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Source: Natural Areas Journal, 37(1):98-107. Published By: Natural Areas Association DOI: http://dx.doi.org/10.3375/043.037.0112

URL: http://www.bioone.org/doi/full/10.3375/043.037.0112

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#### CONSERVATION ISSUES

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# Indigenous Perspectives on Private Protected Areas in Chile

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Natural Areas Journal 37:98–107

ABSTRACT: It is no longer conventional nor desirable practice for protected area managers to disregard the needs and desires of indigenous people. Several frameworks attempting to identify the roots of indigenous—external conservation actor conflict have emerged in recent decades. The rise of private protected areas (PPAs), however, is yet to be fully represented in these frameworks. We conducted interviews with Mapuche leaders and community members at three PPA sites in Chile's Los Ríos region to explore how they perceived PPAs and their social impacts. Our analysis suggests Mapuche were not resisting constraints on resource rights and use created by Chile's property-rights system. Informants, particularly community leaders and elders, adopted a deliberate and cautious approach to relationship building with PPA administrations, perhaps because of a Mapuche history negotiating colonialism, corporate exploitation, political marginalization, environmental degradation, and capitalism. Our results suggest that to be inclusive of PPAs in Los Ríos, future conflict frameworks should attend less to the notion of controlling territories and people and more on how private property regimes inhibit park—people partnerships, what global and state mechanisms contribute to conflict at the local level, and how locals respond to PPA creation.

Index terms: conflict, framework, indigenous, Mapuche, private protected area

#### **INTRODUCTION**

Mainstream conservation discourse asserts that "conservation works better with social justice" (Baker 2014). Governing conservation bodies, such as the International Union for Conservation of Nature (IUCN), acknowledged that exclusionary approaches to control marginalized local people and disregarding social conditions resulted in detrimental and unacceptable social costs and weakened conservation efforts (Mc-Neeley et al. 1994; Borrini-Feyerabend et al. 2004). This is particularly the case where disregard for social justice prompts clashes between indigenous groups and external conservation actors (e.g., natural resource managers, environmental non-governmental organizations) (Beltrán 2000; Brosius 2004). The Durban Accord of the Fifth World Parks Congress served as a novel opportunity for global protected area actors to draft a strategy for integrating indigenous peoples into their plans (Colchester 2004). This event was a global forum in which concerned professionals and scientists from all regions of the world promoted the Dana Declaration, an innovative conservation approach in defense of indigenous cultural and livelihood rights, knowledge, and experience.

For indigenous people living in or near protected areas in less-industrialized countries, an exclusionary approach resulted in deleterious changes and outcomes. Indigenous groups have chiefly contended with the North American park, or fortress conservation, model. Nepal

and Weber (1995), Colchester (1996), West et al. (2006), and others described the social injustices associated with this model. These authors detailed accounts of dispossession (of land, resource access, and decision making), social and cultural disintegration, and violence. In addition to turning a blind eye to social costs, some external conservation actors also ignored the complexity and dynamic character of rural life in these countries. Scholarship within ecological anthropology and human geography was instrumental in demonstrating the complexities of rural indigenous life and also the efficiency with which rural peoples managed their natural resources in these settings (e.g., Moran 1991; Netting 1993; Fairhead and Leech 1996). In many cases, scholars demonstrated that shortsighted and sweeping conservation policies, particularly national park creation, uprooted local livelihoods and cultures, did not improve local well-being, and tended to result in unsustainable outcomes for indigenous groups (e.g., Neumann 1997; Stevens 1997; Bosak 2008).

The search for just and participatory ways to engage indigenous peoples around public protected areas resulted in several important philosophies, guidelines, and frameworks to remedy conflict with external conservation actors. In Latin America, many state-led conservation actors shifted from a philosophy viewing indigenous groups as nuisances to one that considers them partners in biodiversity conservation (Oltremari and Jackson 2006). The World Commission on Protected Areas (WCPA)

published guidelines that emphasized conflict prevention, respect for indigenous rights, histories, cultures, and livelihoods, and integration of these factors into protected area management through "decentralization, participation, transparency and accountability" (Beltrán 2000). Academics formulated assorted frameworks to mitigate struggles originating often from the conflicting interests of conservationists and indigenous groups (hereafter referred to as conflict frameworks). Timko and Satterfield (2008) examined equity as a major indicator of "socially effective" national park management. Specifically, they addressed land tenure, livelihood opportunities, and decision-making. Nepal and Weber (1995) identified collaborative planning and management, joint problem solving, social impact assessment, and "synergistic multicultural interaction and mediation" as remedies to major sources of conflict over curtailed customary rights of local people over natural resources. They added that benefit sharing, recognition of knowledge and attitudes, conservation education, and financial assistance are also important ways to resolve conflict. Combining aspects of social justice, partnership, and economic development, Negri and Nautiyal (2003) highlighted the recognition of indigenous rights to control and own natural resources and their assimilation into the global political economy via tourism ventures that result in net benefits to materially poor peoples (i.e., pro-poor tourism). Existing conflict frameworks were derived in the context of conventional conservation (Colchester 1994), where governments control and manage resources within their territorial boundaries. They tend to address issues associated with influencing local resident behavior and resolving conflict with indigenous groups by enhancing the state's legitimacy and credibility in part through benefit sharing (Peluso 1993; Nepal and Weber 1995; Oltremari and Thelen 2003).

