

Is culture missing from conservation? Scientists take cues from indigenous peoples.

We typically think of conservation as removing humans from the ecosystem to return it to its 'natural' state. But the practices of many indigenous cultures offer a different way to view humanity's relationship with the natural world.

Joseph Dussault, *The Christian Science Monitor*, November 24, 2017

When you hear the word "ecosystem," what do you imagine? Maybe you picture a grizzly bear pawing at salmon breaching a frigid stream, or a kaleidoscopic seascape of fish and coral. But you may have missed one critical element of the natural world: humans.

But not everyone draws such a clear line between humans and the natural world. Many indigenous peoples, for instance, view humans as vital components of thriving ecosystems. Drawing from that approach, some researchers suggest that a "biocultural" strategy – one that bridges science, community, and culture – might produce better long-term conservation and sustainability outcomes. But first, some experts say, we may need to rethink humanity's relationship with nature.

Conservationists have long relied on public education to influence legislation and to encourage individuals to make more sustainable lifestyle choices. That approach hinges on the hope that properly informing people will prompt them to change their personal behaviors. But a recent study in the journal *Biological Conservation* suggests that environmental knowledge, though important, may play a smaller role than previously thought in promoting sustainable behavior.

Does humanity stop at the forest's edge?

Though humans have always interacted with the natural world, not all cultures have viewed that relationship the same way. The ancient Hawaiians, for example, believed in a spiritual connectedness between nature and humanity. They applied that paradigm to a model for sustainable resource management, the ahupua'a system, designed more than 500 years ago to prevent overfishing and deforestation. Many Native American communities arrived at a similar concept of connectedness, and used it to develop careful hunting and land-use practices.

Western philosophy tends to depict nature and humanity as separate and conflicting forces, says Kawika Winter, director of the Limahuli Garden and Preserve in Kaua'i. As a result, many Americans automatically associate healthy ecosystems with human absence and environmental destruction with human activity.

"The preconceived notion is that humans are separate from nature," says Dr. Winter. "So whenever you're talking about ecosystems, people [assume] that it means places without humans."

That kind of adversarial thinking favors "put-a-fence-around-it" conservation projects over sustainable use, says Winter, and often makes individual environmental action seem futile.

"I think there's a cultural foundation that talks about humanity as a problem, and I'm not necessarily disagreeing with that," he says. "What I'm disagreeing with is the presentation. When you raise kids to think that their existence on the planet is inevitably going to be bad, then why should they even do anything? You don't see yourself as the solution."

New approaches to conservation, however, could help combat environmental defeatism. Winter's research focus is social-ecological system resilience, an interdisciplinary framework that considers human well-being – physical, social, and emotional – within the greater context of ecosystem health.

Thinking in terms of social-ecological systems applies old philosophies to current conservation issues, Winter says. By validating the presence of people and prioritizing co-existence, he says, conservationists could empower individual action.

"By taking stock of the ways that people have historically lived in sustainable ways, we can elevate and validate those approaches," says Ashwin Ravikumar, an environmental social scientist at the Field Museum. "We can give communities pathways to insist, to government actors and folks who are trying to work in their landscape, that they are good stewards of natural resources."