The Pristine Myth


By Katie Bacon

For years the standard view of North America before Columbus's arrival was as a vast, grassy expanse teeming with game and all but empty of people. Those who did live here were nomads who left few marks on the land. South America, too, or at least the Amazon rain forest, was thought of as almost an untouched Eden, now suffering from modern depredations. But a growing number of anthropologists and archaeologists now believe that this picture is almost completely false. According to this school of thought, the Western Hemisphere before Columbus's arrival was well-populated and dotted with impressive cities and towns—one scholar estimated that it held ninety to 112 million people, more than lived in Europe at the time—and Indians had transformed vast swaths of landscape to meet their agricultural needs. They used fire to create the Midwestern prairie, perfect for herds of buffalo. They also cultivated at least part of the rain forest, living on crops of fruits and nuts.

Charles C. Mann, in "1491" (March Atlantic), surveys the contentious debate over what the Americas were like before Columbus arrived—a debate that has important ramifications for how we manage the "wilderness" we still have left, if indeed it really is wilderness, untouched by the hand of man.

If it is true that the pre-Columbus Americas had tens of millions of people and highly developed civilizations, what happened? Why were there so few traces when the conquistadors and the colonists began to arrive in earnest? One demographer has estimated, according to Mann, that "in the first 130 years of contact about 95 percent of the people in the Americas died—the worst demographic calamity in recorded history." Others think this number is too high. But what is clear from oral history accounts is that Europeans who arrived early on found busy, thriving societies. When John Smith visited Massachusetts in 1614, he wrote that the land was "so planted with Gardens and Corne fields, and so well inhabited with a goodly, strong and well proportioned people ... [that] I would rather live here than any where." But by the time the colonists reached Plymouth in the Mayflower six
years later, they found one deserted village after another—the Indians had been felled by European diseases to which they had little resistance. Mann writes,

All through the coastal forest the Indians had "died on heapes, as they lay in their houses," the English trader Thomas Morton noted. "And the bones and skulls upon the severall places of their habitations made such a spectacle" that to Morton the Massachusetts woods seemed to be "a new found Golgotha"—the hill of executions in Roman Jerusalem.

The debate over how many Indians lived in the Americas will perhaps never be settled—there is too little archaeological evidence, and too many variables required to calculate their population. Mann makes clear, though, that the contributions of these civilizations were myriad—from corn to tomatoes to ways of sustainably managing land—and we would do well to learn from them.

Mann is an *Atlantic* correspondent. We corresponded by e-mail last week.

—Katie Bacon

**Within certain communities—archaeological, anthropological, environmental—there is bitter debate over how many Indians were in the Western Hemisphere before Columbus's arrival, and how actively they managed the land. Could you sketch out why this is such a polemical issue?**

The debate over Indian demography gets emotional pretty fast. The greater the pre-contact population, the greater the tally of post-contact losses, and the greater the pre-contact human impact on the environment. Some people don't like scholars who argue for a huge death tally, because it feels to them like another self-hating spasm of political correctness—an academic left-wing attack on Western civilization as inherently murderous. Others don't like the high numbers because they want to view the pre-contact environment as an ecological touchstone—nature as it oughta be. Having too many Indians around interferes with this. They think that arguing that there is no wilderness, no preferred state, is a right-wing strategy for legitimizing a corporate assault on the environment.

**In the opening scene of your article, you're flying in a small plane with some scholars over the Beni in Bolivia, a watery plain of 30,000 square miles with islands of forest linked by raised berms. Some scientists believe that this entire landscape was created by a populous society that lived 2,000 years ago. Another group sees little evidence that there was large-scale human habitation of the area. How could there be two such different interpretations of the same landscape? What are your thoughts on the problems inherent in trying to research something where there's so little historical record? And what sort of archaeological evidence do the various factions use to back up their claims?**

