Caring for Pacific salmon

Reconsidering salmon-human relationships

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My relationship with Pacific salmon transformed dramatically in 2019, evolving from abstract knowledge of supermarket fillets to intimate understanding through fieldwork in the Heiltsuk territory. What I experienced personally deeply influenced my subsequent research approach.

My ethnographic work showed that various groups conceive of and practise 'care' for salmon in distinct ways. It became clear that direct interaction is key in shaping people's sense of responsibility for the salmon's survival. Drawing on 12 months of ethnographic fieldwork with the Heiltsuk Nation and other actors who engage with salmon, I demonstrate how caring for salmon is embedded in cultural, historical and regulatory contexts that sometimes align and sometimes conflict.

Salmon-human relationships

During my first visit to the Heiltsuk territory, I learned about the five native Pacific salmon species – sockeye, chinook, coho, chum and pink salmon – their particularities and what these species mean to people. Every salmon species plays a unique part in the ecosystem and also carries specific cultural importance.

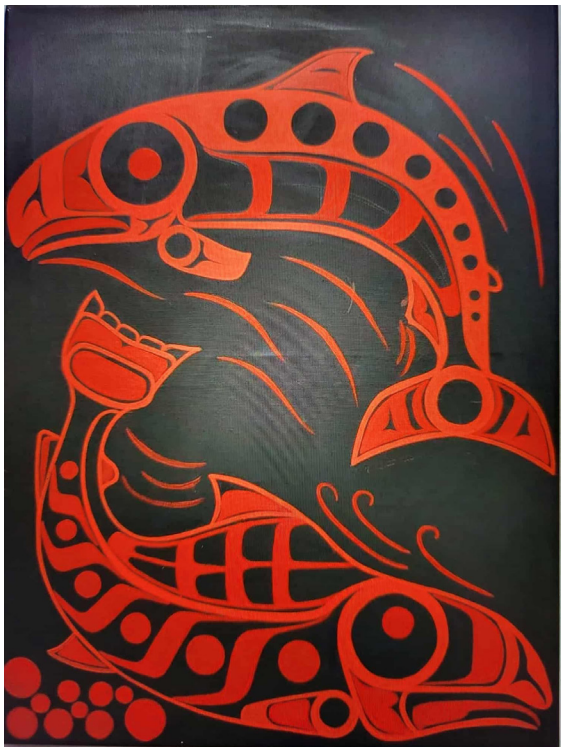
Through the research collaboration, I worked with Heiltsuk and non-Heiltsuk people, those who fish for food, social and ceremonial purposes (FSC), sport fishers, commercial fishers, community members, scientists and people active in salmon enhancement projects. With ongoing salmon population declines, both Heiltsuk and non-Heiltsuk people worry greatly about the species' survival. A long-time Heiltsuk fisherman expressed this deep connection and concern, telling me, 'Salmon will go and people will die'. This highlights the devastating impact salmon declines have on local communities, particularly Indigenous ones like the Heiltsuk, who have relied on salmon for millennia.

In these interactions, salmon are not an abstract resource but inhabit a plurality of meanings for different and the same actors, drawing on Todd's concept of '"fish pluralities" (multiple ways of knowing and defining fish)' (Todd 2014: 271): salmon entail social and cultural connection to family, friends, ancestral practices, oral histories and the more-than-human environment. They provide food as well as sporting and economic opportunities for Indigenous and non-Indigenous people.

For the Heiltsuk, responsibility connects strongly to ancestral ways and kin-like relationships with other beings in their territory. This forms a relationship of mutual care. Central to these practices is their place-based, reciprocal engagement with the more-than-human world. This understanding connects to what Haraway (2008: 89) calls 'response-ability', describing relationships where those involved shape each other through their interactions.

In fishing encounters – the most common and intimate salmon-human interaction – fishers have to be in tune with the fish they want to catch, as well as with their environment. They constantly respond to what the fish responds to: changing lures, depth, speed and areas. Here, salmon are often experienced as fish with agency. This recognition of salmon agency, along with practices of being present with them, constitutes a responsibility which is further negotiated in practices of killing salmon.

