

The Effects of Biological Conservation Efforts on Indigenous Rights

With the increased threat to biodiversity posed by climate change, habitat loss, and other human activities, several tools for conservation have been explored throughout the world. While it is essential for human well-being to research different ways of protecting and sustaining biodiversity and ecosystem functioning, the effects of these conservation strategies on the local indigenous populations are often overlooked. This paper provides an overview of the history of conservation efforts and its impacts on indigenous rights in the U.S. and globally. It also explores Indigenous conservation methods that have protected biodiversity for generations in different regions.

The concept of setting aside areas of valued lands for natural species can be traced back to Mesopotamia in the first millennium B.C.³ The first national parks established in the United States resulted from a tumultuous rush of land-grabbing during the American conquest of the Wild West and the conceptualization of Manifest Destiny. Yosemite, California, saw the inception of the first protected land in the U.S. in 1864. While Abraham Lincoln signed this into law to preserve Yosemite Valley, it forcefully evicted Miwok settlements over the next 105 years, creating a bloody war of extermination of the Miwok people.³ Almost 10 years after the first protected land was created in the country, Yellowstone was established as the first national park in the country in 1872. This was the time when the devastating Indian Wars were occurring in the quest for the colonization of indigenous land. Indigenous people lived in Yellowstone for more than ten thousand years ago, and a total of 26 tribes (including the Shoshone, Lakota, Crow, Bannock, Nez Perce, Flathead, and Blackfoot peoples) have ancestral connections to Yellowstone National Park, which still is considered sacred land. The indigenous peoples who lived in and made use of the extensive woods, plains, and waters of Yellowstone were thus excluded,

displaced, or killed. Box 1 provides a timeline of other national parks and protected areas that were created in the U.S.

Since their establishment in the United States in the early nineteenth century, the creation of protected areas has been based on the mode of conservation called “fortress” or “colonial” conservation.⁶ This is based on the belief that biodiversity protection is best achieved by creating protected areas where ecosystems can function in isolation from human disturbance. It assumes that local human populations use natural resources in irrational and destructive ways, resulting in biodiversity loss and environmental degradation. This often results in the displacement of local Indigenous people living in the area, causing long-term social conflict, denying Indigenous peoples their rights, and evicting them from their homelands. Oftentimes, these evictions are compared to colonial exploitation since the devastating consequences to Indigenous livelihoods and cultures remain the same.

Some have categorized the growth of the white environmentalist movement as entailing conservation ahead of people. Introducing the individualized property regimes explains some of the colonial ideologies regarding land. In most parts of the world, the notion of private land ownership began with the arrival of Europeans.⁶ This Western concept was not congruent with indigenous values and communities where, generally, territories and resources were seen and used collectively for the benefit of the entire group. At the same time, nature preservation was framed as a universal good, and colonial conservation was structured to benefit the colonizing power (through tourism, trophy hunting, and scientific research).

Box 1: Timeline of acts and policies relating to enclosures in the U.S⁴⁺⁵

1842: Origin of the public trust doctrine

(states that wildlife and fish belong to all the people in the U.S, and stewardship of those fauna is entrusted to the individual states)

1864: Establishment of Yosemite

1872: Establishment of the Yellowstone National Park

1892: Formation of the Sierra Club

(dedicated to the preservation of the Pacific Coast and Sierra Nevada wilderness by John Muir and others)

1891: Forest Reserve Act and creation of Shoshone National Forest

(the nation's first federally managed forest reserve)

1903: President Roosevelt established Pelican Island as the first National Wildlife Refuge.

1916: Creation of the National Park Service by Congress.

1919: Establishment of the Grand Canyon National Park in Arizona.

1976: Ebey's Landing National Historical Reserve, located in Washington, is established.

(the first protected working landscape affiliate with the National Park System)

In November 2014, the World Parks Congress argued that protected areas are core to the future of life on our planet, requiring more extensive coverage, representation, and better management and funding.⁹ Indigenous lands have been threatened and stolen not only in North America but all over the world. The evaluation of the success of protected areas deflects on how the implementation of exclusionary conservation in many countries does not protect against so-called “development” projects. Extractive industries, agribusiness, and conservation alike

encroach into community and indigenous lands and hinder local people's ability to manage and be sustained by their territories and to play a role in fostering biodiversity.⁹ This shows how colonial norms and knowledge systems have been institutionalized in colonized territories at the expense of marginalized and exploited communities. One example of such exclusion is presented in Box 2 with a case study.

Box 2. Case study - Dukha community of Mongolia⁷

The Dukha people of Mongolia belong to one of the smallest ethnic groups in the world. They are a group of 250 reindeer herders living a few kilometers from the border of Russia. They dwell, as their ancestors did, in the forest, where they live by hunting, gathering, and drinking the milk of their animals. In 1987, one of the respected and oldest members of the community established the first protected area in the region and saved a part of it from mining exploitation. He says, "Our role is to testify to our love and respect for the taiga (boreal forest biome). We have taken care of our reindeer since before Mongolia existed; they are our pride."

This right was stripped away from the Dukha with the creation of the Tengis Shishged National Reserve, and new laws were put in place without any consultation from the local community. Hunting, fishing, and chopping wood was prohibited, and only limited migrations were allowed. Only three areas were authorized for the pasturing of the reindeer. Local people ask, "Why don't they come and talk with us? We would tell them what to protect and where the animals are. But also which lands we need for our reindeer. Why couldn't we work together?"⁷



Some governments have endorsed and adopted the United Nations Declaration on the Rights of Indigenous Peoples. The declaration proposes to implement and uphold rights, including conservation standards, dispossession, forced resettlement, and violation of the rights of the Indigenous communities in places targeted for conservation. This displacement has impacted the communities in many ways, including causing impoverishment, political disempowerment, losses to livelihoods, cultural practices, human-wildlife interactions, and indirect losses because of loss of access to the protected area.

