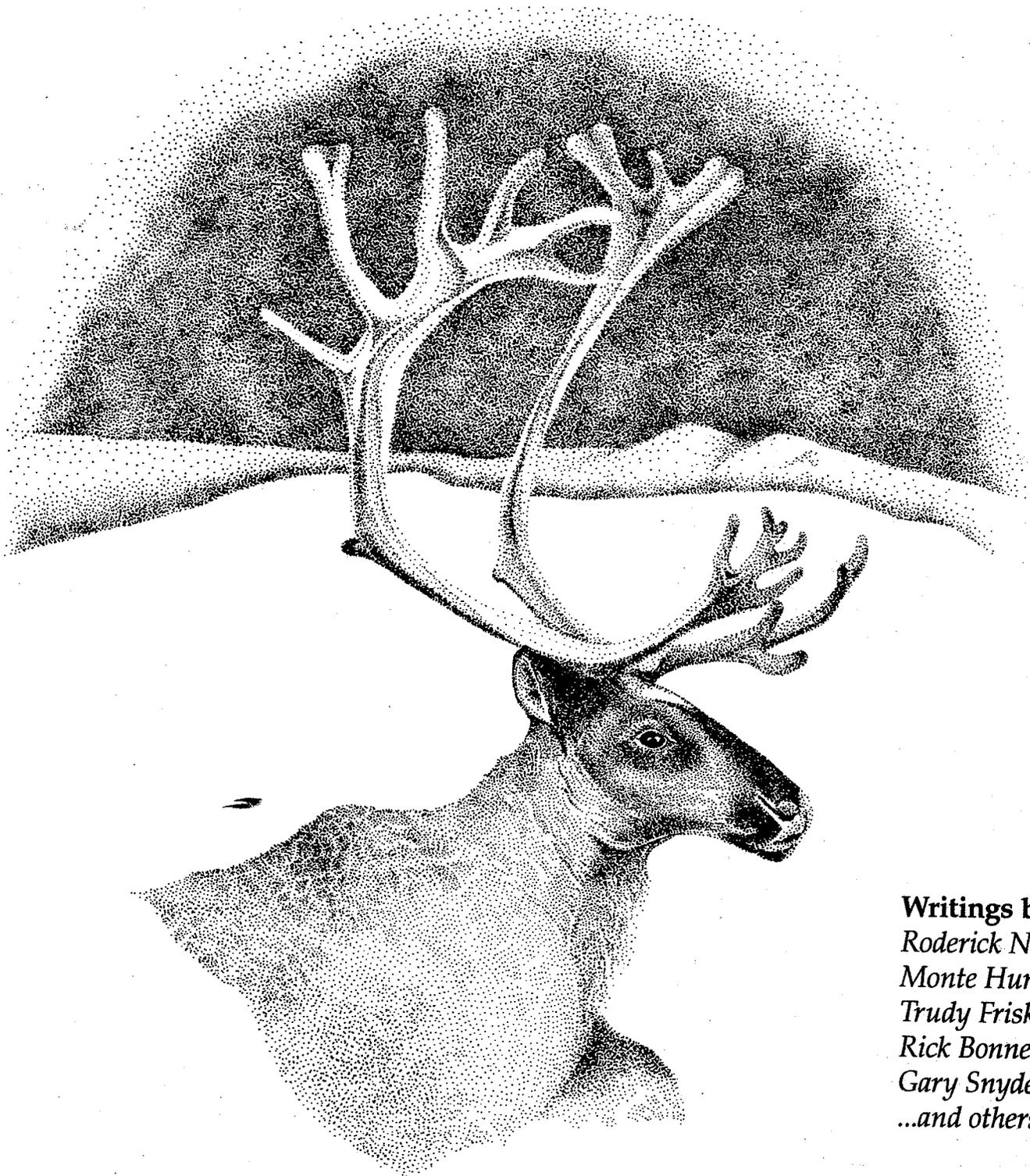


# Wild Earth

VOLUME 1, NUMBER 4

WINTER 1991/92

Issue Theme:  
*Devastation in the North*



Writings by:  
*Roderick Nash*  
*Monte Hummel*  
*Trudy Frisk*  
*Rick Bonney*  
*Gary Snyder*  
*...and others*



