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Critical Relationality: Queer, Indigenous, and Multispecies Belonging Beyond Settler Sex & Nature

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FISHY PLEASURES: UNSETTLING FISH HATCHING AND FISH CATCHING ON PACIFIC FRONTIERS

CLEO WOELFLE-ERSKINE

***Abstract**: In debates over Puget Sound salmon recovery, the Wild Steelhead Federation, a settler sportfishing advocate, argues that hatchery-raised steelhead lack fighting spirit, and figures them as unnatural. The Northwest Indian Fisheries Commission and its member tribes operate hatcheries as strategy for maintaining fish runs until degraded habitats can be restored, and figure hatcheries as one of many sites of making relations. Although the genetic science mobilized on all sides of this debate is fairly new, settler discourses that, on the one hand, blame tribal harvest for salmon decline and, on the other hand, construe sportfishing as central to settler family-making and masculinities, have roots going back to the notion of the frontier itself. As a slantwise intervention in this debate, I consider sportfishing as a site and strategy for making settler sexualities, by examining visual archives that document historical practices of sportfishing and the technologies on which contemporary salmon and trout sportfishing depends: the reservoir, the fish hatchery, and the fishing pole. Tracing arguments about Nature and settler masculinities back to the origins of fish culture in hatcheries through the writing of George Perkins Marsh, I argue labeling either normative settler sexualities and gender relations or the flooded spawning grounds beneath reservoirs as unnatural threatens co-constituted settler sexualities and reworkings of "natural" landscapes.*

***Résumé**: Au sein des débats qui entourent la réimplantation des saumons dans le Puget Sound, la Wild Steelhead Federation, qui défend la pêche sportive des colons, avance que les saumons Steelhead de pisciculture manquent d'agressivité et ne les considèrent pas comme naturels. La Northwest Idian Fisheries Commission et les tribus qui en sont membres maintiennent que la production en élevage sera un stratégie nécessaire pour conserver la population piscicole jusqu'à la restauration de leur habitat naturel, et considèrent la pisciculture comme un des multiples sites propices à l'établissement de relations. Bien que la science génétique utilisée par les différents côtés de ce débat soit relativement récente, les arguments des colons accusant les pêches pratiquées par les tribus d'être responsables du déclin de la population des saumons considèrent, par ailleurs, la pêche sportive comme centrale à la la masculinité et à la construction des familles parmi les colons et remontent à la notion même de frontière. M'insérant dans ce débat par un biais différent, je considère la pêche sportive comme un site et une stratégie de construction des sexualités des colons en étudiant les archives visuelles qui documentent les pratiques historiques de la pêche sportive et les technologies dont dépend la pêche sportive contemporaine du saumon et de la truite: les bassins, les appareils à éclosion et les canes à pêche. Retraçant les arguments sur la Nature et les masculinités coloniales jusqu'aux origines de la pisciculture dans les écrits de George Perkins Marsh, je suggère que la normativité des sexualités masculines coloniales et l'établissement de bassins piscicoles sous les réservoirs aquifères sont des menaces artificielles constituées par les sexualités coloniales et leur reconstructions des paysages "naturels".*

Catching, holding, preparing, and eating fish yield unparalleled sensuous pleasures: floating on the water in a boat with the breeze in your hair, sitting on the bank in contemplation, wading in a swift-flowing stream, the satisfaction of a good cast, luck of the bite or dip of the net, the thrill of grasping a lively, flopping body, the heft of a fish or string of several, the first bite of flaky hot flesh on your tongue.

What kinds of relations do Indigenous, arrivant, and settler people make of, through, and with these fishy pleasures? And, with which fish do different people make these relations and take these pleasures? In what entanglements with water, infrastructure, and toxicity, as well as notions of Nature? How do fishy pleasures matter for Indigenous sovereignty, migrant history, and settler narratives? How do these relations co-constitute family and gender relations, and do they prop up or dismantle normative settler sexualities?

This work builds on Indigenous scholarship on fish relations as constitutive of Indigenous identities and cultural practices, and of repairing fish relations as exercises of sovereignty. In her work with Inuvialuit hunters and fishers, Zoe Todd ("'This Is the Life': Women's Role in Food Provisioning in Paulatuuq, Northwest Territories") argues that food provisioning—especially fishing, but also whaling, berry picking, and hunting—are not men's affairs, but conducted by families, with women and men taking on complementary and interdependent roles. While addressing the lack of attention to women's practices of fishing, Todd ("'This Is the Life': Women's Role in Food Provisioning in Paulatuuq, Northwest Territories" 155) outlines an Indigenous understanding of gender in which human-animal distinctions are more important than differences between men and women, and hunting relations among men, women, and whales distinguishes between human genders without defining them as opposites: "Whereas Western conceptions of gender turn on a binary opposition of male to female, Iñupiat whale hunting emphasizes the interdependence of men and women, each of whom possess certain knowledge and skills that, while complementary, are inseparable from the whole." This understanding of both male and female gender identities as co-constituted through familial relations while hunting and fishing can make space for more expansive understandings of gender (inclusive of Two Spirit, trans, or

the genders of childhood, among others), and for thinking about fishing as a way of making queer familial relations.