This paper presents a case study of indigenous Mapuche perceptions of private protected areas (PPAs) in Los Ríos, Chile. We then overlay their views with existing conflict frameworks because these frameworks do not explicitly account for the global and rapid rise of private sector conservation and related social impacts.

Though global counts are elusive, PPAs are growing rapidly (B. Mitchell, pers. comm., 10 April 2014). PPAs, now located in both hemispheres (Mitchell 2005), were defined by the 2003 World Parks Congress as "a land parcel of any size that is (1) predominantly managed for biodiversity conservation; (2) protected with or without formal government recognition; and (3) is owned or otherwise secured by individuals, communities, corporations, or non-governmental organizations." The private sector's attempt at large-scale protected area conservation is an emerging enterprise. Similar to state protected areas, some PPA administrators have engaged local peoples intentionally, including indigenous groups; however, indigenous perspectives on non-indigenous PPAs are largely absent in the scientific literature (Serenari et al. 2015). We address this need and provide a starting point for additional PPA scholarship asking the following: (1) how do indigenous people perceive private protected areas and their social impacts? and (2) how can current indigenous-conservationist conflict frameworks be adapted to better account for the social impacts of private conservation on indigenous peoples?

#### **METHODS**

#### **Study Area**

Indigenous Peoples in Chile

The Atacameño, Aymara, Colla, Diaguita, Kawashkar, Mapuche, Quechua, Rapa Nui, and Yagán are the nine indigenous groups recognized by the Chilean government. The Mapuche ("people of the land") are the largest indigenous group, numbering approximately 1.5 million individuals in Chile, or 9% of the national population. Los Ríos, administrative region XIV, is one of four regions where Mapuche people are most concentrated. The Mapuche have remained outside Chile's larger societal institutions, such as the neoliberal economic and education systems. Coupled with high levels of national inequality, the Mapuche have been considered "the lowest social caste" in Chilean society (Meza 2009:152). Mapuche history is underscored by five centuries of defending culture from conquest, assimilationist policies, and land colonization and usurpation. This history has dictated relationships with non-indigenous people (Carruthers and Rodriguez 2009). Actively defending their symbolic and material ties to the land and sea against a variety of threats, the Mapuche are also possibly the most organized and engaged in conflicts over biodiversity conservation in Chile (Meza 2009).

Los Ríos and Private Conservation

The Los Ríos region is a hub for large PPAs. Further, with support from local and global actors, a few well-intentioned large PPA owners actively engage local residents and use market solutions to craft "sustainable" alternatives to prevent environmental degradation and material poverty (Bishop and Pagiola 2012). From May through August 2013 we investigated three large PPAs engaged in development-based conservation in Los Ríos (Figure 1). They were formed between 1989 and 2004: Oncol Park, owned by timber and pulp company Arauco Corporation, used for an ecotourism venture and to meet forest certification standards; Valdivian Coastal Reserve (RCV), owned by The Nature Conservancy (TNC), owned primarily for forest protection; and Huilo Huilo Reserve, owned by Chilean tycoon Victor Petermann, used for an ecotourism venture. Each administration of these PPAs interacts with local indigenous people through community outreach efforts.

#### **Participant Selection**

We employed key informant and snowball sampling to glean authoritative perspectives from indigenous people living near the three large PPAs in Los Ríos. Indigenous informants held positions as community decision makers, residents engaged directly in tourism development (local officials, tour guides, restaurant, shop, cabin/quincho owners), or current and former PPA employees and contractors. Interviewing took place until theoretical saturation was reached at each PPA site (Corbin and Strauss 1994).

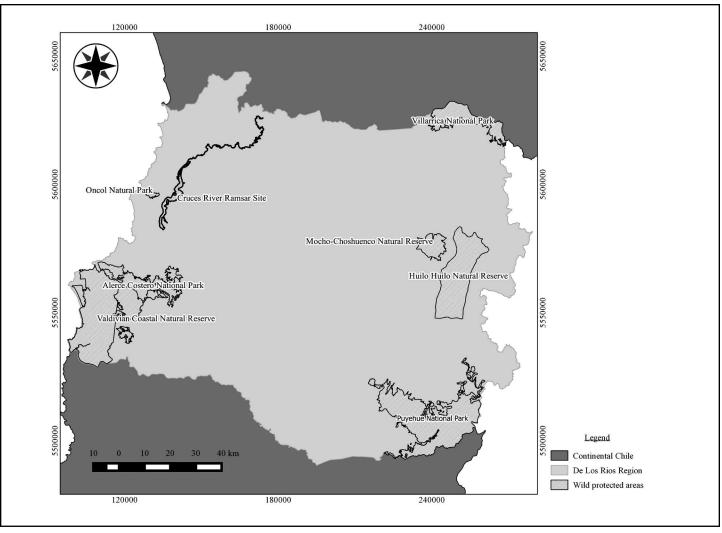


Figure 1. Protected areas in Chile.

#### **Analysis**

We completed a total of 37 semi-structured interviews with key informants (park: Oncol (18); RCV (14); Huilo Huilo (5)). We conducted closed coding, drawing from sideboards on indigenous perspectives about protected areas (conflict situations, community perceptions, and community expectations) established in this journal by Oltremari and Jackson (2006), and then added one of our own (cultural realizations). We employed QSR International's NVivo v.10 qualitative data analysis software (Burlington, Massachusetts). Continual movement between text and themes allowed us to pinpoint thematic moments and relationships and also evaluate our coding precision (Guba and Lincoln 1985; Petty et al. 2012). We focused this reflection on identifying areas where cultural meaning was unclear and member checking. Though not a linear or sequential process, the repeated interface encouraged reflection on our own involvement in the study (Guba and Lincoln 1985).

