Archaeology within an Indigenous-Rights Based Approach to Sustainability and Locally Sourced Foodways

A Case Study from the Shoalwater Bay Indian Tribe

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"But the Shoalwater environment was mainly water – the sea, the tidal waters, the rivers, the wetlands, and the rain! If the Shoalwaters weren't in the water, or being rained on, the chances were good that they were on the water."

- Old Shoalwater world, the ancestral environment. Heritage Committee, Shoalwater Bay Indian Tribe. 1984

The aquatic landscape is an essential part of the identity of the Shoalwater Bay Indian Tribe (SBIT). Residing on the coast of the Willapa Bay in southwestern Washington, water surrounds the SBIT. Looking at the bay during low tide it is obvious the bay provided food for SBIT's Chinookan and Lower Chehalis ancestors in the past—dozens of fish weirs dot the tideflats. Today, though each day sees multiple fishing boats dropping nets into the bay, none of these belong to SBIT members. Despite federal recognition, the SBIT does not have rights to gather, hunt, and fish traditionally.

Restricted access to traditional land and food sources means that the SBIT, like most other Native American communities in the U.S., suffer poor health at far greater rates than non-native populations (Espey et al. 2014; Lemke and Delormier 2017; Kuhnlein et al. 2013). Lower life expectancy and the disproportionate disease burden exist often because restricted access and economic stresses diminish their local food diversity and sources (Anderson et al. 2016; Espey et al. 2014; Gracey and King 2009; Gundersen 2007; King et al. 2009; Lemke and Delormier 2017). While Indigenous communities struggle to gain access to local foods, climate change makes it all the more pressing that Indigenous and non-Indigenous communities alike begin to sustain themselves at a local level (Frison 2016). To remedy these health disparities and regain a more sustainable lifeway, Indigenous communities are reviving traditional foodways and reclaiming their

rights to local food sources (Satterfield et al. 2014; Wesner 2013; Vernon 2015; Desmarais and Wittman 2014; Coté 2016).

We see three ways that archaeology can help these community-focused sustainability projects. First, archaeological understandings can complement traditional knowledge to establish the cultural infrastructure needed to motivate and enrich these efforts within the community. Second, archaeological data can be instrumental in the legal battles necessary to overturn governmental laws that prevent Indigenous communities from accessing traditional and local food sources. And lastly, Indigenous communities can capitalize on archaeology's broad public appeal to advance public perceptions of these projects.

To illustrate this, we present the SBIT's ongoing use of archaeological data from Nukaunlth Village to reinvigorate traditional foodways. Archaeological investigations of this late prehistoric/protohistoric site revealed evidence of the bay's importance in the lives of past Lower Chehalis and Chinookan peoples. Our investigations will produce four tangible outcomes: (1) an exhibit for the SBIT Cultural Museum, (2) an education kit for K-12 classrooms, (3) a module for an adult nutrition course, and (4) archaeological evidence to be used in a court case to reaffirm fishing and shellfish harvesting rights. Our project uses western scientific knowledge to corroborate the long-standing Indigenous knowledge that local natural resources, especially marine resources, were indispensable to life prior to European settlement, and to argue that access to these resources is an inherent right of Indigenous peoples.

The Health Disparities of Indigenous Communities

With the arrival of Europeans to the Americas came numerous epidemics and devastating population losses (see Boyd 1999, 1990, 1985). Now a new epidemic of non-communicable diseases (NCDs) afflicts global populations, and like the infectious diseases of the past, it affects Indigenous groups at greater rates than non-Indigenous groups. While white populations in the U.S. experienced significant decreases in all-cause mortality over the last decade, Native Americans did not, with mortality rates that were 46% higher than white populations due to the prevalence of NCDs (such as obesity, cardiovascular disease, and type-2 diabetes), smoking, problem drinking and social determinants (Espey et al. 2014). Native American households in the U.S. are also significantly more food insecure (Gundersen 2007). Besides NCDs, food insecurity is related to calorie and nutrient deficiencies (Gracey and King 2009).

NCDs are often called "lifestyle diseases," a phrasing that implies personal choice. In actuality, the prevalence of these diseases among Indigenous groups "result from a combination of classic socioeconomic and connectivity deficits as well as Indigenous-specific factors related to colonization, globalization, migration, loss of language and culture, and disconnection from the land" (King et al. 2009:76). The colonization of Native American territories physically severed the ties of Indigenous peoples to their land, weakening or destroying the culturally-informed subsistence practices (King et al. 2009). This necessitated first a dependence on government rations and then state-funded commodities programs (Chino et al. 2009; Grey and Patel 2015). Through the forced adoption of a Westernized diet, colonization decultured people "from the inside out" with

nutrient-deficient, industrial food—food that does not promote the health of peoples nor lands and fails to reinforce the relationship between the two (Grey and Patel 2015:438). Widespread degradation of the environment compounds these issues and negatively affects the health of all peoples. This layering of circumstances produces and sustains the health disparities plaguing Indigenous communities globally (**Figure 1**).