In her more recent work, Todd writes of Métis identity and place-situatedness as constituted with sturgeon and Lake Winnipeg watershed ("From a Fishy Place"). She theorizes Indigenous law in relation to sturgeon relationships and notes that these principles continue to guide Métis notions of legal orders and proper relations across species even as the populations of these fish are in severe decline. Todd refuses Canadian state legal understandings of Métis relations with sturgeon and land-waterscape, and proposes a Métis ethical-legal framework to replace it:

> The erasure of Métis-fish and Métis-water relationships within the Lake Winnipeg watershed in the legal reasoning of *Daniels* diminishes the significance of the labour that Métis peoples perform in tending to, renewing and sustaining ongoing relationships to more-than-human beings within a specific and bounded watershed through time and space. The labour of co-constituting relationships to the waters and fish of the Lake Winnipeg watershed is integral in shaping the material and metaphysical sustenance and governance of Métis as a people....[Métis people] must also turn to, and acknowledge, our responsibilities to waters, to lands, to fish and to all the other living, sentient beings within the territories we move through in order to envision a Métis polity that encompasses possibilities, dreams and stories far more sustaining than the anemic capacities of the nation state and its hand-me-down laws from Britain and France ("From a Fishy Place" 52).

Potawatomi scholar Kyle Whyte and colleagues discuss how Anishinaabe understandings of sturgeon (Nmé) as relations conflicted with settler understandings of sturgeon genetics (Holtgren et al.). Anishinaabe management maintained genetically distinct stocks and promoted genetic diversity, a strategy that will require a century to regain fishable levels; the settler proposal of intensive hatchery rearing would have produced more catchable fish, but disrupted the continuity of Nmé-human relations through time. The Anishinaabe and settler plans both relied on the techniques and technologies of fish cul-

ture—tanks, hatcheries, and harvesting gametes from adult fish and releasing young ones into waterbodies. Both strategies mobilized western scientific methods to support policy goals, and produced scientifically valid results to support those goals. But the two management plans emerged from very different notions of relations between sturgeon and people, and so ended up with different temporalities of recovery understandings of what that recovery meant. The Anishinaabe plan set a 100-year window before sturgeon populations would recover to harvestable levels, so that they could propagate genetically distinct stocks in different water bodies, thus preserving relations between particular Nmé and the Anishinaabe clans with which they are in ongoing relation.

Whyte notes that Anishnaabe-led management practices—namely public events where Indigenous, arrivant, and settler humans release young hatchery sturgeon into the stream—have transformed settler relations to the Nmé (Whyte, "Our Ancestors' Dystopia Now"). This practice has fostered in non-Anishinaabe people a collective relationship to the Nmé population that is different from the sportfishing one that dominated previously. This relationship is not the same as Anishinaabe clan relations to the Nmé, but it is a relationship that is commensurate with Anishinaabe management and fish relations.

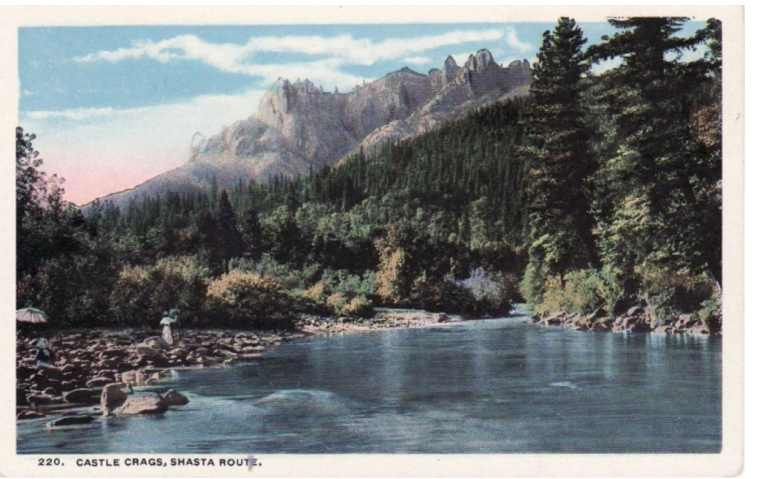
Here I am interested in complementing these theorizations of Indigenous fish relations as collective and intergenerational care practices with a parallel theorization of settler-fish relations. I explore how gender, the family, and sexualities are co-constituted with practices of sportfishing and the technologies on which contemporary salmon and trout sportfishing depends: the reservoir, the fish hatchery, and the fishing pole. This is a slantwise intervention into a current debate over the role of hatcheries in Pacific salmon fisheries.[1] I discuss the scientific and sovereignty implications of this debate at length in my monograph (in progress), but gloss it briefly here. A sportfishing organization strives to limit hatchery production of steelhead, while tribes maintain that hatchery production is necessary to sustain treaty-guaranteed fisheries. Bound up in this debate are incommensurate ethics of fishing (with a settler sportfishing group asserting that tribal commercial harvest and hatchery production are exacerbating steelhead decline, and tribes countering that catch-and-release practices trans-

