no. 4 (Winter 2000): 339-357 and Eileen Crist, "Against the Social Construction of Nature and Wilderness," *Environmental Ethics* 26, no. 1 (Spring 2004): 5-24. See also the discussion of Cronon and postmodernism in my "Wildness, Cyborgs, and Our Ecological Future" paper and Gary Snyder's "Is Nature Real?" in Butler, *Wild Earth*.

<sup>28</sup> Paul Shepard, "Virtually Hunting Reality in the Forests of Simulacra," in *Reinventing Nature? Responses to Postmodern Deconstructionism*, ed. Michael Soulé and Gary Lease (Washington: Island, 1995).

other. I guess I can now join the Flat Earth Society, believe that the Earth is seven thousand years old, that dinosaurs and humans were on Earth at the same time, that humans were specially created, *etc. etc.*, with a clear conscience. The “dumbing down” of America proceeds apace.

## VI.

In contrast to “mastery over Nature” worldviews, E.O. Wilson’s biophilia hypothesis holds that humans genetically need and love wild Nature. In his provocative paper “Love It or Lose It,” David Orr claims that, for Wilson, “biophilia is not only innate but a sign of mental and physical health.” However, biophobia, Orr claims, is common among people overwhelmed with technology who spend almost all of their time in urban environments. Has Silicon Valley addicted a whole Digital Generation to not-so-smart phones and Facebook, turning them into narcissistic biophobes? Orr asserts that “biophobia is not OK for the same reason that misanthropy or sociopathy are not OK.” Whole societies are distancing themselves from wild environments. “Is mass biophobia a kind of collective madness? The drift of the biophobic society, as George Orwell foresaw...is toward the replacement of Nature and human nature by technology....”<sup>29</sup>

Paul Shepard has developed an even more elaborate theory than Wilson’s, which claims there is a genetically based human ontogeny that involves bonding with wild Nature.<sup>30</sup> According to Shepard and Wilson, we would be losing the capacity to become fully healthy human beings if we destroyed the opportunity to be in wilderness for considerable periods of time and thereby develop our wildness.<sup>31</sup> This provides another perspective on Thoreau’s claim that “In Wildness is the Preservation of the World.” Therefore, Rachel Carson, Arne Naess, Michael Soulé, and many others, have written about how important it is to get young children out into wild Nature so they can begin to bond with it at an early age. One begins to wonder to what extent Teilhard, Fuller, Botkin, Schellenberger and Nordhaus, Haraway, and the rest of the anthropocentric “mastery over Nature” theorists are ultimately motivated, at some psychological level, by a strong dose of biophobia!

---

<sup>29</sup> David Orr, “Love It or Lose It,” in *The Biophilia Hypothesis*, ed. Stephen Kellert and E.O. Wilson (Washington: Island, 1993).

<sup>30</sup> See Paul Shepard, *Nature and Madness* (Athens, Ga.: University of Georgia Press, 1982) and *Coming Home to the Pleistocene* (Washington: Island, 1998).

<sup>31</sup> See also Sessions, “Reinventing Nature, The End of Wilderness? A Response to William Cronon’s *Uncommon Ground*,” in *The Trumpeter* 13, no. 1 (1996).



VII.

These theoretical critiques by the “mastery over Nature” theorists and critiques of deep ecology and the traditional goals of the environmental/conservation movement have intensified since the 1990’s. We shouldn’t have been surprised, but this has now resulted in a new movement – the “new conservation movement” and the embracing of the Anthropocene Era – that seeks to “hijack” or replace the traditional movement. Conservation biologist Michael Soulé has been especially disturbed by this, and a new anthology edited by George Wuerthner, Eileen Crist, and Tom Butler, *Keeping the Wild: Against the Domestication of Earth*, is the result. The title says it all, and the essays by conservation biologists and others do an outstanding job of confronting the attempt to destroy wilderness and the wild. I will not attempt to summarize the points – it is a must-read book, and lays out the current crucial environmental/ecological battle.

Americans have prided themselves on their pragmatism, but individual problem solving does not serve them well when the issue is a major worldview change, and seeing the “big picture.” We need a new generation of Dark Green/Deep Ecology theorists and environmental journalists, who can write in a way to reach the general public about the need for these big changes. Wouldn’t it be convenient if the conservation movement was to become just an adjunct to the “mastery over Nature” movement? Then the public would be totally “in their pockets” – there would be no adversarial position to have to contend with. The “mastery over Nature” proponents would have their way and, if the world’s top scientists are right, the destruction of the ecological integrity of the Earth, and the Mass Extinction of Species, *including humans*, will likely have occurred by the end of the 21<sup>st</sup> century. Concentrating, as we now are, primarily on lowering carbon emissions to counter climate change is absolutely crucial but a gross oversimplification of the problem. We have to see the “big ecological picture” and work on all the key problems involving a major change in the direction of civilization. But some environmentalists are now claiming that we have waited too long and it is already too late. Oh no! Here comes the “doom and gloom” again. I personally think that as responsible human beings we should do everything in our power to turn things around and save ourselves, the ecological integrity of the Earth, and other species. But to what extent have most people lost the capacity to “seek the truth,” face reality, and “do the right thing?”