

First People - Firsthand Knowledge

by Dennis Martinez

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Native People have taken care of the natural landscape for thousands of years. If we lose their wisdom, we lose the land as well. White images of Indians have always changed with the social and intellectual climate. Modern environmentalists have drawn inspiration from the noble savage who "walked lightly on the land," failing to appreciate the high degree of Indian influence on what they see as a "pristine" environment. Some Western intellectuals, in reaction to the romanticization of indigenous peoples, have emphasized the alleged impacts to Paleolithic hunters, such as the mega fauna extinctions of the last Ice Age, while refusing to accept Native peoples as competent conservationists and land stewards.

Unheard in the ruckus are Native peoples themselves. Few Western intellectuals have lived or worked in traditional, as opposed to assimilated, Indian communities. Few resource managers or environmentalists have read the wealth of documentation in ethnohistory and ethnography of indigenous land stewardship and conservation available in libraries and archives (most still residing in raw field notes) or contained within the oral tradition still passed from generation to generation by elders in their own languages.

As long as Native peoples are not heard, non-Native audiences will continue to deal in caricatures. To begin to understand the Native perspective, it's important to consider some often overlooked facts. For example:

- Anthropologists have grossly underestimated both prehistoric indigenous populations and the length of time this hemisphere has been occupied - promoting the myth of an empty continent, ready for settlement.
- Some indigenous cultures (Aztec, perhaps Mayan and Anasazi) may have made serious environmental mistakes. But what about the others? Where mistakes were made (and generations punished), lessons were learned for the future.
- Indigenous peoples differ tremendously in cultural practices and cosmology. Yet their conservation ethics (stewardship practices, hunting and gathering limits, taboos, ceremonies of world renewal, thanksgivings, and stories) are nearly universal in their understanding of a sustainable land/culture relationship.

The elders say that if you don't take care of the plants and talk to them and relate to them, they get lonely and go away. To the sophisticated cynical modern mind that seems like a quaint belief yet there is a profound truth in it. If you take care of the plants and animals, they come back again next year to give you food or medicine or shelter or clothing. It's a very simple truth, yet it has been overlooked by most of the environmental movement. It

worked for tens of thousands of years, and still works in many remote Indian communities scattered throughout Canada, the United States, Mexico, in Latin America, and among indigenous peoples globally.

If you did something bad to the plan animals, their spirits would return to the spirit villages and report what you did. That's how Indian children were instructed. This kind of restraint and respect was built into every Indian worldview - and it still exists. Indigenous ethics had spiritual teeth, and entailed a high degree of personal responsibility for the state of the environment. To disregard these ethics was to starve or to face personal calamity or genetic extinction.

Yet this tradition of care giving is fading away, because indigenous peoples were separated from their land base. The old-time traditionals are beginning to lose out to nearly assimilated "progressives" willing to sell their children's birthright for short-term profit. But land health is a prerequisite for cultural survival, and cultural survival is a prerequisite for land health. Support traditional people and you support conservation. Support reserved treaty rights and co-management on public lands ceded by treaty and you will support the environment.

By every early pioneer account, biodiversity in this hemisphere was so incredible as to be likened to the Garden of Eden. Yet when I talk like this, red flags go up among academics. They say I'm romanticizing the past, looking backward when I should be looking forward. But systems analysis and chaos theory today show us what quantum mechanics showed us back in the 1920s: that the ability of human beings to predict trends in matter or living organisms is severely limited. That is a humbling thought.

And we need humbling thoughts. We are infatuated with our intellectual abilities and capacities to predict and analyze, when what we need is to learn to listen and to observe over time in one place, something indigenous peoples - indeed the ancestors of everyone here - once did. And they survived a long time. Survivability is the acid test of cultural adaptability. That part of the indigenous past that is still retrievable is a better guide for the future than limited computer modeling (although computers are a useful tool up to a point).

Before computers, good scientists were good observers, like the old-time general naturalist who spent a lifetime in the forest in one place and saw what nature was really like. Book learning was not imposed on the raw flux of natural complexity. Today, transects, plots, and computer simulation have taken the place of the blank mind waiting patiently to be slowly filled with firsthand knowledge. There is no substitute for the collective experience of Native peoples over vast stretches of time.

Listening and learning is what made Native Americans into wise environmental managers. Yet this wisdom is rarely recognized. How many people know that Indian women in the San Francisco Bay Area were prescription-fire experts? How many people know that the forest structure, function, composition and quality of habitat of areas like

Yosemite were at least partly determined through indigenous selective harvesting and fire, through working with and assisting natural processes?