gress against fishes' offering up of their bodies for consumption) and divergent notions of what characteristics of the steelhead population are important to preserve (with tribes asserting ongoing relations to hatchery produced fish through ethics of care in tribal hatcheries and the sportfishing group defining wildness as a good fighting spirit on the end of the line).[2] The Washington state fisheries agency manages most hatcheries and also depends on fish and game tag sales for most of its revenue. It sees its mandate as ensuring enough fish for commercial, recreational, and tribal harvest, no matter the genetic profile, while federal agencies have delayed final decisions as they await more study. Although the genetic science mobilized on all sides of this debate is fairly new, settler discourses that, on the one hand, blame tribal harvest for salmon decline and, on the other hand, construe sportfishing as central to settler family-making and masculinities, have roots going back to the notion of the frontier itself. Here I explore these discourses in images and historical texts.

Throughout this paper, I will distinguish among different tactics of settler colonialism in the guise of Manifest Destiny, enacted across time on and along rivers. Following Patrcik Wolfe, I consider Manifest Destiny as an ongoing process—rather than as an event that began with John O'Sullivan coining of the term 1845—that continues long after the frontier's official closing in 1890. This longue durée of settler colonialism resonates with Wolfe's "logic of elimination": "Negatively, [settler colonialism] strives for the dissolution of native societies. Positively, it erects a new colonial society on the expropriated land base—as I put it, settler colonizers come to stay: invasion is a structure not an event" (388)

Let me begin by presenting four moments of settler sexuality as illustrated through fish catching, arrayed through 120 years along two iconic California rivers.

VISUALIZING FISHY PLEASURES IN SETTLER FAMILY LIFE



A picture postcard of a new rail line along the McCloud River (tributary to the Sacramento) circa 1889 depicts women in Victorian dress painting the wilderness sublime as blank slate; others in the series show men fly-fishing in the river and the train arriving at a luxury lodge near Mount Shasta. Fishing and outdoor recreation in spectacular locales near railroad lines was a frequent pastime of Victorian elites, who traveled to vaguely Indian-themed lodges in Yosemite and Yellowstone National Parks; perhaps the ultimate symbol of leisure in wilderness was William Randall Hearst's Wyntoon estate, along 39 miles of the McCloud River. The colourized black-and-white photograph is one of a series produced railroads to boost train travel to such luxury lodges. The river is pictured as a blank slate, ready to welcome its new white inhabitants to practice familiar pursuits in comfortable settings. The bloody massacres of the Wiyot, Paiute, and Wintu people, the crude and vulgar life of the mining camps, dominated by working class men's homosocial (if not homosexual) practices, the brutal labour extracted from (mostly) Chinese men in building the railroad—all of this contamination has been magically erased, and the clear water and green forest provide both a site for virile pursuit of

fighting trout and genteel feminine representation of the wilderness sublime.

I encountered this photograph on a fly-fishing guide's blog (Trout). The blog's curator, fittingly named Jack Trout, included another photograph of two tow-headed children fishing with willow poles from rowboats near a fishing lodge—further visual evidence that white families visiting the lodge saw fishing as a key tactic of staking claim to and inhabiting the territory. That Hearst named his estate "Wyntoon" after the Wintu, whose fishing spots he usurped, suggests that he and his guests saw themselves as becoming "native" through their exploits there. As inheritors of Manifest Destiny, settlers saw themselves as heirs to the continent's biological abundance, figured as resources (fish, game, forest, and mineral) to be exploited freely. In 1883, on the McCloud River, railroad construction threatened the export of salmon eggs from the hatchery; the eggs were transported by rail and ship around the world to re-stock rivers damaged by resource extraction, even as the railroad construction damaged the source of the eggs on the McCloud. "[T]he heavy blasting involved in the construction operations of the railroad company, near the mouth of the Pitt River, had the effect of destroying or stopping nearly all of the salmon which would have ascended the Pitt River, to which the McCloud River is a tributary" (Stone, "Report of Operations at the U.S. Salmon-Breeding

Station, on the M'Cloud River, California, During the Season of 1884" 169). Yet despite damage from logging, mining, and the railroad, the river still ran with fish, enabling settler sexualities as embodied in the heteronormative family to be produced through various forms of elite recreation a day's train-ride from the metropole of San Francisco.