VOLUME 1  
NUMBER 4

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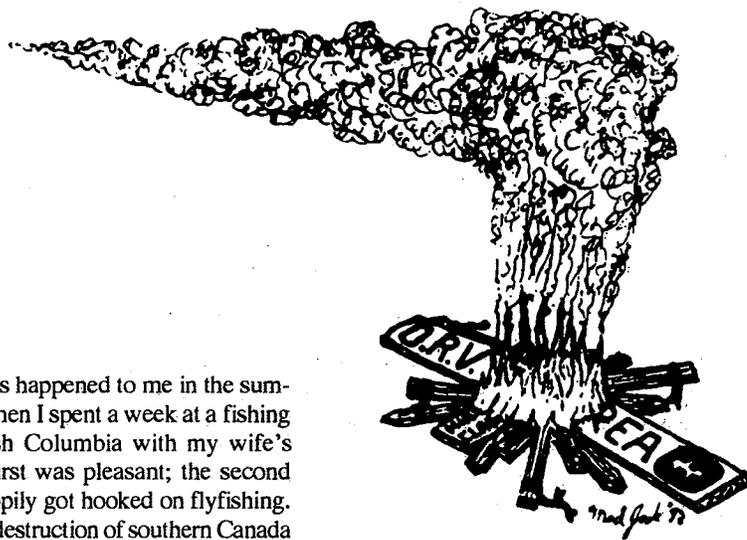
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Wild Earth

# AROUND THE CAMPFIRE



Two things happened to me in the summer of 1986 when I spent a week at a fishing camp in British Columbia with my wife's family. The first was pleasant; the second dreadful. I happily got hooked on flyfishing. But, sadly, the destruction of southern Canada smacked me between the eyes with the fury of a rogue Moose. In "The Dark Side of the Return of the Wolf" (in *Confessions of an Eco-Warrior*) I wrote about the three-hundred-mile-wide swath of destruction across southern Canada and how that "development" is cutting off the wild lands in Washington, Idaho, Montana, Minnesota, and New England from the great northern wilderness running to the Arctic Ocean.

Despite the logging, plowing, damming, roading, and cityfying that has occurred in southern Canada, the boreal forest and tundra to the north has remained a great refuge for wildness and for the human spirit. Canada, more than any other nation with the possible exception of Russia, has the opportunity to preserve true ecological wilderness with all native species and natural processes intact.

At least so I thought until I visited Calgary and Edmonton, Alberta, last fall to speak at several colleges. Afterwards, over the mandatory beers (but they are better in Canada than the US), I was privileged to talk to a number of grassroots wilderness activists who are fighting to keep Alberta Alberta. I was dismayed to learn that the great northern wild is not secure, that the boreal forest stretching from Alaska to the Atlantic is under an industrial assault rivaling the dismemberment of the tropical rainforests of Brazil, Indonesia, and Malaysia.

How can this be? Canada? Good, grey, dull, peaceful, progressive Canada. Canada the civilized and middle-class. It has universities, scientists, wealth; it is a champion of reason in world affairs. How can it be making the same awful mistakes earlier made by the

United States and currently being made in the poverty-stricken tropics?

As you read this issue of *Wild Earth* with its theme of wilderness destruction in Canada, you will realize why I call Canada "Brazil North." Nowhere else on Earth today is wilderness—biodiversity with integrity—being ripped apart, shredded, and hammered into the tawdry articles of international commerce as quickly and intensely as in Canada. Yes, it's also happening in Irian Jaya, Sarawak, and Rondonia, but what is going on at the end of the road in British Columbia, Alberta, Manitoba, and Quebec is unmatched for its sheer magnitude and stupidity.