Caring for salmon can take different forms and entail a commitment to learn more about salmon (cf. Haraway 2008). Practices of caring for salmon through getting to know the fish's behaviour and environment then often constitute material practices of trying to maintain salmon populations and their environments, combining the affective dimension of care with material practices of maintenance (cf. Puig de la Bellacasa 2017). While catching and killing salmon might seem counterintuitive to caring for the species, these practices are also part of how people care for salmon when they are based on responsibility.



MAX JOHNSON

Fig. 1. *Twin salmon represent twins in the Heiltsuk community. The design by Heiltsuk artist Max Johnson shows a female and male sockeye salmon ready to spawn.*

Historical salmon relationships

Indigenous peoples along the North American West Coast have engaged in what has been described as 'salmon husbandry' (Johnson 2009): most important salmon streams are also Indigenous village sites and Indigenous peoples have actively shaped salmon populations through terminal selective fisheries or the transplanting of salmon eggs to other streams (Campbell & Butler 2010; Menzies 2016).

Terminal selective fisheries, especially, shaped salmon populations as a catch selection for smaller, weaker fish that in turn influenced the size, migration time and genetic mark-up of the population – since bigger fish were left to carry on their migration and spawn (Jones 2002; Menzies 2016). To ensure care-full fishing practices, certain families in the Heiltsuk territory were responsible for specific streams (Jones 2002; author interviews). When there were not enough salmon returning to their streams to ensure the survival of the species and the needs of the community, families would ask other families whether their streams were doing better and would supply enough fish for them (Jones 2002).

The proprietorship of salmon streams was an important aspect to ensure connection and responsibility: to the salmon and their more-than-human environment. Here, salmon have never *not* been cared for. Instead, salmon migrations structured human life and human interference shaped salmon and their environment over millennia. These relationships form part of a larger, more-than-human web, as Heiltsuk practices recognize the intercon-

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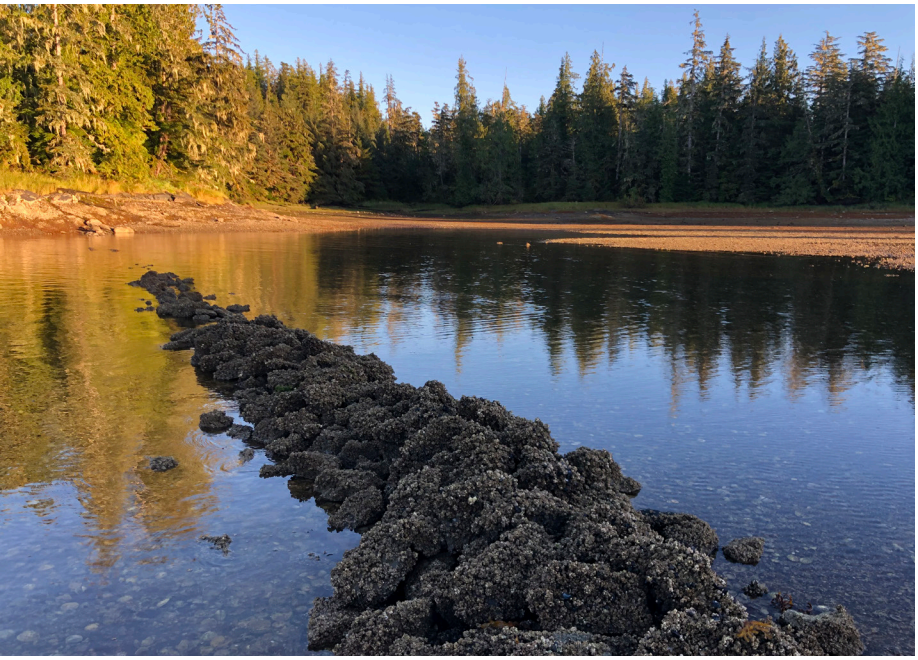

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Fig. 2. *The stone walls of an ancient Heiltsuk fish trap visible at low tide.*

nectedness of terrestrial, freshwater and marine systems and the more-than-human beings within them.