A newsman's series of photographs of Millerton Lake on opening day in 1945 shows those same elites joined by working-class fishers along the barren shores of a newly flooded landscape. All five photographs were taken on May 29, 1945, the day the reservoir was opened to fish-

ing. Engineers began filling the reservoir behind Friant Dam on February 21, 1944; water first flowed down Madera Canal to San Joaquin Valley 12 days after these pictures were taken. Sometime in that intervening year, the soil became saturated and grasses and trees under the water died. Friant Dam on the San Joaquin River decimated those salmon runs as Shasta did to upper Sacramento River ones. At Millerton, the eerie images of men recreating in a drowned landscape celebrate a triumphant vision of dam building while obscuring the dams' destruction of million-strong salmon runs on the Sacramento and San Joaquin rivers. These photos, and the archives in which they are contained, omit the Indigenous and more-than-human relations that arose from the seasonal runs of four species of Chinook salmon, coho salmon, and steelhead trout to California rivers. The photographer's caption notes that the men, women, and children at the reservoir that day were fishing for bluegill and crappie (both non-Native hatchery-produced warm-water lake fish), but the fish on the stringers appear to be brown trout (a species from central Europe that was also produced at the nearby Kings River hatchery). The men in the posed photographs are performing fish culture as a leisure activity one does away from home, by car, in groups of men, for sport and to show off. They are displaying feelings of prowess, camaraderie, and pride about the fish, though it's hard to see the feelings as being for the fish themselves—because the fish are dead and held up for display like trophies. Yet, the small size of some of the fish the men are taking home, and the way in which the fish are displayed, suggests that they are fishing for keeps, to eat later.

McCloud redband trout also showed up at the Rainbow Rancho, a trout hatchery founded in 1939, high in the arid San Bernadino Mountains on the edge of the Mojave Desert.

Located in Whitewater, off the route from Hollywood to desert resorts but within a few hours' drive from urban centres, the resort featured square fishing ponds and a lodge where kitchen staff would cook up your catch. In a photograph from 1944, two men and two women stand at the bottom of granite steps in front of a wooden lodge holding a wooden pole from which hang 10 dead rainbow trout. The trout hang from their gills, in a symmetrical pattern with two large ones in the middle and smaller ones flanking them. The men hold the heavy fish stick possessively, the women merely gesture to it, acknowledging their mates' masculine drive. The women stand closer to the men than to each other, one hand holding fishing poles flung over their shoulders and their other hand resting on the trout stick. The couples' outfits are coordinated—solids vs. checkers—and their expressions ooze carefree leisure, as if all are thinking (about their presumably heterosexual mates), "What a catch!"

Only a white granite outcrop coming in from the upper-right corner disturbs the casual symmetry of binary gender, lodge roof, and hanging trout. The people appear to be elites, heterosexual couples escaping

the heat of wartime Los Angeles for a few days of mountain romance, but the caption identifies them as the actor Howard Warrick, Rainbow Rancho proprietor Irv Mills, and Hollywood starlets from Palm Springs—perhaps just acting out straight settler romance for the camera. The cute assonance and consonance of "Rainbow Rancho," the casual appropriation of Spanish names, the trout-descendent bodies, and the reconfiguration of a flashy, braided, fishless river into a placid granite-rimmed pond all co-constitute a settler sexiness that alludes to romance, sex, and love without reproduction.

The other extant historical photograph from the Rainbow Rancho shows a more heterogeneous mixture of people. Whereas the 1944 photograph evokes the elite Wyntoon lodge, here the setting is almost urban, with a mix of cypress and pines planted in Los Angeles parks, and a smooth, level ground surrounding a constructed pond. The centre of focus is a middle-aged white man who is holding a fishing pole aloft in one hand while holding a line out with the other. Perhaps he has just landed a fish; it's too dark in the shadows to tell for sure. Two blonde girls to his left are looking at the end of his line, as is a Black boy to their left, who is half-perched on the granite wall of the pond with a line in the water; other children are looking away. The presence of the Black boy in the foreground invokes a postwar multiracial society in which settler property ownership (in this case, of the Rainbow Ran-

cho) extends benefits to non-native, non-white citizens. In the photograph, settler sexuality produces the family in a safe and sanitized space where fish are released full-grown, and are easily catchable for paying customers of different ages and genders. Perhaps Marsh's notions of fishing as virility booster are giving way to postwar notions of gender equity, or perhaps rural or working-class women who grew up fishing are continuing as adults. The photograph evokes a wholesome family scene, predicated on superseding Indigenous relations. This supercession continues into the present. The Wildlands Conservancy bought the property, removed the trout hatchery, and planted native shrubs and grasses there, while maintaining the trout fishing ponds as wildlife habitat. When I visited in 2017, two huge, old trout swam in the upper pond, which was now surrounded by thickets of willows filled with birds. The lodge building is preserved as an information center for visiting hikers, with natural history of local species and the organization's land preservation efforts, but I found no evidence of collaboration with the Morongo Band of Mission Indians or other regional tribes.