When settlers came over the Oregon Trail, they thought that the Indians did nothing to enhance the productive capabilities of the land. This was their primary justification for genocide. Because Indians roamed wide spaces, the newcomers automatically assumed that Indian people were maybe noble, but certainly didn't count much in the landscape.

Today, nothing has changed. Indians are given token appreciation by people interested in their ceremonies and their ways, and by environmental groups desiring a charismatic morning prayer, but there is no real support for their cultural survival. And little credence is given to the impact that the Indian people have had on the very structure and composition of the landscape. The heritage of Indian people is the heritage of everyone. There are 300 million indigenous people in the world. They are land based and have traditional ways fairly intact, and they hold the collective heritage of every human on Earth. We're talking about perhaps 120,000 years of human co-evolution with the natural world.

If you are looking for models of this relation of Indians to the landscape, and its relevance to the health of the environment, they're not too far away. Recently, I was at Walpole Island Reserve, which is Ottawa, Potawatomi, and Anishinabe (Ojibwe) in southern Ontario and Lake St. Claire. They have 5,500 acres of tallgrass prairie and oak savannah that they have never stopped burning. Every one of Ontario's 65 endangered plants is there in quantity. In less than nine square miles you have acres of rare blazing star and big blue stem eight, nine, 10 feet high. Botanists can't believe the diversity there, all because of burning. Although little reported in the media, there are thousands of similar examples of sustainable land practices throughout the globe.

We can't turn the clock back and restore all the details of the ecosystems we've lost. What restorationists do is look at recovering the key features of ecosystem structure, composition, and function. A historical reference ecosystem can be modified as changed conditions required by resorting to Western ecological sciences. But the plants that grew up with fire and selective harvesting have genetic memories that are far wiser than those of any intellectual. And they are activated when they approach the right intensity, seasonality, duration, and return-interval of the fires that were set by Indian women in the fall or the spring. That is why restorationists ought to begin with the historical reference ecosystem - the indigenous-managed landscape - and go from there.

Where I live in southwestern Oregon there is now almost no water in the creeks that once ran all year. We have a forest that burns repeatedly and catastrophically, which is not good for the soil. The same goes for slash burning following clear cutting. It has to be the right kind of fire - the fire that the Indian women set. This is what the plants understand in the co-evolutionary process between those natural communities and fire. As the elders say, it's what will keep the plants from going away.

Native cultures don't separate themselves from these communities. We cannot protect the land unless we have the capacity, economically and spiritually, to be caregivers. That is fundamental. There is no Indian word for "wilderness" because there never was a wilderness. When I talk about "natural community," I mean our relatives, the plants and animals - the diversity of life, which includes us humans as well. I've coined the word *kin-centric*. We are all related, and if we take care of our relatives, they will take care of us. That's why Native cultures have ceremonies to renew the world, because we use up the world. We take personal and collective responsibility for the earth's welfare. The Indian ancestor spirits are still here, which is the best proof we have that this land is still healthy enough to be restored. When those spirits go away, the spirit of the land will be dead.

The modern mind is uneasy with talk of spirits. But the rendering of nature dead, without spirits, is why the modern world has lost respect. By putting history and culture back into nature, we become rooted in a real past. We link up spiritually with thousands of years of our own past. Euro-Americans are really very new to this hemisphere. If spiritual healing does not occur between the former longtime inhabitants and the new ones - and that includes a willingness to learn from Native peoples about ecology and land stewardship - the land and the ancestor spirits will vomit us all from the land. Together we must forge a worldview that doesn't deny the past, but builds on it, forging a synthesis between the old and new, between Western science and traditional environmental knowledge.

If we don't change our ways of agriculture, the wildlands will go away. That is clear. And it's the same if we don't change the way we treat people in terms of economic and social justice. The campesinos, the workers, the tribal people, the people affected by NAFTA in Chiapas - these are the people of place who have local traditional knowledge, and they see no need to be part of the new world order.

We need to work with local people. One of the things we're trying to do in Oregon is develop a Mexican and Indian cooperative so that they don't get squeezed out by large reforestation contractors. Every tax law and regulation in Oregon favors big multinational corporations and excludes local people as well as responsible stewardship. We need to rethink market economies so that every time we use the forest for timber and non-timber products, we further conservation and restoration. Economics must follow ecology. When Indian women burned the land, not only did they have straight basketshoots, medicine, food, and game, but the land benefited at the same time.

Natives took care of the landscape, and it took care of them in return. But if the people came back in the flesh today who lived here 100 years ago, they would be totally lost. They would not know where they were, and the land would look trashy and uncared for - a wasteland. Yet their spirits are still here, and they are tired of waiting.