It is time that international pressure be brought on the national and provincial governments and on the business leaders of Canada, as pressure has been applied on Third World nations. It is time that conservationists around the world raise such a hue and cry that when Canada is mentioned, images of forests falling and native people being driven from their homes spring to mind just as they do when we hear the word "Amazon."

Yet, Canada remains the paramount hope for significant wilderness preservation on this planet. Canada has some of the most visionary, effective, committed, and intransigent conservationists in the world. The ecological fabric of the bulk of the country remains intact. If the destruction can be stopped, if the boreal forests of Alberta and Manitoba can be saved, if the nightmarish James Bay project can be terminated, if the last great coastal forests of British Columbia can be spared the chainsaw,

if the mining threat to the Tat is thwarted, if . . . If self-conscious restraint can come to Canada, Canada can bless the world with true wilderness.



I sometimes have to believe that certain ideas float around in the air like circling birds and find lodgment in several brains at the same time. Such an idea is the notion of using the principles of conservation biology to devise ecological preserve systems that connect isolated Wilderness Areas and National Parks into larger functioning ecosystems that are able to maintain their natural integrity. *Wild Earth* magazine is a child of that notion—particularly of its more grandiose sibling which is to plan a connected and buffered wilderness preserve system for the entire continent of North America.

Ideas, however, are just ideas, no matter how many people pluck them out of the air and nod enthusiastically. For one of these airy ideas to become reality, an individual is needed who can push others out of inertia. Doug Tompkins is the man who just pushed a bunch of us off the precipice. You can read the details in David Johns's report in this issue of how a dozen of us have formed a steering committee to begin pulling together wilderness restoration and biological corridor proposals for all of North America. Rod Mondt and I are establishing a clearing house in Tucson for that purpose. But it was, frankly, Doug Tompkins with his boundless energy, enthusiasm, and prodding who got us off our butts to organize the meeting, and who provided the where-withal and gracious hospitality to hold it. Thanks, Doug. We needed the push.

This tying together of a comprehensive North American Wilderness Recovery Strategy is one of the two main focal points of *Wild Earth* (the other is providing a voice and forum for the New Conservation Movement). You will read much about the recovery effort in coming issues.

Happy Trails  
Dave Foreman

# Island Civilization

## *A Vision For Planet Earth in the Year 2992*

by Roderick Frazier Nash

It is no news today that Planet Earth is not well. The problem, in a nutshell, is that one species out of thirty-odd million is growing in both its numbers and its impact on the environment to levels that are unsustainable on the finite spaceship that carries the only life of which we are aware through the cosmos. In the larger community, the global ecosystem, *Homo sapiens* is no longer a good neighbor. Our ability to co-exist responsibly with other life forms began to disappear about 15,000 years ago, when we turned from hunting and gathering to herding and agriculture. Since then, through technological civilization we have carried environmental modification to dangerous extremes. Now there are signs that in our tendency toward uncontrolled growth, humans are a kind of cancer in the Earth organism. Like cancer cells, we destroy normal systems. Like cancer, we are very good at growth. We both do well in frontier-like contexts where expansion is a virtue. But ultimately, and ironically, we fail from our own success. It is well to remember that at the moment of a cancer's greatest achievement, its host organism is near death, **but so is the cancer.** Humans too will go down with the ecological ship unless we cultivate the capacity for self-restraint.

We are presently in the midst of the most powerful environmental movement in history. There is talk in the 1990s of a green decade and a coming green century. And we are starting to do some things reasonably well. Recycling, non-polluting production, and energy efficiency are more than slogans. But most of today's environmentalists lack vision. I mean long-term vision: a conception of what we want civilization to be like in a thousand

years. Without it, we have no compass to guide us through what will certainly be rough ecological seas ahead. Lacking long-term vision, we are like a skier whose focus is fifty feet down the hill. The short-term performance (contemporary conservation) may be impressive. But up ahead there is a cliff (the thresholds of irreversible change in the planet's life-support systems), and the myopic skier runs the risk of carving perfect turns right into the abyss! We need bifocal vision. We must operate in the day-to-day and year-to-year arena, but at the same time, we must keep an eye on the big, long-range picture. We are now playing God. For better, but probably for worse, the future of the planet is in our often clumsy hands.