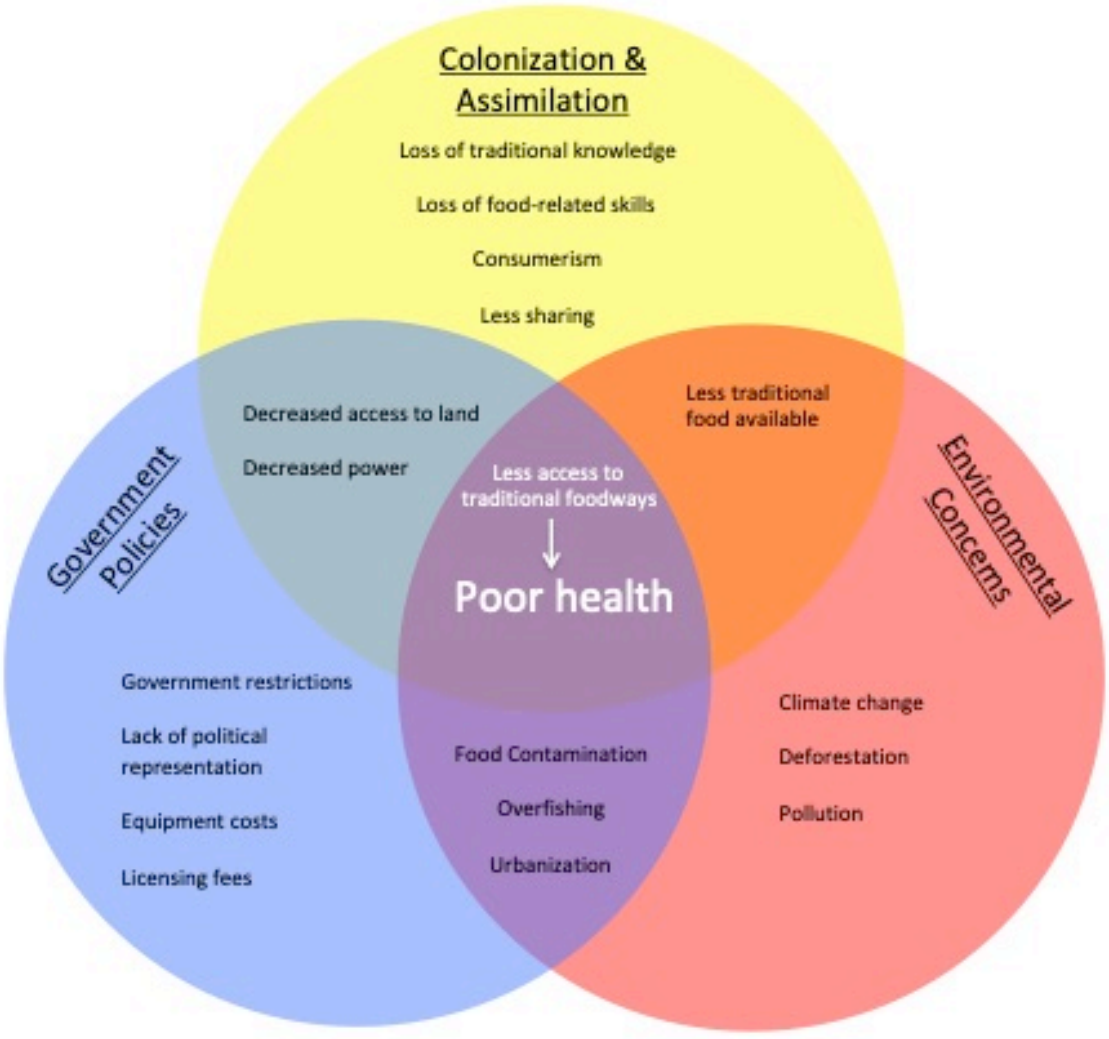

Figure 1. Socioeconomic Determinants of Indigenous Health Disparities

Cultivating Health and Sustainability through the Indigenous Rights & Food Sovereignty Movements

If the aforementioned consequences of colonization negatively affect Indigenous peoples' health, then increased access to traditional lands, environmental stewardship, and revitalization of traditional practices should go a long way towards improving the holistic health of these communities (Elliott et al. 2012). A growing number of Indigenous communities are turning towards the Indigenous rights and food sovereignty movements to meet these ends.

The Indigenous rights movement seeks economically, environmentally, and culturally viable means of asserting rights that reflect the Indigenous reciprocal relationship to the natural world while promoting political maneuverability within a state-centered system (Corntassel 2008). The food sovereignty movement calls for the rights of all people to healthy and culturally appropriate food produced through self-determined ecologically sound and sustainable methods (Patel 2009). These movements promote access to traditional territories and traditional food procurement because Indigenous communities, like all communities, have the right to healthy, culturally appropriate foods.