#### **RESULTS**

#### **Perceptions of PPAs**

Informants shared views that PPA owners benefited most from PPAs. Owners were perceived as wealthy, powerful, privileged, and reaping the returns of PPA tourism, which was growing in these historically indigenous areas of Los Ríos. A former head of the local fishing association discussed the difficulties of establishing a fertile re-

lationship with wealthy PPA owners who have different values and qualities than Mapuche people: "The majority of the people that we could call rich, always kind of leave aside the people of the country. It would be very difficult to [establish a relationship] because, for instance, the leaders here of the neighborhood board of the communities don't have those values, or they don't have relationships with people with a high educational level, social, or economic status. He lacks those characteristics that would allow him to talk to them" (BON-02).

Owners were viewed as "big and powerful...have money" and "the State is on their side" (PELLIN-02). We note that owners operating under Chile's neoliberal private property-rights regime were viewed as

unassailable, commenting, "You can never do anything to him" (MINAS-01) and "The owner can do whatever he wants with his land" (PF-08). Informants across all three study sites credited PPA owners with protecting remnants of the native forest, harboring the sacred canelo tree (*Drimys winteri* Forst.), after it was decimated by corporate logging. The president of the Huiro Fishermen's Union summarized informant views about PPAs saving the forest, declaring it "a good thing."

PPA benefits to indigenous people were detected, though limited. Informants mentioned that PPAs benefited children through environmental education and community institutions via wood donations in winter, but the majority of informants interviewed stated those who "work in tourism" or "for the park" and lived in the gateway communities (Las Minas (Oncol Park), Chaihuín (RCV), and Neltume (Huilo Huilo)) benefited most. Enterprising indigenous women made handmade goods near RCV or with the Huilo Huilo Foundation (HHF). Near Oncol Park and RCV, men guided, women pursued food and drink sales, and both men and women built and rented cabins or quinchos. Traveling farther afield from these parks, the number of people working in tourism or employees of these parks was low, however. Interviews revealed that Oncol Park and RCV hired only three to five locals to work in staff jobs such as park guards and zipline operators. With staff opportunities limited, RCV hired locals from other communities, such as Huape, to harvest nonnative eucalyptus, but this employment was temporary. An informant who owned oceanfront property overlooking a sea lion rookery in Huiro, five miles south of RCV stated, "The people that don't work on tourism don't win anything here" (HUIRO-02), while a second Huiro resident claimed that RCV "is too far away" (HUIRO-05) to experience appreciable tourism benefits. Lago Neltume residents were not employed by Huilo Huilo. In addition to few transportation options, a main reason Lago Neltume residents did not work at Huilo Huilo was because "they pay minimum wages for pretty long shifts" (LAGNEL-01).

Informants from each community viewed

PPA administrations' earnestness toward engaging local people differently. For those living near Oncol Park, they associated the park with Arauco and believed the relationship between park administration and Arauco was defined by self-serving motives. A Lefkenche woman spoke of the administration's perceived insincerity: "In some communities [Arauco/Oncol] had offered help only to certain people. For example, they help one family and...then [Arauco/Oncol] appear in the newspaper talking about how they have helped the entire community, when it's not the case at all...And for that reason the people here don't take seriously the activities that they have come here to do" (BON-03).

Oncol Park communities have a long history of exploitation by interlopers, which was detected in our data. One local leader, also a park guard, summarized the Mapuche experience during the big timber era: "The more ignorant [locals] were, the easier it was to take their things from them" (MINAS-01). A coastal Mapuche environmental history underscored by a major pollution event caused by Arauco (one of the worst ecological disasters in Chile's history due to discharge of pulp mill effluent into a wetland in 2004, negatively impacting our informants and their communities) induced another community leader to summarize residents' wariness about the company's attempt to run a pulp mill waste pipe through the Oncol Park study area, on to the ocean: "Always the one that knows less is tricked" (BON-01). Though informants acknowledged PPAs provided some opportunities to better themselves economically, one indigenous leader working for Oncol Park as a guard suggested his people deserted a Mapuche culture based on communication and collective action and embraced values rooted in individuality, competition, self-interest, and inequity.

"When you come from a culture 5000 years old...this land, with different customs, and you want to integrate [those] into that development, because you don't want to be left behind. And you don't have the knowledge that a colonist might have brought [with them], that arrived here with the concept of development...And what did we want

to do? Copy a bit...we started destroying the forest, selling raw material, just like Chile continues to do, without producing anything [for ourselves]. And we end up in poverty because...a tree is taken, a piece of land is overexploited; it doesn't go back to being the same...the people that arrived were...people that only came to extract resources. We followed them, and we wanted to have sawmills, buy many chainsaws, oxen, cattle, winches, skidders, and extract everything there was as fast as possible, even from gorges. So, that leads to the poverty of [our] later generations."