The vision I am about to advance will be controversial because I am addressing the big, tough issues that entail subordination of human interests to the interests of the biotic whole. Even biocentrists and "deep ecologists" will disagree with parts of my proposal. But before the fur flies, let me urge the importance of futuristic thinking in general. If you don't like some or all of my dream of Island Civilization, create your own. The essential thing is that we occasionally lift our eyes from everyday details to the far horizons of planetary possibility. Where do we want our species, and nature in general, to be in a millennium? Without such goals there can be no direction. And without direction we drift into an increasingly frightening environmental abyss.

I will begin with four hopes or objectives that I entertain for the future of the human endeavor on Earth. The adjustments I then propose are designed to assist their realization. **First**, I hope our presence on this planet can be sustained for many thousands of years. I do not share the misanthropy of the most radical deep ecologists whose extreme biocentrism persuades them that the best course for *Homo sapiens* is species suicide. Neither am I among the futurists who expect

that Earth will no longer be our principal habitat in a thousand years. Regardless of whether expansion into space works or not, it seems to me that we are morally obligated to care for our first home. To abandon a ravaged Earth for greener planetary pastures would be, at minimum, the height of ingratitude.

**Second**, I believe in the existence rights of all species and of normal ecosystemic processes. I further believe that these rights trump the rights of humans to increase their numbers, their affluence and their claim to habitat. I hope that the avalanche of species extinctions occurring presently can be curtailed and that environmental ethics will guide future people-planet relationships. The moral community should eventually be identical with the ecological one. I anticipate natural rights expanding to embrace the rights of nature. I hope that in a thousand years not only all human beings, but four-footed beings and rooted beings and flying beings and microbotic beings will **all** join together in an expanded ecological brotherhood. Building on Martin Luther King's 1963 rhetoric, I say let freedom ring not only from but **for** Stone Mountain in Georgia and also for oceans, rivers, and forests everywhere.

**Third**, I hope that a meaningful amount of wilderness will remain on this planet forever. I do not applaud a totally humanized, homogenized environment, no matter how beneficent or benign. Wilderness preservation is essential, not merely for human recreation, but as a gesture of planetary modesty on the part of a species that desperately needs to be reminded that it is a member and not the master of the ecosystem. Aldo Leopold understood this in the 1940s when he warned that the first law of successful tinkering is to save all the parts. The second law, we could now add, is to save the instructions, and these are contained in healthy wild ecosystems.

**Finally** (and here I expect to part company with respected colleagues on the more

radical frontiers of environmentalism), I hope for full development of the human intellectual and technological potential. The sticker "Back to the Pleistocene" does not appear on my bumper. I regard many characteristics of modern civilization as worthy of protection and extension. What's wrong with symphonies, universities and modern medical technology? Computers, television, and nuclear power are marvelous tools—if we only knew how to use them responsibly. And in a thou-

sand years what wonders might exist? Technology, you see, is not the basic problem. Machines only express human values. Change these values and you can alter the most basic pollution of all: mind pollution. And, since we are in control here, profound change is theoretically possible. The trick, as Henry David Thoreau recognized a century and a half ago, is "to secure all the advantages" of civilization "without suffering any of the disadvantages." Moreover, don't a reasonable

number of humans have as much right to fulfill their evolutionary potential as any other form of life? **The essential proviso is that in doing so they don't compromise, or eliminate, the chances of other species to do the same.**

My thousand-year vision starts with the assumption that on a finite planet, shared with other species, only limited numbers of humans can enjoy unlimited opportunities. Restraint, in other words, is the key to progress. Less is indeed more. The first essential limitation must be in our numbers. We are now 5.3 billion and growing—fast. Demographers think that between one and two billion humans, living carefully and efficiently, is a sustainable population. So, in 2992, I call for about 1.5 billion human beings maximizing their potential while respecting the potentials of other beings. Wouldn't this be preferable to fourteen or forty billion barely clinging to a pathetic existence on a biologically impoverished planet?

