

**The Ecological Indian: Myth and Reality.** Shepard Krech III. W. W. Norton, New York. 1999. Illus., bibliography, index. \$27.95. ISBN 0-393047-555.

Shepard Krech's book *The Ecological Indian* is the best of the works that debunk the concept of "the Indian" or "the indigenous/traditional person" as a natural environmentalist and conservationist, at one with nature. As he puts it: "For while this image may occasionally serve or have served useful polemical or political ends, images of noble and ignoble indigenoussness, including the Ecological Indian, are ultimately dehumanizing (p. 26)." As this passage implies, he rejects also the image of the ignoble savage, "cannibalistic, bloodthirsty, inhuman (p. 16)." However, the present book attacks only the nobler image, although the second remains-alas-far more common in popular culture, recent Hollywood movies notwithstanding.

Most of the classic tales of indigenous waste of resources are at least mentioned in this book. Some stories he demolishes, some he credits. The core consists of six detailed case studies that speak to the reality of Native American resource management. These studies have significance beyond the bounds of the book itself.

The first concerns Paul Martin's famous case for humans as the cause of the extinctions of Pleistocene fauna at the end of the last Ice Age (Martin and Wright 1967). Krech does not look with favor on Martin's thesis of a sudden, extremely rapid population increase, followed by rapid migration. (This thesis is now unnecessary, though; evidence for pre-Clovis migration and settlement in the Americas is becoming extensive. Martin can argue, reasonably, for a long slow process, rather than having to insist on a wave of hunters marching in lockstep down the continent singing "Stout Hearted Men.") Krech also notes a singular lack of evidence in the form of kill sites; the *argumentum ex nihil* seems defensible here, because of the sheer volume of archaeological work done in the Americas since Martin's book. We still await a significant number of finds.

Krech also points out that "minifaunal as well as megafaunal animals vanished (p. 38)." The lost include small birds, dwarf pronghorns, storks, and other unlikely game for Paleo-American hunters. Martin's attempts to explain these as all due to human agency are notably lame; some were giant scavengers dependent on megafauna, but most were not. Moreover, the climate of the Americas changed exceedingly rapidly at the time. Pleistocene habitats changed radically. Many have no analogues today. Harrington's mountain-goat, a southwestern species (and a *very* unlikely candidate for hunter-driven extinction), lived in habitats that combined elements now scattered from mountain forest to desert scrub; it could not survive the wringout its plant community broke up. Areas rich in megafauna became hot and dry. Large animals dependent on water would have been wiped out with or without human agency. "Six other extinction events marked the last ten million years in North America (p. 40)." There had been others earlier. All followed hard on periods of rapid drying.

Krech refers to the inappropriateness of the analogy to recent island extinctions, which took place when people with far more sophisticated technologies entered far more circumscribed, predator-poor environments. I have mentioned

this problem. The Polynesians and other island pioneers brought dogs, pigs, rats, and new pathogens with them; analogy with recent island extinctions makes it certain that these did a good deal of the exterminating. The human invaders can be blamed in some sense for causing the extinction, but it was not really their deliberate bad management that did it; it was their symbionts and parasites.

In short, the Pleistocene extinctions are almost certainly not a simple matter of overhunting. I find it impossible to believe that humans were the main factor, but equally difficult to believe that hunters were not one of the factors. As I see it, diminishing megafauna and increasing human population were clearly on a collision course, especially as drying landscapes concentrated the animals around water holes (cf. Glover 1997). Ambush must have been easy. Management was difficult; the hunters would have had a hard time working out a plan, because every year the game diminished from natural causes. No doubt the hunters overshot in more ways than one.

Krech also provided a solid and reasonable review of fire in traditional Native American management. Krech, however, paid too much attention to large-scale prairie fire and less to the more carefully controlled and targeted burning that is known in California, the Northwest Coast, and other western landscapes. He considers all the evidence carefully, but provides much more detail on the more destructive cases. He might have profited from comparison with Australia, where set fires probably helped exterminate large marsupials (Flannery 1995) but has proved essential to the survival of many small ones (Nowak 1999; Pyne 1991).