With the arrival of European settlers, these relationships were drastically altered. The Indigenous system of proprietorship for salmon streams was changed into a common property with gradual exclusions through governmental licensing schemes (Brown 1993; Menzies 2016). These licensing schemes especially disadvantaged Indigenous fishers and pushed many out of the commercial fishing industry (Menzies 2016). Through the introduction of diseases, violent conflict and government legislation, Indigenous peoples were amalgamated in reserves, often far from their families' salmon streams. Indigenous terminal fisheries were declared unsustainable and therefore banned and often destroyed while fishing shifted to mixed-stock fisheries (Menzies 2016; Taylor 1999). This shift disconnected fishing from the assessment of the individual streams and risks adversely affecting weak populations as they can hardly be separated from healthier stocks in mixed-stock fishing.

Colonialism disrupted Indigenous ways of managing salmon, creating issues that still affect conservation efforts now. Management based on Western science tends to focus on population numbers and economic factors. Indigenous ways, conversely, emphasize responsibilities embedded in relationships and place-based knowledge.

Contemporary salmon management

We still see the conflict between Western and Indigenous perspectives on salmon. Current Western management systems continue to interfere with and restrict Indigenous practices. At the same time, these systems haven't managed to turn around the historically severe drop in salmon numbers. In the Heiltsuk territory, as well as in many other parts of the BC Coast, two main types of salmon fishing remain: Indigenous FSC fishing, which is protected by aboriginal rights, and recreational sport fishing, which is regulated through licensing and seasonal restrictions.

Although existing side-by-side, these types of fishing follow different, often clashing, rule sets. FSC fishing is largely managed by Indigenous communities using traditional knowledge and practices. Sport fishing, however, is regulated by government agencies applying catch limits, size rules, gear restrictions and seasonal closures. These distinct regulatory frameworks show different core values concerning the salmon-human relationship.

Local salmon stocks present a difficulty, often being insufficient to support the fisheries or ensure the populations' survival. This situation leads people to discuss how individuals and communities might practise better care for salmon.

Relating to salmon

Catching, killing and eating salmon is not necessarily in conflict with caring for the species. For the majority of my research participants – Indigenous and non-Indigenous – the feeling of responsibility to care for salmon (the individual as well as the population) is fuelled by their own 'consumption' of salmon. Heiltsuk people referred to the practices of their ancestors: oral histories set out the responsibilities to care for salmon populations as these populations were in turn caring for the people in giving themselves for them. Anthropologists like Nadasdy (2007) and Voinot-Baron (2022) who worked with Indigenous communities have already underlined the importance of understanding human-animal relations as reciprocal encounters and taking seriously the notion that animals can care for humans, too.

For Heiltsuk participants, salmon and other nonhumans actively participate in mutual relationships by providing nutritious, culturally and economically important food. This reciprocity is embedded in oral histories like 'The Salmon Country' and 'The Salmon Boy', which acknowledge salmon's agency – their ability to choose whether to return to local waters based on how they are treated (Boas 1932). These stories outline a basis for responsibility: people have to look after salmon habitats and only take what's needed to ensure respectful relationships.

A Heiltsuk FSC fisher voiced a worry shared by nearly all Heiltsuk participants when she said, 'It's scary to think that my grandchildren are not going to have this.' This deep concern, she explained, was a key reason she became involved in protecting marine environments, salmon included. A fish biologist explained that a particular fishing trip spurred his motivation to work alongside local communities on salmon protection. Small-scale commercial fishers were aware that their survival depended on the survival of the salmon stocks and that weak stocks would ultimately end their fishing enterprise. Sport fishers were often very passionate about their fishing, wanted to continue their sport and also pass it on to their children and grandchildren. All groups currently fishing for salmon are interested in keeping salmon stocks healthy, not for altruistic purposes but precisely because they themselves are using salmon in different ways. Only when humans and salmon are connected do salmon become more than a manageable resource and a species with which humans can enter reciprocal relationships.