SETTLER MASCULINITIES AND VIRILITY AS ARTICULATED WITH DAMS AND HATCHERIES

Boosters and Bureau of Reclamation engineers sold Shasta and Friant dams to settlers as reclamations of wastelands, opportunities for postwar leisure, cheap water for farming and urban development, and sources of cheap electricity for the war effort and postwar boom. The young men of the Civilian Conservation Corps who laboured and occasionally died building the dams were, like the rivers their dams trammeled, transformed from unruly and sometimes deviant forces into efficient components of postwar industrial economies. As [Anonymous] notes,

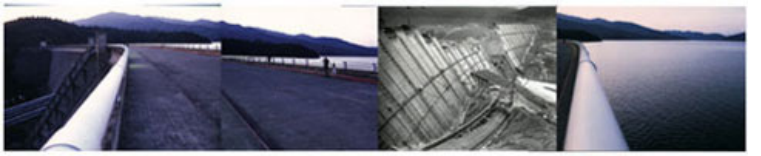
> Along with relieving households of underemployed young men, the CCC offered petty offenders an alternative to judicial punishment, and it promised to sculpt these men's bodies and character through hiking, calisthenics, routine hygiene checks, and team sports that were intended to cultivate the "militaristic tendencies" that were necessary for success in the modern

> business world. Along with acculturating masculinity in explicitly nationalist terms, the swath of youth development organizations that proliferated from the twenties to forties fostered an anti- ecological common sense that figured the white male as an exceptional ecological agent whose mastery of wilderness spaces reflected his readiness to advance U.S. American civilization through industry and domestic family making (Anonymous).

These dams were premised on the erasure of Indigenous riverine management and fisheries practice, inhabitation, and treaty rights (whether ratified or, as with the Winnemem, not). This was all quite explicit. Dams flooded many villages and named fishing sites, which were used by individuals or collectives or fishers to catch different species at different times with nets, weirs, and sometimes spears. They blocked spawning grounds and prevented salmon from reaching fishing sites, where people from many tribes would come together to fish, trade, exchange news, sometimes meet their future spouses, and perform ceremonies. These dams and the ones that came after them ended up driving salmon runs to extinction or the brink, though this was not their builders' intention. Rather, white male engineers and fisheries scientists (they were all white men back then) believed that hatchery-produced fish could replace and even improve on the natural runs the dams extinguished. Politicians marketed the new lakes as family idylls that would promote settler family values: leisure in masculine company for office-bound Father, a chance for Son to cultivate masculine independence and sportsmanship, and fresh healthy fish for Mother and Daughter to prepare back home.

For people who don't fish, what to do at these lakes is a bit of a mystery. I've driven the Interstate 5 corridor dozens of times over the last 20 years, over a neck of the reservoir in all weather. I've noted the height of the "bathtub ring" of red earth between the tree line and the water that marks the current severity of drought and the progress on the new, higher interstate overpass that will enable the dam to be raised 17 feet, flooding out several miles of McCloud River and many of the Winnemem sacred sites that remain above water. I've stopped at Lake Shasta perhaps 10 times, a few times to jump into the frigid water after six

hours baking in the Central Valley with no air conditioning, a couple times to walk the dog, and several more to walk out onto the dam itself or take the elevator plunge through its arch wall. Sometimes, swimming or walking the dog at the boat ramps, we'd see pontoon boaters coming or going, sober or sunburned but most often not. At the dam, people tend to walk the length of it, back and forth, sometimes staring upstream at the still water, or straight down at the dizzying curve of the wall. Ever since I saw the Bureau of Reclamation photograph of the dam half completed, I've sensed the steel rods and mountains of gravel that make up the structure under my feet. Ever since I've learned of schemes to raise the dam, I've imagined the extra water as a weight pressing down as I walk or lean over the railing and look down.



When fisheries technicians stocked the new lakes with hatchery trout, bass, and bluegill, they reinvigorated an argument about settler nationhood and white masculinity first put forth by proto-environmentalist George Perkins Marsh a century before. By the mid-1800s, most of the fishing streams and hunting grounds along the eastern seaboard of the U.S. were silted in by logging and agricultural erosion, poisoned by factory effluent, and blocked by tens of thousands of mill dams. As settler descendants migrated from rural areas to factory towns, some feared feminization and moral decay, both from inter-marriage with immigrants and from the loss of vigorous outdoor pursuits.

Marsh's 1857 rallying cry for fish culture argued that fish hatcheries could preserve settler masculinity and safeguard nationalism:

> We have notoriously less physical hardihood and endurance than the generation which preceded our own…and we have become not merely a more thoughtful and earnest, but, it is to be feared, a duller, as well as a more effeminate, and less bold and spirited nation.…The chase is a healthful and invigorating recreation, and its effects on the character of the sportsman,

> the hardy physical habits, the quickness of eye, hand, and general movement, the dexterity in the arts of pursuit and destruction, the fertility of expedien, the courage and self-reliance, the half-military spirit, in short, which it infuses, are important elements of prosperity and strength in the bodily and mental constitution of a people; nor is there anything in our political condition, which justifies the hope, that any other qualities than these will long maintain inviolate our rights and our liberties (Marsh 8).