Much less defensible is Krech's stand on buffalo hunting. As he points out, the Indians at least left 60,000,000 buffalo on the plains for the white men to eliminate in the late 19th century. But, he maintained, the Indians wasted bison. This they did largely through the "buffalo jump": Driving herds over cliffs and ravine rims. It undeniably involved a great waste of bison. However, Krech almost certainly exaggerates the extent of this. Reading his work, one cannot escape the conclusion that, every time an Indian wanted a light snack, he drove a million buffalo over a cliff. The truth is more complex. For one thing, before the horse and gun, there were very few Indians on the plains. For another, not every jump got a million buffalo at a time—most managed to get very few indeed. For another, driving a herd of buffalo is exceedingly difficult even with the horse and gun; for tiny roving bands operating on foot, it must have been almost impossible. It would have, at the very least, taken the whole group a great deal of time to organize it. One would expect buffalo jumps to be very rare. This is indeed the case. Krech cites the displays at the Head-Smashed-In Buffalo Jump in Alberta as a source, so he is surely aware that those displays point out that there was only about one successful jump per quarter century. Other sites have even fewer jumps. Many were used once only. Of course, once a herd starts over a cliff, it may stampede, leading to the deaths of many times more buffalo than a group could possibly butcher and utilize. Evidence, however, suggests that such a mass kill was a rare event. (Was it viewed as a tragedy?) Much more often, only a few buffalo went down, and these were more or less thoroughly used. Of course, the Ecological Indian of Hollywood stereotype would probably not have used the jump method at all.

One main theme of Krech's book is his contention that the concept that the

Native American concept of rebirth of animal souls allowed the Indians to kill without compunction. Virtually universal in native North America is the theory that animal souls are immortal; when one animal body dies, the soul goes to seek out another. This is taken by Krech as a license to kill. What Krech ignores is that in every well-documented case known to me-and I have worked with several Native North American groups and have read mythology or ethnographic data from all of them-this theory is used as a justification for good management. Usually it is explicitly so used. The souls are believed to go elsewhere, or to refuse to reincarnate at all, if humans treat the animals with disrespect-and the worst form of disrespect is deliberately taking more than one needs. Weirs that block whole rivers, slaughter of whole herds of game, trapping out whole populations of beaver, and other such overdrafts on the resource base are prohibited; such offense makes the spirits go elsewhere. In addition, most groups have concepts of Masters of the Game, or leader animals, or some such supernaturally powerful animals that watch over the animal beings and punish humans who overhunt. As a conservation measure, this is hopelessly inadequate in an age of shotguns, but it is reasonably effective in a simpler, less heavily armed economy. I know this because it is still very much alive and taken very seriously in the area where I now work, the Maya communities of the Yucatan Peninsula. It still operates to reduce hunting pressure very substantially. Overhunting goes on, but at least some game survives.

Krech's next case is that of the beaver, and here he reaches still farther out-though, again, he is careful to assign the worst blame to European enterprise for trapping the beavers out, and to luring the Native Americans to do most of the dirty work. But he seems to maintain that unchecked waste of beaver was aboriginal. This is difficult to believe. Traditional Native American ideology of beaver conservation is too well-documented and widely documented to deny; it is still a feature of life in Canada. However, Krech follows the very shaky arguments of Robert Brightman (1993), who indeed found this conservation ideology, but maintained it was a result of teaching by early fur traders and other white outsiders. The obvious problem with this is that Brightman, and Krech, rely largely on the testimony of fur traders who were trying to explain to the home office why furbearer numbers were thinning out. Blaming the Indians, who were claimed to waste beaver in spite of all the traders' diligent directions to the contrary, was an obviously rather self-serving story. Perhaps it was true, at least locally. But the conservation ideology of the Indians, as documented by Brightman and virtually all other ethnographers, is the same general belief system that one finds from the Koyukon of Alaska to the Maya of Quintana Roo. It is encoded in myth and ritual all over the continent. It did not come from the fur traders. Nor do I believe that many fur traders were seriously interested in conserving the resource. They were, indeed, rather more prone to forestall rival groups by deliberately trapping out all beaver over vast areas. In a single expedition, Peter Skene Ogden led a party that exterminated the beaver from most of Oregon and northern California (Ogden 1987, orig. ca. 1827). The protestations of early writers, and their blame of Indians (whom they tended to regard as drunken and bloodthirsty savages), ring rather hollow. Conversely, to maintain his theory, Krech is forced to dismiss virtually all

ethnographers, from Frank Speck to Harvey Feit, as hopeless romantics in the grip of the Ecological Indian stereotype. Never mind that Speck and many others wrote at a time when the stereotype of the Ignoble Savage was overwhelmingly dominant and the Ecological Indian lay in the dim future.