While there are similarities across the groups, it is important to recognize that access to salmon does not mean the same for each group: biologists and sport fishers can move to a different area for their research or sport; however, for Heiltsuk people, the connection to their ancestral territory and salmon populations is not replaceable. This connects to a key difference in viewpoints. Heiltsuk people often speak of mutual care relationships. In contrast, non-Heiltsuk participants frequently discussed conservation more as giving back – a responsibility linked to benefiting from the salmon.

Exercising care for salmon

Since fishing is the primary salmon-human encounter in the Heiltsuk territory, these interactions are also an important practice in which people practise care for salmon. Principles that connect actors across the different groups are trying not to harm salmon more than necessary, trying not to waste any of the fish, protecting the survival of the

1. Fisheries along the BC Coast are managed federally and commercial fishers often work in different fishing areas. Heiltsuk commercial fishers continue to participate in fisheries' openings – often either in Northern or Southern waters of BC.

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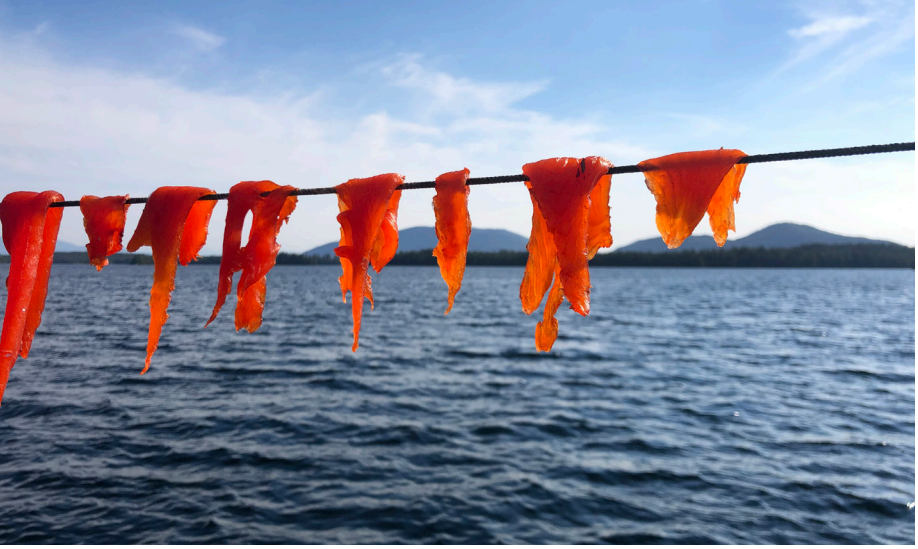

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Fig. 3. *Freshly caught coho drying in the sun while fishing. Heiltsuk people have dried salmon for millennia.*

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Fig. 4. *Bright chinook caught at the beginning of the fishing season 2022 in Heiltsuk territory.*

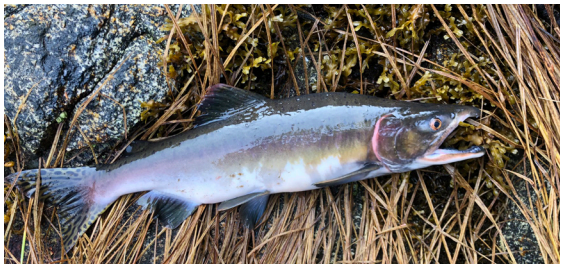

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Fig. 5. *A male pink salmon whose body has already transformed to spawn.*

species and genetic diversity in not catching undersized or very big fish. However, these principles play out differently for actors also due to different regulatory frameworks.