The other major application of restraint that my proposal demands concerns living space. From the point of view of other species, one of the worst characteristics of contemporary human civilization is its tendency to sprawl. In the past five hundred years in the temperate latitudes, we have witnessed a frightening explosion of the human-modified environment. In Europe and large parts of Asia, Africa and North America we approach saturation. Unchecked, this expansion could affect every part of the planet. Remember, we are facing in the next thousand years an extrapolation of technical abilities beyond our wildest imaginings. Domed cities covering the poles and undersea subdivisions are very conceivable. **Instead of this explosion, I call for implosion.** My dream for the next millennium envisions most of the

*continued next page*



1.5 billion human beings living in five hundred concentrated habitats. Integrated into each one would be the means of food and material production and energy generation. In the vast spaces between these habitats would be the habitats of other species. Most of the planet in 1992 should be returned to a wilderness condition. Instead of dominating the globe, mankind and its works should occupy small niches in a continuous wild ecosystem. Instead of islands of wildness in a matrix of civilization, as presently exists, we would have **Island Civilization**.

I use "habitats" rather than "cities" to imply that these future human environments will be unlike anything with which we are familiar. Accommodating about three million people each, they could be a mile high, both above and below ground or, perhaps, the surface of the sea. The technology of 1992 would permit habitats to exist anywhere on the planet. Civilization could be expected to expand on the poles, but it would shrink radically in the temperate latitudes. To more fully understand what I have in mind consider that legally designated Wilderness Areas amount in 1992 to about 2% of the contiguous forty-eight American states. In 1992 the ratio would be reversed; Island Civilization would need no more than 2% of American soil. This is a much bigger "Outside" than even Dave Foreman has envisioned. It needs some explanation.

First, bear in mind that in a thousand years the 1.5 billion people on Earth will be using technology inconceivable today. For example, there will be no need to cut trees in 1992; wood will have been outmoded as a building and printing material (along, perhaps, with newspapers and books!). With energy, water, materials and foodstuffs produced inside or close by the habitats, dams and aqueducts are gone and with them all long-distance pipelines, cables and transmission wires. Freeways and railroads no longer exist. All transportation in 1992 is in the air and, more likely, instantaneous. Science fiction, you say? Well, consider what was thought in the 1890s about a moon landing. I think that if humans can keep the planet habitable, they have unlimited technological potentials. Turn our best minds loose on the technical challenges of Island Civilization (rather than repairing the old, unsustainable paths) and it is not necessary to go back to the Pleistocene for a model of low-impact living.

What would living in Island Civilization be like? In addressing this important consideration it is necessary to put aside the termite-mound apartment house image. I am confident that architects of the future, building on the ideas of visionaries like Paolo Soleri, will be capable of designing very dense but

very appealing single-structure habitats. Of course there will be sacrifices. What will be gone completely in the imploded habitat of 1992 is the "American Dream": single family homes on half-acre lots widely separated from business and cultural centers and linked with networks of roads into a nearly continuous fabric of civilization. But while I have in mind an **intensely** urban culture, I envision far more possibilities for contact with high-quality wilderness than exist at present. Just a few miles from the civilized islands will be where the wild things are: bears and wolves and elephants and tigers but also the full complement of the more humble species whose presence defines biodiversity and ecological health. Those who venture into this paradoxically wilder wilderness of a higher-technological culture must take it on its own terms. This will mean restraint in how people get into and what they take into wilderness. It will mean training and licensing in responsible wilderness etiquette. But as I see it back-country skills would be commonplace in 1992 because every able-bodied citizen would have attended the University of the Wilderness. This educational interlude would be required between secondary schooling and college or career at the age of about twenty. I am not talking about two-week Outward Bound courses here but several years of subsistence hunting and gathering completely out of contact with the civilized islands. Here is where we do go back to the Pleistocene! Young people, organized in tribal groups, follow the caribou through the mountain passes and fish for the salmon whose runs have been restored to the free-flowing rivers. They learn the ancient and primitive skills and, more importantly, the land wisdom and reverence of indigenous peoples.