There's actually more historical record than one might think—the problem is how to interpret it. Many
Spanish accounts exist of what the Americas were like just after contact, and also of what Indians said life was like in the years before, but scholars differ on how much to believe these accounts. Similarly, researchers differ on how to treat ecological questions. Some people say, for instance, that the poor soils in Amazonia would have made intensive agriculture unfeasible, and thus there simply could not have been large-scale societies—that would have been impossible. Others say that the poor soils might have made things difficult for conventional agriculture, but agriculture based on trees—remember all those nuts and fruits in the tropics?—could well have been productive enough to sustain large numbers of people. So scholars begin from different assumptions. In the Beni, the area in eastern Bolivia that I visited, the savanna has scores or hundreds of high, forested mounds where the soil is literally thick with pottery fragments—you dig six inches and the soil is half ceramics. To some archaeologists, this suggests (bearing in mind ecological limits) multiple reoccupations by small groups of people. In this view, the mounds are based on natural formations or were built up more or less by accident. To others, this seems ridiculous—the mounds were of course deliberately constructed, they say. And that would take many people. In both cases, how scientists look at the evidence is deeply influenced by their views on larger issues like the role of ecological limits and, I think, their ideas on what humankind is like. Newer archaeologists—to generalize perhaps too much for a moment—tend to think that people are enormously energetic and clever about overcoming obstacles in the natural world. Older ones are more likely to be humbled by ecological limits and (perhaps) more stringent about interpreting data. (Close-minded, their opponents would say.) Many scientific arguments eventually devolve into disputes over details and procedures that are difficult for outsiders to judge. But the archaeologists and anthropologists who are in favor of a larger Indian presence seem to be winning the argument within their disciplines, at least for now. Supposedly Thomas Kuhn (or a philosopher of science like him) said that disputes between researchers are never resolved, but the side with more young scientists wins because it outlives the other side. And it seems that more young people hold this view.

You talk about the power of the "pristine myth" in the environmental community—the idea, in your words, that the Americas in 1491 "were an almost unmarked, even Edenic land." If indeed the landscape of the Americas was actively managed by Indians, the thinking goes, that may complicate efforts to restore the Midwestern prairie, for example, to its original state—because we may not know what that state was. But does it really matter whether we're restoring something to its original state, or to a different state that is still in its way Edenic? Do you see negative repercussions in setting aside conservation land to be untouched by human management? To your last question: me, personally, no. But if we want to do that, we should be mindful of the fact that it is probably highly "unnatural" to do so. "Negative repercussions," in your question, implies harm, which in turn implies standards of good and bad. That's more where the question lies. Many people don't like putting things this baldly, but if there really has been very little "untouched" nature for 10,000 years then it is essentially impossible to go back—conditions have changed too much. But many well-meaning people find it difficult to come out and say, for instance, "we want tall-grass prairie because we think it's really
nice and we like it”—especially when they're fighting economic forces. So they tend to invent standards, states putatively preferred by natural systems—wilderness. It's like appealing to a deity, an ecological Ten Commandments that comes from some source outside the fallibly human. Yet if we truly can't return to pristine wilderness, then there's no way around it: we're in charge of deciding how, say, the prairies are going to look. Obviously we don't have absolute control, but we sure have a lot of influence.

**How is this debate playing out in the Amazon, where some scientists now argue that most if not all of the region's rain forest was created by humans? If indeed much of this landscape was built, how should we be managing the rain forest and other landscapes previously thought to have been pristine wilderness?**

Amazonia is such a huge area that one shouldn't generalize about it all, but I will nonetheless. At the moment, it seems to me that the impact of these scholarly arguments is pretty small. But it may get larger. In recent years many of the nations in Amazonia, especially Brazil, have been cutting back on the subsidies they give to developers, which has resulted in slowing the pace of development. Some of the most obviously ludicrous schemes have not come to pass. But pruning back bad development is not enough. There are too many very poor people in the area, and they have to be offered something positive—a meaningful chance at a better life. The great question is how to improve their welfare without trashing the environment. Ultimately, I think, the new scholarship may play a role in answering that question, by suggesting the ways that Indians in the past created rich urban complexes without stripping the forest bare.