For example, Heiltsuk FSC fishers could decide to keep an undersized salmon that comes up dead in order to not waste the fish's life. In contrast, sport fishers could be fined for the same practice as fisheries' regulations prohibit them from keeping undersized fish. Similar regulations also apply to commercial fishers. A Heiltsuk commercial fisher[1] told me about one incident in which he and his crew had to throw back steelhead, chinook and coho, even though they were covered in red jellyfish and were unlikely to survive. Being very empathetic to the suffering of the fish with red jellyfish trapped in their gills, he pointed out: 'It's unbelievable how much fish is destroyed that way.' The lack of respect and responsibility for salmon still deeply affected him.

This instance illustrates a conflict between Indigenous understandings of care for salmon and government regulations – personal understandings of good care for salmon collided with governmental measures to care for the species' survival. Here, government regulations lacked the capacity to be 'response-able' (Haraway 2008: 71) towards the fish's suffering: while the mandatory release can be interpreted as a violent act in ignoring the fish's suffering and fishers' share in it, the act of killing the fish could have exercised care in responding to this suffering.

In contrast to regulations for mandatory release, sport fishers were the only group practising voluntary catch-and-release of their target species. They release salmon either to conserve these fish for the genetic gene pool or to catch a bigger fish or more desirable species to maximize their catch limits. Many Heiltsuk people, along with some sport fishers, criticized voluntary catch-and-release. They argued that salmon were unlikely to survive after being fought for a long time before release. These people described that after about 15 minutes of fighting with a salmon, these fish would be too strained and too exhausted to survive and continue their migration upriver, even when they were initially able to swim away after release. This concern is supported by research on post-release mortality of Pacific salmon (Raby et al. 2015).

In contrast, other sport fishers who intentionally caught and released salmon after 30 or more minutes did not assume their actions to harm these fish. One sport fisher described how he would revive the salmon after a long fight by gently pulling them back and forth through the water to flush water through their gills. Another sport fisher argued that even when there was some mortality after release, keeping all fish would result in a 100 per cent mortality. While sport fishers practising catch-and-release saw this practice as caring for salmon populations since they were not killing the fish, other sport fishers and Heiltsuk people saw it as a care-less act, as it was harming the fish.

These different views reflect wider cultural beliefs about the relationship between humans and salmon. For Heiltsuk fishers, catching a fish only to release it violates their reciprocal relationship. In contrast, sport fishers often view catch-and-release through a conservation lens. Caring for salmon is part of individual negotiations of what respectful and responsible relationships with salmon should look like. This understanding of care is then directly exercised in fishing encounters.

Conclusion

This exploration of salmon-human relationships has shed light on a different perspective on responsible care for ocean creatures. As Kimmerer (2020) argues, Indigenous perspectives of reciprocal relationships between humans and animals bear the potential to transform these relationships. When people understand salmon to take care of them, then this also requires a different human approach to caring for salmon: instead of trying to control another species, trying to engage in a relationship marked by reciprocity and responsibility.

This perspective expands care ethics beyond anthropocentric frameworks, recognizing more-than-human agency as essential to ethical ecological relationships (cf. Kimmerer 2020; Todd 2014). While there is no return to how salmon-human relationships used to be before the arrival of European settlers, there are attempts from Indigenous communities, including the Heiltsuk Nation, to regain control over salmon-human interactions and revitalize Indigenous practices of caring for salmon, such as to reconnect population assessment and fishing efforts in terminal fisheries (Atlas et al. 2021).

This research demonstrates how care manifests through practices that might seem contradictory: harvesting animals while working to ensure their population's survival. For conservation practice, effective salmon management requires acknowledging multiple ways of relating to salmon, particularly by incorporating place-based knowledge and relational ethics. Indigenous systems, with their emphasis on stream- and species-specific knowledge, may offer more sustainable approaches than management that treats salmon as an abstract resource.

Again and again, the people I worked with emphasized that communities must work together if salmon are to survive – emphasizing connection between actors and species. Their view was that good stewardship requires fixing the broken links between diverse groups and the salmon they depend on. ●

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