In a statement echoing Karl Marx's theory of alienation, he further explained that when the ability to "develop yourself economically and culturally" without influence of the larger society is stifled, then the "peace" is "broken," and the Mapuche quality of life is upset:

"When the father and mother have to dedicate their whole days to work, that destroys your quality of life because you have no contact with your people, with your family, you forget your culture because maybe you're working for a guy that's talking to you all day of how beautiful another culture is. And you feel stepped over and you finally end up forgetting your culture because you think it's not the correct path.... a bad quality of life is easy to have, it doesn't cost much to have a hostile environment, with people that are all day stepping over you due to their interests. Competing is horrible...Living in a society like that, for us and for me is complicated...you don't care about people's values; you don't care who [your competition] is, what that person feels, but you just go over him because you need your things. You're priority number one." (MINAS-01)

Lago Neltume leadership observed a lack of deference, candidness, and transparency by Huilo Huilo administration toward the Mapuche, leading one to respond, "No, they don't" (LAGNEL-02-M1) when we asked if the administration respected the Mapuche culture. Another added that he had observed "no real commitment" (LAGNEL-02-M2) to engage his family. Unlike in Oncol and Lago Neltume, infor-

mants from Huape stated that TNC did not "jeopardize" (HUAPE-01) locals as they feared the nongovernmental organization would when they created RCV in 2004. Though dismayed by the lack of jobs and communication deficiencies, informants from RCV communities thought that TNC was committed to local "support" and "helping them out" (HUIRO-03) in order to obtain funding for tourism development.

Informants across all three study sites expressed a range of willingness to partner with administrations, which translated to asking PPA administrations for help. Willingness to partner with a PPA administration was highest among informants residing near RCV. Informants in all four RCV communities believed TNC favored communication, ecotourism development support, and collective action, which jibed with existing community institutions. Residents near RCV were more likely to ask for support from TNC and thus, partner with them: "Anybody who has asked for support has had it. It just requires asking" (CH-06). Another informant suggested elements of human dignity mattered and wanted to see "a closer relationship among neighbors that could mutually help each other" because "in rural communities, if your neighbor needs anything you try to help where you can" (CH-04).

Lago Neltume leaders were less motivated to ask for tourism development help and had a patchy relationship with Huilo Huilo's community engagement organization, the HHF. Engagement tended to come at the individual level. Leadership remarked that they did not find a match between their community goals and the opportunities that the HHF offered. Leadership did have success dealing directly with Mr. Petermann on community issues in the past, receiving water "hoses" and "rights," as well as an animal for a ritual (US \$750.00) from him. When asked, leadership also reported traveling to the reserve to give blessings. These dealings may offer locals hope that they can remain in their territory as their lands degrade. They are no longer adequate for grazing ("no sustainable grass") and have been "overexploited" to the point locals cannot harvest timber for fires (LA-GNEL-02-M3); meanwhile, CONAF (the Chilean Forest Service) restricted locals' ability to remove encroaching vegetation. Leadership saw two opportunities, one in partnership with and the other without Mr. Petermann. They perceived Mr. Petermann's land more suitable for livestock grazing and vegetable growing and wanted to ask him to exchange lands. Leaders were also working with Endesa, a major hydroelectric company, to obtain tourism development funds, totaling approximately US \$34,000.

Near Oncol Park, informants viewed the park as an enduring private entity that posed little threat or benefit to their lives directly as long as communities were wholly disengaged from park administration. Community leaders hardened this strategy when they passed a resolution preventing communities from establishing formal relations with Oncol Park—despite park administration offering to help communities reap the benefits from tourism and rural development projects. Perhaps downplaying his own employment with the park, one community leader offered reasons for his support of this decision in two words: "dangerous" and "assistencialism" (MINAS-01). He illustrated his point with a simile about a wild bear that becomes habituated to human feeding.

#### **Conflict**

Informants rarely mentioned overt conflict with PPA administrations, a function of indigenous mutual respect for PPA borders and owner desires to do what they want with their land. A leader summarized informant sentiments about PPAs in this study saying, "Oncol is over there and we're over here" (BON-01).

Despite the general lack of conflict among "neighbors," RCV and Oncol residents showed similar inclination to engage in conflict. Relations between Oncol Park residents and Arauco were tenuous, and one informant promised conflict should the company become more of a local presence: "We don't have any problem with Oncol Park. We have nothing to do with them. I repeat: if Arauco got involved, there would be problems" (BON-01), and a community

elder added, "They are always going to be rejected" (BON-04). When Oncol informants believed lands were illegally taken from them by interlopers, they wanted them returned, and that conversation was the only one worth having. A community president claimed that Arauco took his and others' lands to create the park: "I wouldn't like to have a discussion with [park administration], unless it's a conversation to tell them to return the lands that they took from us" (PELLIN-02). Farther south, TNC's creation of RCV launched a multi-year logging operation to remove nonnative eucalyptus trees. Heavy logging trucks contracted by TNC damaged the only road passing by communities, traveled at high speeds, and produced dust clouds, triggering locals to "cut the road" until their demands to improve the situation were met. Eucalyptus removal operations also made use of an old logging sewage pit, which leaked and contaminated the local fishery, prompting a community letter of condemnation. Additionally, informants had a history of complaints about chemical (pesticides and fertilizer) runoff and soil erosion on the slopes at RCV due to the restoration logging project. At the time of our study, an issue with eucalyptus residue runoff was pressing: "A lot of neighbors aren't drinking the water right now. A little bit further over there, their water was contaminated...the resin of the eucalyptus, the bark is all there, so all that makes a mixture. And that's a fact because they conducted a water analysis and sent it to a university. Health services came here and the water is effectively contaminated" (HUIRO-02). Informants noted that TNC showed a commitment to remedying each issue and indeed they had in many cases.