Note the keywords: effeminate, sportsman, destruction, half-military, our rights, our liberties. The "our" in question is settler men preserving heteropatriarchy and the military spirit necessary to subdue Indigenous nations and foreign enemies.

Like other conservationists of his day, Marsh saw industrialization and the accompanying extinction of game animals as inevitable:

> But however desirable it might be...to repeople the woods and the streams with their original flocks and herds of birds and beasts, and shoals of fish, it is for obvious reasons, impracticable to restore a condition of things incompatible with the necessities and the habits of cultivated social life. The final extinction of the larger wild quadrupeds and birds, as well as the diminution of fish, and other aquatic animals, is everywhere a condition of advanced civilization and the increase and spread of a rural and industrial population.(Marsh 9)

Beneath the idyllic picture of white heteronormative families fishing in a stocked lake lie technoscientific interventions into fish sex and reproduction: the fish hatcheries that Marsh was arguing for in the tract cited above.

The stocked lake and the grizzly-free wilderness that [Anonymous] theorizes both create safe spaces for settler families that nonetheless evokes a time when bears fished for salmon in wild rivers: the wilderness that is necessary for the construction of a white, settler masculinity. As [Anonymous] argues in relation to grizzly bears, the eugenic commitments of conservationists only became more explicit in the 20th century. Predator control, meant to increase ungulate populations for

elite hunters, was rooted in fears of emasculation through settler intermarriage with immigrant and Indigenous people (who were figured as feminized and "parahuman") and the undermining of heterosexuality in an increasingly urban population. Crockett Club founder Theodore Roosevelt "endorsed an ethic of 'strenuous masculinity', which located wilderness recreation as the key to safeguarding the virility as white, American race" (Anonymous).

Fishy pleasures of chase-and-catch and immersion in nature became more easily accessible to more settlers when fake lakes replaced rivers. These lakes (figured as Nature) became the backdrop to performances of "natural" heteronormative gender/sex roles—women picnicking with their young children while their husbands and sons fished from the shore at Millerton, or later, women lounging in bikinis while men caught fish from the patriarchal pontoon boat on thousands of fake lakes in California and beyond.

INDIGENOUS KNOWLEDGE IN FISH CULTURE TECHNIQUE

These hatcheries originate in the settler appropriation of Winnemem Wintu fisheries knowledge at Baird Hatchery on the McCloud River where, from 1872, Winnemem men, women, and children taught fish-commission biologists from the East Coast where to find fish, how often they spawned, what species they belonged to, and how to catch them. Winnemem men did much of the labour of building weirs and hauling seine to catch the spawning fish and digging waterworks to divert flow to the hatching tanks. Women and children worked in the hatchery picking over eggs and preparing them for shipment by rail and steamship as far away as Germany, Patagonia, and New Zealand (Stone, *Report of Operations during 1872 at the United States Salmon-Hatching Establishment on the M'Cloud River and on the California Salmonidae Generally; with a List of Specimens Collected.*). Winnemem people lived, worked, and harvested salmon at Baird until 1935, when Bureau of Reclamation engineers building Shasta Dam bulldozed their homes and took their lands without compensation (Stone, *Report of Operations during 1872 at the United States Salmon-Hatching Establishment on the M'Cloud River and on*

the California Salmonidae Generally; with a List of Specimens Collected.).

Livingston Stone founded Baird Station on the McCloud River, the first hatchery for Pacific salmon and source for most of the rainbow trout raised in hatcheries worldwide to this day. When he travelled to the McCloud in 1872 he knew nothing about Pacific salmon: not where they spawned, or when, or where they went after spawning, how many species there were, or how to catch them (Yoshiyama and Fisher). In this photograph from around 1874, Winnemem hatchery workers dry salmon for later consumption, with the hatchery in the background. The photograph, like several others of settlers and Winnemem workers pulling seines dip-netting salmon, sometimes on mixed settler-Indigenous crews, show everyday interactions among the groups that appear unremarkable.

Courtesy, National Anthropological Archives, Smithsonian Institution, negative #76-14451

McCloud Wintu tribespeople assisted in salmon egg-collecting operations at Baird Station on the McCloud River, California, during the 1870s and early 1880s. Photograph ca. 1882.

More so than staged portraits, photographs like these that show everyday interactions in fish hatcheries depict the continued existence of Indigenous people and societies in modernity. As Caro comments in relation to Gertrude Käsebier's photograph "Unititled (group of Native performers)",

> It is precisely the way these photographs have captured Native subjects inhabiting modernity that today allows us the possibility of a different kind of nostalgic reading—a nostalgia predicated on the loss of contemporaneity. In other words, viewers today can see in these photos Native subjects who simultaneously inhabit the space of the photographer, a coevalness often denied Native subjects within the anthropological gaze. (Caro 38)

This coevalness opens the space for what July Cole has called "latent destiny," a more relational possibility for fisheries science that depended and still depends on continuing Indigenous presence and evolving cross-pollinations between Indigenous and settler scientific practice (Cole). Ultimately this latent destiny did not persist at Baird because Stone and his colleagues didn't challenge settler modes of fishing and inhabitation, from settler squatting on Winnemem land to forced relocation without compensation from first McCloud corridor to the remnant piece of land flooded behind Shasta Dam. However, numerous contemporary tribal fisheries science and habitat stewardship programs demonstrate the ongoing opportunity to foreground Indigenous knowledges in riverine ecology practice.