Could someone live off the land a thousand years from now? You bet, considering that the numbers of eighteen to twenty-one year-olds doing so would be approximately equal to human population in the Pleistocene, and also considering that ecological integrity (especially healthy populations of edible animals) would have been restored. For example, in 1992, the Great Plains of the United States would, according to my scenario, consist of three habitats occupying a few dozen square miles and 100,000 square miles of wild prairie. The buffalo would be back along with the wolf and the grizzly. Humans could take their place along with the other predators. Southern California would have its several habitats, but on the hundreds of miles of wild shoreline, foraging opportunities would be as good as they were for the ancient Chumash. Also as good as ever would be the chance to acquire an environmental ethic which underlies the ecological responsibility of Island Civilization.

How to make the dream of Island Civilization come true is beyond the scope of this outline proposal. Suffice it to observe that if the reform route proves ineffective the radical option of force or revolution will make increasing sense and particularly to a population shocked and frightened by the early-warning signs of ecological catastrophe. Violence, after all, has figured frequently in human history as a way to change paradigms. One thinks of the American Revolution and the Civil War. The Abolitionist movement led in the 1860s to a violent solution to the problem of slavery in the United States. Environmentalism could similarly rationalize the use of force for the liberation of nature. Or, as some are starting to argue, the violence may come from nature, striking back and purging itself of the threatening human cancer. But whether by choice, coercion or catastrophe, there **will** be an end to the present unsustainable levels of growth and devastation. It may be closer than we think. The 21st century could well be the last one with the option to correct the course of civilization in a mood of deliberation.

I am an historian, and from my perspective mankind now stands at a crossroads not merely of human history but of the entire evolutionary process. Life has evolved from stardust over billions of years until one species has developed the capacity to disrupt the whole biological miracle. But amidst the fear to which this thought leads there is one comfort. We are not threatened, like the ecosystem of the dinosaurs, by a death star. **We are the death star.** We could also be the star of ecological salvation. This is simply the greatest challenge life on Earth has ever faced. Will the vision of Island Civilization help?

*Roderick Frazier Nash is a Professor of History and Environmental Studies at the University of California Santa Barbara. He is the author of Wilderness and the American Mind (1982), The Rights of Nature: A History of Environmental Ethics (1989), and American Environmentalism (1990).*



# A Minority View

I cannot resist an editor's rejoinder to the foregoing. First, though, let me stress the importance of Professor Nash's article, whatever the merits or demerits of his specific suggestions. Rod Nash has made a profound suggestion: People need to begin to plan in accordance with the needs of life forms—all life forms—1000 and more years hence. We encourage responses to his provocative essay. *Wild Earth* will probably only be able to print a small proportion of them, so please send copies to Roderick Nash, Environmental Studies, UCSB, Santa Barbara, CA 93106.

I agree with about 98% of Rod Nash's vision but find the other 2% troubling. I offer the following objections to "Island Civilization" with the utmost respect for Professor Nash—one of the premier historians and environmental ethicists today. No one else associated with *Wild Earth* should be held accountable for what follows. These objections emanate from the perspective of a walking anachronism.

1) To speak of Earth as a "spaceship" or "ecological ship" is to heave insults at the only biologically diverse orb we know. This may seem a minor point, but the metaphors we use strongly influence the way we think about and relate to the natural world.