Access restrictions created hardships for community residents who relied on natural resources from common areas that became PPAs. None of the PPA owners relinquished lands or compensated individuals in these instances. Most impacted were communities near RCV, Huiro and Cadillal, as TNC gradually ended cattle grazing, timber harvests, and homesteading in the forest. When asked if the way people take care of their animals has changed, a restaurant owner stated, "The way we live has changed. Everyone used to have more

animals back then" (CH-03). Foraging activities impacted residents near Oncol Park and Lago Neltume to a much lesser degree because forest services, other than timber, were not in high demand.

Finally, indigenous informants near Huilo Huilo and Oncol Park noted new divisions among their community members since PPAs were created. Informants believed Arauco was attempting to divide and conquer Mapuche in this area so that the company could more easily negotiate the location of the pulp mill effluent pipe and a coastal highway which would lead tourists to Oncol Park's entrance: "They want to divide us with a highway, which would pass right through here, right where I have my land" (MINAS-01). Consequently, a bloc of community members "have problems with the park because [Arauco is] supporting the highway that will go along the coast" (PELLIN-03). A letter was drafted by Las Minas, Pilolcura, and Curiñanco leaders rejecting relations with the park. It was signed by all community leaders, generating resentment among some community members who, despite abhorrence for Arauco, wanted help from park administration to develop tourism. Even though tourism development was agreeable, a community president would not go on record to suggest how a tourism partnership with Oncol would work because such speculation could cause him problems with other leaders, adding, "I'm not going to give my opinion because if we have a problem with [Arauco/Oncol Park] at a later date, then I'm going to have a problem with everyone else" (PELLIN-02).

Huilo Huilo dealings exacerbated existing tensions between the president and customary leadership in Lago Neltume originating from an ongoing power struggle over community self-sufficiency (e.g., a belief that the president is "selling the community" [LAGNEL-02-M2] to private corporations). Mr. Petermann invited both the *lonko* and the president of the community to large events: "One time they invited the *lonko* and the president of the community, and the president got angry because he thought the *lonko* was not as important as him. But that's an internal conflict within the community" (LAGNEL-01).

#### **Expectations**

Optimistic expectations about PPAs were shared among informants and were based on early and frequent interactions between PPA administrations and indigenous people, and administration assurances regarding support and economic benefits from tourism. The main expectation prior to PPA creation was that these parks would create park employment, leading to steady income. When these hopes were dashed for most people living near Oncol and RCV, they pursued indirect benefits received from tourism. A Chaihuín resident near RCV took the long view: "At first they thought that the reserve would give many job opportunities and that didn't happen. Now, we are creating jobs indirectly. Things come with time" (CH-08).

Informants shared an expectation that PPA administrations would facilitate community tourism development: "They should be like the bridge, connect the tourists with us" (HUIRO-03), marketing indigenous tourism services (e.g., guiding, gastronomy), as well as helping to obtain and channel funds for community development efforts. Informants nearest to RCV expected tourism development to increase in the future and desired that TNC help them take advantage of these opportunities. Speaking about her community, a Lago Neltume informant stated locals initially expected more tourists as they made their way to Huilo Huilo along an underdeveloped "tourist route," adding that Huilo Huilo's tourism traffic "hasn't really affected us" (LAGNEL-01). She did "hope more tourists will come by...to buy our products and crafts." As tourist visitations remained low, Lago Neltume leadership came to expect little and were opposed to asking for assistance from the HHF to boost tourist visitation. The reserved expectations of informants living nearest to Oncol Park were effectively reduced by indigenous leaders' official rejection of Arauco and little positive social impact over 24 years. A lifelong farmer and fisherman echoed informant sentiments stating that Oncol staff "have been working all these years" attaining "meaningless" results for people, so they expect "nothing" in the future (BON-04).

Informants expected the PPA administrations would protect the native forest from degradation, but feared that community members would be disadvantaged from PPA creation. An early central fear among RCV and Oncol study sites, where there was a history of land dispossession, was that PPA creation would result in further loss of indigenous lands: "We were afraid that they would take our land away" (PI-LOL-01) and feared "they would take over Chaihuín" (CH-03), respectively. The data revealed community members were afraid of Arauco because the company was "big and powerful, they have money, and the State turns to their favor; and, in addition, they wanted to build the pipeline to the sea, to finish destroying the natural resources" (PELLIN-02).

#### **Cultural Realizations**

Informants stated that PPA-led education and training efforts equated to gains in institutional forms of cultural capital. We noted three tenets to PPA administrations' environmental education approach in our data. The first was for residents to "appreciate" their natural heritage through protection and conservation. Appreciation is based on the idea that cultivation of a conservation "mentality" allowed local residents to change their conceptions about what the forest means to them. Forest protection by PPAs resulted in a type of revival for indigenous people who hold the forest sacred. Conceptions of the forest changed for those who were involved in unsustainable corporate logging. A community fisherman's union president told us: "We saw how a beautiful forest was destroyed. It was a disaster" and "Now there's a different way of seeing things" (HUIRO-03). Summarizing informant views, they understood how living differently might benefit the planet, their culture, and communities.

The second tenet comprised altering behavior by replacing utilitarian values with protectionist ones. Workshops on trash management, tree planting, and recycling are some of the ways PPA administrations attempted to slowly change behavior. PPA pedagogy hinged on youth education

through classes and fieldtrips. A teacher discussed an upshot of these efforts by PPAs stating that "the kids have that mentality instead of thinking, 'It doesn't matter if I don't study because I still have the trees and I can cut them for a living" (PELLIN-03). Informants noted that PPA administrations hoped local youth would learn and internalize local biology, forest ecology, and the local and global consequences of forest degradation, then propel this information vertically, "saturating" adults in the community who hold more deeply entrenched utilitarian values. For instance, a woman provided a glimpse of this philosophy in practice while discussing the local children saying, "The kids have learned to take care of nature" (CH-06). An artisan-chef revealed that TNC's approach targets the individual's ethical compass: "Because [TNC] makes those talks, [the kids] know what's good and what's bad."