The number and total area of protected areas worldwide has grown immensely in the post-colonial era, with more than 230,000 protected areas listed covering about 20 million sq. kilometers (in 2018).⁶ While there is a lack of systemic data about what actually happens in Protected Areas, especially in terms of social contexts, the figures estimating displaced populations have been 8.5- 136 million humans as a result of conservation projects. Additionally, as of 2016, less than 5% of the world's protected areas were managed and conserved by Indigenous peoples and local communities,⁶ which is disproportionate to the impact of PAs on Indigenous people and communities.

Most Indigenous cultures view both humans and nature as part of an extended ecological family that shares ancestry and origins. Numerous cultures have awareness that life in any

environment is viable only when humans view the life surrounding them as kin. The kin, or relatives, include all the natural elements of an ecosystem.¹⁰ In turn, the interactions that result from this "kincentric ecology" enhance and preserve the ecosystem. This "kincentric ecology" can be further explained through the Raramuri concept of *iwigara*.¹⁰ The Raramuri culture originates from one of the most biologically diverse regions in the world, the eastern Sierra Madres of Chihuahua, Mexico. Iwigara is the total physical and spiritual interconnectedness and integration of all life in the Sierra Madres. To say *iwigara* to a Raramuri calls on that person to realize life in all its forms.¹⁰ This is also congruent with other Indigenous cultures, where Indigenous people believe that they live interdependently with all forms of life. Indigenous identity, language, land practices, beliefs, and history are all personifications of culture that regulate and maintain the health of humans and the natural world.

It is well-known and researched globally that Indigenous people are exceptionally good at protecting their territories. A World Bank report estimates that 80% of the world's biodiversity resides inside traditional indigenous territories.¹² There are multiple examples of different indigenous practices and efforts (refer to Box 3) that showcase the preservation of many ecosystems.

Box 3: Examples of protection of biodiversity through indigenous practices

Whitebark Pine: During the mid-1990s, the Confederated Salish and Kootenai tribe developed a Forest Management Plan and then eventually a climate change strategic plan. During the planning process, the group identified restoration goals for whitebark pine and its habitat.⁸ According to a report compiled by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), this decline in species populations is happening at a slower rate on indigenous peoples' lands.¹²

Shellfish Populations: Indigenous communities in the U.S. Pacific Northwest have been involved in the ecological restoration of degraded land, restoring shellfish populations and native plant species.¹¹

The Peruvian Amazon: Titling of indigenous lands has shown to reduce forest clearing by more than three-quarters and forest disturbance by roughly two-thirds in a two-year window. There has been a 75% deforestation curtailment associated with land title.¹²

Deforestation rates: The World Resources Institute found that deforestation rates were 2.8 and 2 times lower in indigenous lands of the Bolivian and Colombia Amazon, respectively, than outside indigenous lands.¹²

Farming practices: By combining wild and domestic species in gardens, indigenous communities have created habitats that are much more diverse and species-rich than typical agricultural landscapes—which are often vast fields of monoculture.

It is evident that, in many cases, protected areas allow crucial species and ecosystems to persist and thrive. Numerous endangered species have benefitted from the creation of isolated protected areas. Although studies showcase that biodiversity is higher inside of protected areas than outside, the strategy based on protected areas, which defines conservation success in terms of spatial control, fails to tackle the most significant challenges to preserving biodiversity. The studies have overlooked the devastating impacts on the livelihoods of millions of Indigenous people who have spent centuries stewarding the natural world and living in harmony with it. Steps can be taken to form coalitions and collaborations among policy-makers, environmental organizations, and Indigenous communities to pay more attention to territorial jurisdiction and stewardship by indigenous peoples and local communities. An alternate approach could direct

more resources to initiatives such as supporting ongoing efforts of local communities and facilitating equitable partnerships for conservation, which put communities on an equal footing with the governments and international conservation NGOs in terms of participation in decision-making, strategic planning, and conservation approaches.

Endnotes

1. Agarwal et al. (2009, Jan. 10). *Conservation and Displacement: An Overview*. Conservation and Society.
2. Bauza, V. (2021, Oct. 11). *Indigenous rights matter: 3 stories you may have missed*. Conservation.org.
3. Colchester, M. (2004, Mar. 1). *Conservation Policy and Indigenous Peoples*. Cultural Survival.
4. *Conservation Timeline 1801-1900*. National Park Service. (2015).
5. *Conservation Timeline 1901-2000*. National Park Service. (2015).
6. Dominguez et al. (2020, Feb. 25), *Decolonising Conservation Policy: How Colonial Land and Conservation Ideologies Persist and Perpetuate Indigenous Injustices at the Expense of the Environment*. MDPI.
7. Gauthier et al. (2016, Aug. 28). *'We have nothing but our reindeer': conservation threatens ruination for Mongolia's Dukha*. The Guardian.
8. Michael, K. (2019, June 17). *Earthkeepers: Revering, Recovering the Whitebark Pine*. American Forests.
9. Orozco-Quintero et al. (2016, Jan. 2). *"Conservation" Is Used to Justify the Displacement of Indigenous People*. Truthout.
10. Salmon, E. (2000, Oct). *Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship*. Ecological Society of America.
11. Sneed, Annie. (2019, May 29). *What Conservation Efforts Can Learn from Indigenous Communities*. Scientific American.

12. Webb, J. *Indigenous-led Conservation in the Amazon: A win-win-win solution*. Amazon Frontlines.