On the Northwest Coast, I found that the concrete management strategies and the real awareness of how to use the environment were found most strongly among the very traditional men and women, many of whom spoke little English. By contrast, the glib generalities of the "ecological Indian" sort were indeed found mainly among the young and English-educated. So the rhetoric may be learned, but the substance was old.<sup>1</sup> In Mayaland, there is no conservation rhetoric to copy; Mexican rural development strategy is still overwhelmingly focused on destroying nature and everything natural just as fast as possible. Thus, it is safe to ascribe any Maya teaching or behavior that is ecologically or environmentally aware to genuine tradition.

Books that paint the Native Americans in a good light—from frankly Ecological Indian sources (e.g. Hughes 1983) to more scholarly work (Berkes 1999)—focus on the best of ideology: on myth, cosmology, and teaching. Certainly, it is undeniable that all Native American peoples were intensely conscious of their environments, and encoded incredible amounts of knowledge—both pragmatic and "religious"—in their myths, tales, and cosmological teachings. Yet, as Krech points out, such people often compare the best of Native ideology with the worst of Western practice. Conversely, books that slant toward an Ignoble Savage view, such as Krech, and those that take this view to an extreme, including such intemperate writings as those of Martin Lewis (1992), Rod Preece (1999) and Matthew Ridley (1996), focus on the worst of practice: on overhunting, over-irrigating, overburning. These latter writers have varied political agendas. Lewis intends to defend moderate political positions against those who see a need to dismantle western civilization wholesale. I agree with him—in fact, that is the theme of the present book too—but he had no need to trash the indigenous peoples in the process. Preece, who writes with the equally worthy goal of redeeming western civilization from charges of being anti-environment, unfortunately ruins his case by comparing the best of Western ideology with the worst alleged indigenous practice.

Comparing best ideology with worst practice in 20th century America, one would see a gap between the writings of John Muir, Rachel Carson, and Stewart Udall, on the one hand, and on the other the area of wilderness paved, the number of species exterminated, and the acres of forests permanently destroyed.

What is the truth? Muir and toxic waste dumps were both a part of America in the 20th century, and there was a great deal in between. The Native Americans too have a diverse record.

These negative authors do not consider the superb management of resources that is extremely thoroughly documented for Pueblo agriculture, California plant management, Northwest Coast fisheries, and Maya swidden agriculture (except for the Late Classic overcut!). But, on their part, the Ecological Indian writers delicately write around the issue of human frailty: the fact that the spirit may be willing, but the flesh is weak. Moral standards are normally made to be impossibly strict, since moralists are sadly aware that people almost always fall short of



precept. If one prohibits overhunting, one can hope to reduce it, but not to eliminate it.

These matters are highly political. The Ecological Indian theory, if taken seriously, might lead to giving Native Americans unlimited power over their own resources. This might have most unfortunate consequences. In a few limited areas, it is indeed having such consequences already (see Terborgh 1999; and I have encountered the problem in a few Third World cases).

Conversely, the Ignoble Savage theory was and still is a quite open and calculated justification for depriving indigenous people of their lands and resources. Clearly, people who wander about on the land, burning forests and thoughtlessly exterminating game animals, are not exerting any "true" property rights; they should be driven off the land for their own good, since all they do if left in control is ruin the land for everyone else. This logic is still common in the United States and Canada-I have heard it countless times from ranchers, conservation biologists, fishermen and many others-and is even more frequent in Third World countries, where I have found it in control of local policy from Malaysia to Mexico (cf. Ascher 1999).

It is interesting to contrast modern works on both sides with the classic ethnographies from the days when anthropologists were trying to document the facts, as well as the statements of the Native Americans themselves. Those ethnographies revealed the Indians to be superbly aware of their environments, and good but not perfect resource managers. The extreme polarization, in both directions, is a new thing for anthropology-but, alas, all too well-worn a groove for politicians.

#### NOTES

<sup>1</sup> Krech makes a common mistake among anti-Indians of maintaining that Chief Seattle's famous environmentalist speech, originally made in the 1850s, was a fake. It was, in fact, real. However, it was heavily larded with fuzzily Christian rhetoric in a semi-fictionalized rewrite in 1970-71. The exact words of the speech have been lost, but early versions agree on included Chief Seattle's militant defense of his land, supported by some concrete and specific environmental details. The remake added some general, fuzzily-virtuous sentiments, but did not radically change the sense of these particular passages. See Kaiser (1987).

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