The third tenet is sustainable integration of native biodiversity into local livelihoods to diversify livelihood portfolios and increase household income. Through workshops, adults (re)learned how to live from the land—from "natural" things—and reap the benefits of living simply, organically, and sustainably (author summary of quotes). They were taught composting and novel harvesting techniques, and how to diminish the need for chemical applications. This strategy was effective for Lafkenche on the coast because locals believe that the ocean is "running out of fish" (CH-08) and they require another income source. Nature-based tourism projects were increasingly important in this strategy. For instance, the HHF funded a workshop teaching women how to make handcrafts (e.g., woodland fairy dolls) that are sold at the reserve. The president of a local fishermen's union discussed how tourism is linked to sustainable livelihoods near RCV: "That's why we are doing all this now. I think it implies to have a sustainable job that lasts all the season. Not struggling with the fishing, but working more with the tourists. That's what we want" (HUIRO-03). Informants also noted that these efforts helped Mapuche start and run businesses such as cabin rentals, park guiding, and restaurants. Tourism-based trainings on the coast included gastronomy, wool dyeing, computer technology, and understanding tourist preferences.

Finally, PPA tourism helped informants reengage and promote their cultural identity and practices. In doing so, Mapuche were more inclined to distinguish themselves from non-Mapuche and rekindle personal value in their identity, which is connected to other living things:

"I lived in Santiago and there they called me 'Indian' and I felt bad, underestimated. I came here as a tourist one summer and with time I learned about the Mapuche roots and pride. I learned about the traditions. If you ask a foreign person about the meaning and origins of their last name he won't know. Here, the last name has value...then you realize the value that Mapuche culture has in other places...the same happens with the forest and the animals. We don't realize the beauty of what we have. I think people will only realize it when it is lost" (CH-08).

Some tourist practices infringed on prohibited indigenous cultural practices. Tourists' beach fires received condemnation from a Mapudungún (the Mapuche language) teacher near RCV because it is believed that they bring bad weather, negatively impacting local fishing. Lago Neltume leaders stated the gratis blessings they perform at Huilo Huilo and other tourist destinations were a way to bolster tourist recognition of, and interest in, Mapuche identity and culture. The lonko's son, also a community authority, stated, "I perform the ceremonies. I do the Guillatún [an ancient Mapuche ceremony] and pray for them and do what I can. I want them to recognize our cultural identity" LAGNEL-02-M2).

#### **DISCUSSION**

When comparing our Los Ríos results to literature on indigenous responses to public protected area establishment, forceful responses by indigenous informants to social perturbations caused by PPAs were uncommon. As evidenced by road cutting near RCV, communities near PPAs were capable of such a response, but our data suggests that they were not inclined to engage in such behavior. Our results suggest

that indigenous informants were resigned to the idea that Chile's property-rights system was strong and legitimate, unlike indigenous groups noted elsewhere (e.g., Meza 2009; Holmes 2015). The different types of rights encompassing a property-rights system may deter indigenous people from challenging external conservation actors over resource rights and use, for example. Specifically, access, management, exclusion, withdrawal, and alienation rights define the rules by which private property decision-making power is exercised (Conkleton 2014). The exercising of these socially legitimized rights by PPA owners arguably weakens any notion locals might have that they are claimants to the land or have an effective voice in park management (Schlager and Ostrom 1993). Thus, conflict frameworks anchored to participatory approaches, self-governance, equal partnership, or restoration of customary rights may be less useful in PPA contexts where indigenous claims to property may be weaker than in public protected area contexts. For instance, Mapuche informants believed that they were largely incapable of challenging PPA outcomes, and such resignation was considered rare in contexts of public protected areas (Brosius 2004). Although outreach efforts may be used to overcome indigenous leaders' reluctance to engage external conservation actors and PPA administrators on more equal footing in Chile, periods of violent state-sponsored agrarian and capitalist expansion in indigenous territories, inspiring indigenous beliefs of a perpetual Chilean oligarchy (Berdichewsky 1979), would make such efforts difficult. The level to which a balance of power is achieved impacts how supportive or satisfied indigenous people are with protected areas (Mortenson and Krannich 2001). Further, PPA actors in Chile or elsewhere do not appear to have demands (e.g., regulatory) placed upon them to relinquish decision-making authority or restructure conservation and development institutions—the so-called rules of the game—to enhance third-party participation. So, if indigenous leaders did choose to engage them, it would likely be in highly asymmetrical power relationships. A corollary to these observations is a need for future conflict frameworks to shift focus