The methods of fish culture developed at Baird are now standard at salmon and trout hatcheries: technicians capture spawning fish in weirs, extract their gametes, and incubate them in a series of trays and tanks before releasing the young fry back into lakes and rivers. Descendants of the McCloud rainbow trout are raised by the millions in hatcheries worldwide. Hatcheries sustain both recreational trout catches and many commercially-harvested salmon runs. Leaving aside the commercial harvest for the moment, I now consider sportfishing for steelhead as a reinvigoration of Manifest Destiny logics applied to settler sexualities.

INCOMMENSURABLE ETHICS

Sportfishing sometimes instrumentalizes fish into status symbols, for example in catch-and-release fisheries when the trophy is a photograph of a person, usually a man, grasping a gasping live fish above the water in a photo, or when fish skins are kept and stuffed as trophies. At other times, the boundary between sportfishing and subsistence fishing blurs, as when people pose with their largest fish but take them all home to eat.

The conflicts between sportfishing and Indigenous fishing (and hunting) practices reveal incommensurate ethics. During fish-ins in the 1970s, the pan-Indian movement paper *Akwesasne Notes* featured a two-page spread about the fish wars in Puget Sound. Amidst photographs of a fishing camp recently raided and bulldozed by state game wardens, the paper ran a quote from an unnamed Puyallup fisherman which read, "It was cleaned out—probably by sportsmen who want all the fish for themselves, not to feed their families but to show off" ("Fishermen and the Fascists: The Masssacre of the Puyallup Camp"). The fisherman's comment contains an ethical claim: that catch-and-release practices are unethical because they disrupt relations between a fish and the human it offers its life to. The fly-fishers of the Wild Steelhead Federation, in contrast, recently argued that their catch-and-release practices are more humane because by releasing fish, they are not killing them. However, opponents of catch-and-release salmon and trout fisheries cite research showing that handling stress causes many fish to die several hours after release (Ferguson and Tufts).

The *Akwesasne Notes* spread marks a turning point in settler-tribal-salmon relations in the Pacific West: a movement paper based out of Mohawk territory covering legal cases and direct action on the Columbia River and Puget Sound. This spread appeared just a few years before the Boldt decision transformed salmon management practice by guaranteeing tribes 50 percent of catchable fish—and the right to manage the runs so that there were fish to catch. But where legal scholars often focus on Boldt's legal interpretation as the key in shifting relations, official tribal outlets such as the Northwest Indian Fisheries Commission newsletter note that the tribes' struggle to fish and have fish to catch has continued in various forms since settler harvest and

industry decimated the runs through the present day, when stormwater, culverts, legacy dams, salmon farms, and a legion of other practices block the recovery of nearly all salmon stocks. As Nisqually fisherman and lifelong tribal advocate Billy Frank, Jr. noted many times in his column, "Being Frank," the false notion that tribal harvest is responsible for salmon decline has persisted for nearly 150 years, despite overwhelming historical, tribal, and scientific evidence that dams and habitat degradation were devastating and continue to impede recovery.

In recent years, the trophy fishing organization Wild Steelhead Federation has repeatedly sued state and tribal hatchery managers in Washington and Oregon, seeking to close hatcheries. Because of habitat destruction, water diversion, and dams, these hatcheries support tribal ceremonial and subsistence harvest as well as commercial and sport harvests. The Federation argues that the hatchery fish suffer from inbreeding, which reduces their fitness and also their fighting spirit at the end of the hook ("Wild Steelhead Research on the Sauk and Skagit Rivers").[3] That is, fish that began their lives in hatcheries are figured as less natural than "wild" fish who swim out of gravel in a "natural" stream. But why the obsession with wildness and naturalness among recreationists who drive many miles to their fishing spots, passing on the way the farms that produce the food they eat (since they do not eat their catch) and the clear-cut forests that enclose the small patches of protected state and national parks where they go to fish? Is it because these unnatural fish insult settler masculinity by interfering in their sportsmanlike pursuit of "good fighters"—as they term non-hatchery steelhead—in Nature they figure as untrammeled?

CONCLUSION: FIGURING LAND AS RELATION

Anishinaabeg scholar Leanne Betasamosake Simpson links settler imposition of heteropatriarchy on Indigenous gender relations to capitalist resource extraction projects:

> Really what the colonizers have always been trying to figure out is "How do you extract natural resources from the land when the people's whose territory you're on believe that those plant, animal and minerals have both spirit and therefore agency?"... You use gender violence to remove Indigenous peo-

> ples and their descendants from the land, you remove agency from the plant and animal worlds and you reposition aki (the land) as "natural resources" for the use and betterment of white people (Simpson).