2) As Jerry Mander argues in his brilliant new book (*In the Absence of the Sacred*), it's time we disabuse ourselves of the notion that technology is neutral. Technologies developed in the last 10,000 years have almost invariably led to exploitation of Nature, centralized power structures, and biological impoverishment. History does not lend itself to the view that post-Paleolithic technologies are likely to be used in a benign and sustainable fashion. As our ancestors developed tools and precursors to technology, they should have rested content with earthen cookware, spears (perhaps), and—most important—fire. We could have spent happy millennia contemplating, telling stories about, weaving myths around, and perfecting appropriate uses of the tremendous power we know as fire.

3) Professor Nash used 3 too many zeros in his recommended population: 1.5 billion would almost certainly be incompatible with a full flowering of biodiversity; 1.5 million is

plenty. Some will say the idea that we can peacefully reduce our population to 1.5 million is laughable. Not so. If, starting now, we all simply refrain from giving birth, we can reduce our numbers by 3 orders of magnitude in less than 100 years. (Admittedly, implementing a birth moratorium will be problematic.) Moreover, 1.5 million far exceeds what most conservation biologists consider a minimum viable population for a large mammal. If human migration corridors were maintained (e.g., paths along what once were highways), a global human population of under 1 million could easily preserve its genetic diversity.

4) We may now be "playing God," but we shouldn't be. Conservationists should oppose such hubris at every turn. The thought of biological evolution being directed by a bunch of bumbling naked apes—some of whom wear thick glasses and pointy shoes—is, at best, distasteful.

5) Islands of civilization would almost inevitably cause extinctions, thus violating the existence rights of other beings. If we take seriously the idea of intrinsic, inalienable rights for all life forms, we cannot justly consign any sizeable portion of the biosphere to human domination. Every area has unique life forms. Biologists are continually raising their estimates of the number of species on the planet (as well as the number going extinct every day). Recent studies suggest that even the ocean floor (which Nash says might someday be inhabited by humans) has indescribably great biodiversity. As scientists do more intensive studies of ocean sediments, forest soils, stream bottoms, caves and other relatively unknown environments, they may well find such high and localized diversity of organisms that we'll be forced to concede that any thoroughly humanized landscape will extinguish singular life forms—each with as much right to exist as *Homo sapiens*.

6) Island civilization would perpetuate our alienation from Nature. If we spend most of our lives in humanized environments, and especially if we don't experience the Big Outside until the age of 18, we will not gain Earth wisdom or knowledge of place. We'll be bleary-eyed dweebs.

7) Unless we accept the old Judeo-

Christian idea of *creatio ex nihilo* (creation from nothing, an ability historically attributed only to God and capitalists), it's hard to see how large concentrations of people could sustain themselves without exploiting outside regions. Humans cannot persistently flout the laws of Nature, in particular the 2nd law of thermodynamics (the entropy law).

8) Again, humans will remain essentially at odds with Nature as long as they employ high technology and live in artificial environments, as long as they refuse to be regular members of the biotic community. Moreover, as long as the human habitats are at odds with Nature, they will remain like a cancer. It seems wildly improbable that a living organism can long play host to 500 benign tumors. Sooner or later, a tumor will turn malignant. Metastasis will follow; and before long, we'll be back to 1991.

To conclude these rough and hasty objections, Roderick Nash has done us a great service by making us look ahead, and has given us an enticing glimpse of a possible world 1000 years hence. However, I suggest that about 2% of Rod's vision needs radical modification. We are indeed like skiers headed blindly toward an abyss. Let us, then, stop, shed these plastic appendages, climb back up the mountain while we still remember the way, and glissade gracefully down the side from whence we came ... back to the Pleistocene.



Before descending, though, I'll return to the present for a moment, albeit still from a recidivist's perspective: David Johns gives a good overview in this issue of the recent North American wilderness recovery strategy meeting. I believe, however, that one idea discussed at that gathering needs more emphasis—expanding wilderness. Continental wilderness recovery not only entails an ongoing process of refining maps and such, but is in itself (or will be if we succeed) an ongoing process.

We would be unwise to pronounce a limited wilderness preserve system as an ultimate goal. The work of rewilding this continent is the work of many generations. Any

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