from principles of "good" protected area governance (e.g., Lockwood 2010) to the politics of PPAs. Whereas "good" governance is associated with state protected areas and entailed oversight and control over people and territories, PPA governance referred more to negotiation between neighbors in our study and uncovering the hidden motivations for entering into PPA-local partnerships than to the direct control over locals. "Good" governance principles such as fairness, accountability, connectivity, or transparency will not solve Mapuche disengagement near Oncol Park, for instance, because of the documented symbiotic and nested relationships between Chile's "bourgeois" and politico-legal institutions that have negatively impacted Mapuche. Our data and the growing literature on PPAs establishes that these associations play an important role in PPA-local relations (Langholz and Krug 2004; Holmes 2011; Serenari et al. 2015). "Governance" needs to be operationalized to address how PPA administrations and their global networks establish and change the rules to create and resolve conflicts for indigenous people (Paavola 2007). Mowforth and Munt (2008) offered a network-based definition of governance that is useful for theorizing innovative conflict frameworks attending to PPA nuances, such as private property rights or indigenous environmental, social, and political histories. These authors referred to "the web of institutions and agencies that are central players in the political environment...the focus...is on national governments, bilateral development agencies and the supranational institutions" (Mowforth and Munt 2008). Perhaps thinking of governance in this way will inspire more inclusive conflict frameworks, as well as best practices for engaging local communities, that consider, for example, how PPAs are linked to the norms of global biodiversity conservation and economic development and new institutions of conservation governance (Hansen 2013); or, at the local level, how social and environmental histories influence expressions of conservation conflict and partnership between indigenous people and outsiders.

The structural apparatuses that degrade

indigenous levels of trust in PPA administrations are important considerations in framework development. For our informants, complex social and environmental histories and insulted dignity dictated community interactions with PPA administrations more than financial incentives or perpetuating political discourses (e.g., sustainable development). Informants, particularly community leaders and elders, took a cautious approach to engaging PPA administrations, reflecting Mapuche experiences with colonialism, corporate exploitation, political marginalization, environmental degradation, and capitalist values. Conflict frameworks constrained by hegemonic ideas (e.g., benefit sharing from market-based solutions) and structures attempting to assimilate indigenous people or convince them to care about global biodiversity and development priorities run the risk of burying indigenous truths and ambitions. Consequently, scholars and PPA actors might struggle to comprehend gradations of indigenous trust or legitimization of dissimilar PPA regimes, or why some PPAs are more successful than others in their community engagement efforts.

### FUTURE RESEARCH AND IMPLICATIONS

We highlighted that existing conflict frameworks do not adequately address complex indigenous realities around PPAs in Los Ríos, Chile. To address this deficiency, our findings suggest greater attention be paid to the following opportunities for future research to inform conflict frameworks emanating from the creation of PPAs. First, there is a need to validate the assumption that indigenous people should have a voice in PPA management, a key idea in existing conflict frameworks. Our study suggests Chile's private property regime may serve as a potential moderating variable, shaping why and how local communities respond to PPA creation, calling into question this assumption. Second, because PPAs are relatively new to community engagement, existing frameworks have little to say about what types of engagement strategies may be useful to mitigating PPA-based conflicts. Future research should test which conflict mitigation tactics used in public protected area contexts, such as formulaic education, financial incentives, and devolution of control, are effective and possible in PPA contexts and identify what alternatives exist. Finally, it is plausible that conflict over PPAs could intensify under the right political conditions and PPA administrations should operate under that assumption. Our study illustrates that future frameworks need to address fundamental questions about PPA-indigenous interactions based in part on the idea that PPAs are artifacts of political processes that have degraded indigenous dignity and trust of outsiders. Indigenous people may engage in conflict with administrations if PPA goals do not align with their own, or they view PPAs as a threat to their existence. We hold that empirically investigating the politics of PPAs are necessary to inform more comprehensive frameworks.

PPA managers and indigenous groups should capitalize on the neighborly dynamic that private property regimes produce to preserve a low probability of conflict between groups. Historically, protected area managers, appendages of the State, resorted to authoritarian and paternalistic means to build relations with indigenous people. In many documented instances, these approaches were met with low levels of trust of, and support for, public protected areas because indigenous groups' collective worth (i.e., dignity) was fundamentally devalued. Given that PPAs are afforded socially legitimized protections under private property, PPA administrations that do not desire to wield their property rights in an antagonistic manner may be more socially effective than public protected area managers for at least two reasons. First, PPAs may not degrade the dignity of indigenous groups to the degree that public protected areas have because PPA administrations cannot reasonably resort to socially unjust strategies. Second, indigenous people have little sway in PPA matters, but they do hold some power in that they can rebuff PPA attempts at community engagement without reprisal. For these reasons, these two parties are ideally suited to seize the potential of a neighborly dynamic through early dialogue focused on enhancing human dignity, which would give each party a sense of common ground and worth that

could be useful for building sustainable PPA-indigenous relationships.

#### **ACKNOWLEDGMENTS**

The research team would like to thank Felipe Guarda for his dogged efforts during the data collection effort, the people of Los Ríos who shared their perspectives with us, and the reviewers and editorial staff for their thoughtful comments.

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#### LITERATURE CITED

- Baker, J. 2014. Conservation works better with social justice. <a href="http://www.iied.org/conservation-works-better-social-justice">http://www.iied.org/conservation-works-better-social-justice</a>.
- Beltrán, J. 2000. Indigenous and Traditional People and Protected Areas. IUCN, Gland,