In figuring aki as fundamentally different from "natural resources," Simpson links Nature as a concept and abstraction to the suppression of Indigenous gender and sexual relations and to ways of relating to land, water, and its constituent species. Also riffing on aki, Potawatomi/Anishinaabe scientist and writer Robin Hall Kimmerer writes, "If we are to survive here—and if our neighbors are to survive, too—we [English speakers] need to learn to speak the grammar of animacy" (368) In a move that gender-non-conforming human people would recognize, Kimmerer proposes a new pronoun for more-than-human kin: "Just a small thing: let us replace the word 'it,' the pronoun we use for non-human beings, with a new pronoun: not 'he' or 'she,' but 'ki,' from aki, to signify animate, being of the Earth. So that when we speak of the sugar maple, we say 'Oh, that beautiful tree, ki is giving us sap again this spring'" (368)

Further linguistic adaptations can (further) trouble nature and the natural. In the call for this special issue, Sisketon-Wahpeton scholar Kim TallBear and settler scholar Angela Willey highlight the settler notion of "natural" as a provocation for thinking about settler sexualities in relation to colonization projects: "Ideas of what is natural are always paramount in settler invocations of what are considered the right ways to relate." Queers have lots of experience with being figured as unnatural; a queer ecological stance revels in troubling the various senses of "natural." One sense (from Middle English via Old French, "having a certain status by birth") is of an innate quality or ability, something that comes instinctively to a person, or a character of personality that is relaxed, unaffected, spontaneous. Another, related sense is "simple, unaffected, easy," of being in agreement with the circumstances surrounding someone, as in sharks have no natural enemies, or occurring without debate. The settler invocations of right relations TallBear and Willey invoke rely on this last sense of inevitability. I see this inevitability as derivative of "not unusual, exceptional, irregular, or miraculous" and also "formed by nature; not subject to human intervention, not

artificial." Yet another sense of natural is at work in discourses of the wilderness sublime developed by Transcendentalists and their descendants—a reworking the archaic Christian doctrine definition ("relating to earthly or unredeemed human or physical nature as distinct from the spiritual or supernatural realm").[4] The mainstream U.S. environmental movement and the natural sciences arise from the doctrinal division: natural as "existing in nature" is defined as not made or caused by humankind. The elision of these senses of the natural—innate and inevitable in (settler) bodies and cultural forms—and the earthly—not made by humankind—came together with destructive power in the doctrine of Manifest Destiny and other settler-colonial projects.

Images of settler elites painting and fishing on a virgin pristine McCloud, in the "reclaimed" landscape of the just-flooded Millerton Reservoir, the Rainbow Rancho trout ponds scraped out of the high desert, or on pontoon boats on Lake Shasta over a river drowned now for most of a century evoke these different senses of the natural as paramount in settler heteronormativity, by highlighting how settler sexual and familial relations erase Indigenous lives co-constituted with more-than-human relations.

Indigenous theories of land relations threatens the settler concepts of pristine nature; as Kim TallBear has argued, they also challenge patriarchal notions of the nuclear family with extended familial, adoption, and non-reproductive kin-making practices (TallBear; TallBear). In reviewing an archive of photographs that depict settler-trout relations in California, I have argued that labeling either normative settler sexualities and gender relations or the flooded spawning grounds as *unnatural* threatens co-constituted settler sexualities and reworkings of "natural" landscapes.

Reading across the grain of the archives of fisheries science, I have considered fundamental misunderstandings of salmon ecology by settlers in the late-19th and early-20th centuries as bound up in settler sexualities as well as reproduction of fish and the white family. Settler separation of ethics and relations from science perpetuate genocidal policies and potentially condemn the salmon to extinction. Sex without passion, death and killing without love, and exceptionalism rooted in set-

tler masculinities still evoke a toxic frontier nostalgia that haunts settler fishery science.

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NOTES

1. For an overview of this debate, compare these two articles: (Loomis; Williams)↩
2. For an extended treatment of Billy Frank's articulations of salmon treaty rights, reciprocity, and ecocultural relations among Puget Sound / Salish Sea tribes and salmon, see Whyte, *Food Sovereignty, Justice and Indigenous Peoples*)↩
3. Billy Frank, Jr., writing for the Northwest Indian Fisheries Commission, articulated the ongoing need for hatcheries as essential for tribal and non-tribal fishing: "Lost and damaged habitat, not hatcheries or harvest, is what's driving wild steelhead and salmon populations toward extinction," Frank said. "The focus needs to be on fixing and protecting habitat, not fighting over hatcheries and the fish they produce. Climate change and exploding population growth are only making our habitat problems worse, which in turn makes hatcheries even more important for wild fish and all of us" (Frank Jr and Frank Jr)↩
4. (All quotes this page from OED Online, "Natural, Adj. and Adv.")↩