**I recently read a book about competing methods of farming in the 1800s. The author, Steven Stoll, argued that those farmers who stayed behind while most farmers were rushing out to the frontier after depleting their eastern farm lands felt they had an almost moral obligation to keep their soil rich and healthy through crop rotation and soil restoration. In general, did the Indians have a similarly "conservationist" approach to their management of the landscape, or would they use up their land and move on?**

There's a wonderful book about this very question called *The Ecological Indian* by Shepard Krech, a Brown University anthropologist. (I quoted him once in my article, but if I'd had more space I would have quoted him much more.) So one answer to your question is "read his book." My own answer would be to say that in some sense you can't answer the question, because—and this is something we're not taught in school—the Americas before Columbus were filled with a staggering variety of cultures with wildly different attitudes towards practically everything. You can't say much about Indians "in general," because there were too many exceptions to every rule. Having said this, let me violate my own stricture. Many Indian societies seem to have been really, really good at land management—they make us look like pikers. These groups seem to have been able to transform their environment in the most profound ways without making it less productive. That's not exactly being "conservationist"—the label probably doesn't apply to anyone who burned down much of the Great Plains—but I think it's something we might be able to learn from.
Waves of different diseases decimated the population of the Americas—smallpox, typhoid, bubonic plague, whooping cough, and other diseases that Indians had no resistance to were all brought here by Columbus or those who followed in his wake. But why didn't Indian diseases have a similar effect on Europeans, either directly or indirectly when the diseases were carried back to Europe?

There just doesn't seem to have been nearly as many Indian diseases. "The exchange of infectious diseases ... between the Old World and its American and Australasian colonies has been wondrously one-sided," wrote Alfred Crosby in *Ecological Imperialism*, another terrific book. "Venereal syphilis may be the New World's only important disease export..." The reason for this epidemiological poverty is a matter of speculation. Certainly, as I mention in the article, the relative lack of domestic animals spared the Indians what are called zoonotic diseases. But really nobody can be sure.

Could you talk about the idea of Native Americans as a keystone species—a species, in E. O. Wilson's words, that "affects the survival and abundance of many other species"? How does thinking about them as the Western Hemisphere's keystone species before the arrival of Europeans change our conception of the Americas?

I should first make clear that Native Americans were keystone species in the Americas the same way that Europeans were the keystone species in Europe. They were the keystone species because they were human beings, and human beings are incredibly powerful at shaping environments around themselves. What's interesting is that they seem to have been so good at their job, and managed environments that Americans today like so much, that there has been a tendency of white society to discount the human role.

The implications are multiple, but they perhaps press most closely on our understanding of environmental goals. Very loosely, you can speak of having two general types of environmental goals—reducing the amount of pollutants to avoid consequences to health, and maintaining biological processes in some desired state. The two are obviously linked, but they are not the same thing. Taking lead out of gasoline is an example of the first goal; protecting endangered species is an example of the second.

Human health is a more or less quantifiable goal—you can say "having this amount of lead in the air is bad, because it creates the following bad conditions." (People might disagree with the exact numbers, but rarely with the goal itself.) But maintaining ecosystems and biological processes at a desired state is much fuzzier—what ends are we trying to accomplish, and how will we know when we accomplish them? For one wing of the environmental movement, the answer has been: return as much of the nation as possible to its "natural state" of "wilderness." What was here in 1491 is what we should be striving for.

Problem is, this new generation of anthropologists and archaeologists is saying that as a matter of cold,
hard fact the Americas in 1491 were not a wilderness. They were a huge, special garden, planned and maintained by the active efforts of a wildly diverse range of societies. Environmentalists tend not to like this line of argument, because to them it implies that there is no preferred "natural" state—so let the bulldozers rip. And to be fair a lot of anti-green commentators have drawn just this implication. Personally, though, I believe both sides are wrong. Knowing more about what the Indians accomplished suggests that human beings can have a large, long-lasting impact on the landscape without wrecking everything. To me, at least, that seems an incredibly hopeful notion to carry along into tomorrow.

As late as 1987, you point out, a standard American history textbook "described the Americas before Columbus as 'empty of mankind and its works.'" How do you think the history books fifteen years from now will read? Will students ever study the lost civilization of the Ancient Incas or the Caddoans as they now do the Babylonians or the Phoenicians?

Studying the Incas would really be something, wouldn't it? I can see the college class: Totalitarianism from Machu Picchu to Moscow. Myself, I'd hope they would learn something about the Northwest Coast Indians, who had wonderfully interesting economic institutions; the Iroquois, who so importantly affected both American history and Americans' concepts about freedom; the Mayans, whose ruins I always think of as being more interesting than those of Greek and Rome—by now, my drift should be obvious. These are fascinating societies and worth knowing about; I hope our children learn about them. I'd also give a plug for learning about Indians today, a collection of fast-growing and interesting groups that add up to far more than casinos and a shameful history of mistreatment.

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