- Switzerland.
- Berdichewsky, B. 1979. Anthropology and Social Change in Rural Areas. Mouton Publishers, Paris.
- Bishop, J., and S. Pagiola. 2012. Selling Forest Environmental Services: Market-Based Mechanisms for Conservation and Development. Earthscan, London.
- Borrini-Feyerabend, G., A. Kothari, and G. Oviedo. 2004. Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation: Guidance on Policy and Practice for Co-Managed Protected Areas and Community Conserved Areas. World Commission on Protected Areas. Best Practice Protected Area Guidelines Series No. 11. IUCN, Gland, Switzerland.
- Bosak, K. 2008. Nature, conflict and biodiversity conservation in the Nanda Devi Biosphere Reserve. Conservation and Society 6:211-224.
- Brosius, J.P. 2004. Indigenous peoples and protected areas at the World Parks Congress. Conservation Biology 18:609-612.
- Carruthers, D., and P. Rodriguez. 2009. Mapuche protest, environmental conflict and social movement linkage in Chile. Third World Quarterly 30:743-760.
- Colchester, M. 1996. Beyond participation: Indigenous peoples, biological diversity conservation and protected area management. Unasylva 186:33-39.
- Colchester, M. 2004. Conservation policy and indigenous peoples. Environmental Science and Policy 7:145-153.
- Conkleton, P. 2014. Examining the role of property rights and forest policy in forest governance: Lesson from Mexico, Bolivia, and Cameroon. Pp. 35–52 *in* G. Barnes and B. Child, eds., Adaptive Cross-Scalar Governance of Natural Resources. Routledge, New York.
- Corbin, J., and A. Strauss. 1994. Grounded Theory Methodology. University of Hagen, Germany.
- Fairhead, J., and M. Leach. 1996. Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic. Cambridge University Press, Cambridge, UK.
- Guba, E.G., and Y.S. Lincoln. 1985. Naturalistic Inquiry. Sage Publications, Beverly Hills, CA.
- Hansen, M. 2013. New geographies of conservation and globalisation: The spatiality of development for conservation in the iSimangaliso Wetland Park, South Africa. Journal of Contemporary African Studies 31:481-502.
- Holmes, G. 2011. Conservation's friends in high places: Neoliberalism, networks, and

- the transnational conservation elite. Global Environmental Politics 11:1-21.
- Holmes, G. 2015. Markets, nature, neoliberalism, and conservation through private protected areas in southern Chile. Environment and Planning 47:850-866.
- Langholz, J.A., and W. Krug. 2004. New forms of biodiversity governance: Non-state actors and the private protected area action plan. Journal of International Wildlife Law and Policy 7:9-29.
- Lockwood, M. 2010. Good governance for terrestrial protected areas: A framework, principles and performance outcomes. Journal of Environmental Management 91:754-766.
- McNeeley, J.A., J. Harrison, and P. Dingwall, eds. 1994. Protecting Nature: Regional Reviews of Protected Areas. IUCN, Gland, Switzerland.
- Meza, L.E. 2009. Mapuche struggles for land and the role of private protected areas in Chile. Journal of Latin American Geography 8:149-163.
- Mitchell, B. 2005. Editorial. PARKS 15:1-5.
- Moran, E.F. 1991. Adaptive strategies in Amazonian blackwater ecosystems. American Anthropologist 93:361-382.
- Mowforth, M., and I. Munt. 2008. Tourism and Sustainability: Development, Globalisation and New Tourism in the Third World. Routledge, New York.
- Mortenson, K.G., and R.S. Krannich. 2001. Wildlife managers and public involvement: Letting the crazy aunt out. Human Dimensions of Wildlife 6:277-290.
- Negri, C., and S. Nautiyal. 2003. Indigenous peoples, biological diversity and protected area management: Policy framework towards resolving conflicts. International Journal of Sustainable Development and World Ecology 10:169-179.
- Nepal, S.K., and K.W. Weber. 1995. Managing resources and resolving conflicts: National parks and local people. International Journal of Sustainable Development and World Ecology 2:11-25.
- Netting, R.M. 1993. Smallholders, Householders: Farm Families and the Ecology of Intensive, Sustainable Agriculture. Stanford University Press, Stanford, CA.
- Neumann, R. 1997. Primitive ideas: Protected area buffer zones and the politics of land in Africa. Development and Change 28:559-582.
- Oltremari, J.V., and R.G. Jackson. 2006. Conflicts, perceptions, and expectations of indigenous communities associated with natural areas in Chile. Natural Areas Journal 26:215-220.
- Oltremari, J., and K. Thelen 2003. Planificación de áreas silvestres protegidas. Comision Na-

- cional Del Medio Ambiente, Santiago, Chile.
- Paavola, J. 2007. Institutions and environmental governance: A reconceptualization. Ecological Economics 63:93-103.
- Peluso, N.L. 1993. Coercing conservation? The politics of state resource control. Global Environmental Change 3:199-217.
- Schlager, E., and E. Ostrom. 1993. Property-rights regimes and coastal fisheries: An empirical analysis. Pp. 13–41 *in* T.L. Ander-
- son and R.T. Simmons, eds., The Political Economy of Customs and Culture: Informal Solutions to the Commons Problem. Rowman and Littlefield, Lanham, MD.
- Serenari, C., M.N. Peterson, Y-F. Leung, P. Stowhas, T. Wallace, and E.O. Sills. 2015. Private development-based forest conservation in Patagonia: Comparing mental models and revealing cultural truths. Ecology and Society 20:1-11.
- Stevens, S. 1997. Conservation through Cultural

- Survival: Indigenous Peoples and Protected Areas. Island Press, Washington, DC.
- Timko, J., and T. Satterfield. 2008. Criteria and indicators for evaluating social equity and ecological integrity in national parks and protected areas. Natural Areas Journal 28:307-319.
- West, P., J. Igoe, and D. Brockington. 2006. Parks and peoples: The social impact of protected areas. Annual Review of Anthropology 35:251-277.