Environmental sustainability is inherent in these movements. Indigenous foodways are by nature sustainable practices or, at the very least, more sustainable than the transnational agribusinesses that currently dominate global food systems. Indigenous foodways promote local food production, reduce carbon-producing long-haul transportation, and more easily adapt to local environmental changes (Frison 2016). They are rooted in reciprocal relationships with the natural world and the sacredness ethic that views resource extraction as an exchange that demands stewardship (Corntassel and

Bryce 2012; Kealiikanakaoleohaililani and Giardina 2016; Grey and Patel 2015; Gracey and King 2009). These movements are a grassroots-level fight for sustainability: the environmental destruction threatening biodiversity also threatens Indigenous peoples' livelihoods, health, and wellbeing (Corntassel and Bryce 2012). The Stand Rock Sioux tribe's massive anti-DAPL exemplifies this phenomenon.

How Archaeology Can Help

Archaeology typically contributes to sustainability efforts by highlighting long-term trends in environmental change and revealing sustainable resource use in prehistory (see McKechnie 2007; Desse-Berset 2011; Lambrides and Weisler 2016; Groesbeck et al. 2014; Cannon and Burchell 2009; Grocke and Gillikin 2008; Braje et al. 2007; Erlandson et al. 2009; Rick 2011). We argue, however, that archaeology can contribute to sustainability discourses even when a deep-time perspective is not readily available by aiding Indigenous efforts to revitalize sustainable foodways. Archaeology can support these projects by enriching these efforts within the community and translating them for a broader audience entrenched in a western value system.

The Cultural Potency of Archaeology: Establishing Cultural Infrastructure

Archaeology can help establish the cultural infrastructure needed to enact traditional foodways by bolstering traditional knowledge with historical, place-based scientific data. By cultural infrastructure we mean more than museums and other places

that allow people to access culture with a capital "C". We mean a suite of cultural knowledge that communicates identities and heritages, provides materials for innovation, and encourages responsible community membership. Traditional foodway revitalization is embedded within a paradigm of sustainability that emphasizes cultural value and place-based knowledge. It is fortuitous then, that archaeology's approach to history is grounded in the physical landscape and imbued with cultural potency. To restore traditional foodways, people need to appreciate their cultural value and archaeology can help because the past "serves as a potent resource for crafting identities in the present" (Wesson 2013:116). Access to a historical narrative is instrumental to rebuilding a powerful Indigenous identity. A physical connection to that narrative through archaeological sites and artifacts can further strengthen this identity. This is due, in part, to the importance of place-based knowledge within Indigenous communities and, in part, to the undeniable appeal of physically seeing and touching history. Archaeology is also useful when relating Indigenous identities to traditional foodways because the archaeological record is often comprised heavily of evidence of food systems, particularly when investigating coastal communities.

Archaeology as Evidence

Archaeology was once a colonialist endeavor—"the study of the ancestors of the conquered by the descendants of the conquerors" (McGuire 2008:78). Archaeologists can begin to atone for this by using archaeological data to help establish Indigenous communities' rightful legal entitlements and increase their political maneuverability in a

state-centered system. Because traditional foodways are so deeply embedded in the landscape, it is nearly impossible to rebuild them without access to these landscapes. And attempting to access these spaces without legal rights puts communities at risk of prosecution. These legal rights do not encourage native communities to recklessly deplete natural resources, rather they allow communities to launch resource management organizations that enact Indigenous sustainability practices (see Coté 2016; Cleland 2011).

The American legal system values archaeological data based in western science over traditional knowledge and oral histories. Archaeological evidence is thus useful in legal cases that contest treaties and define the content and scope of off-reservation procurement rights, because U.S. law sources these rights in the historic use, occupation, and possession of territory by tribal entities (Charlton 2015). The legal relationship between the U.S. government and Native Americans is premised on the idea that tribes were "the rightful occupants of the soil, with a legal as well as just claim to retain possession of it, and to use it according to their own discretion" (*M'intosh* 1823). Even archaeological evidence lacking long-term data (in archaeological terms) is useful, as U.S. law does not require Indian title to predate European assertion of sovereignty (*U.S.* 1974). Historical, anthropological, and archaeological evidence can be put forward that indicates that at the time the treaty was signed, the tribes engaged in the claimed activities or engaged in historic activities which are retrospectively related to present day activities (Charlton 2015).

Indiana Jones can Help

Lastly, archaeology's broad public appeal can help to advance public perceptions of Indigenous sustainability initiatives. As archaeologists, we often bemoan Indiana Jones for sensationalizing our discipline. But archaeologists should be grateful that this fictional character sparked an interest in archaeology among the general public. Indiana Jones and the like give us a popular culture soapbox. We should use it to insist on scientific rigor in archaeology, while promoting the political, social, and/or environmental agendas founded in that rigor.

While misconceptions of the discipline endow archaeologists with undeserved popularity, Indigenous communities suffer the opposite. Misconceptions of native culture in entertainment, media, and sports teams' mascots reproduce stereotypes and racial bias (Robertson 2015). This undermines Indigenous efforts to strengthen and enrich their communities. As archaeologists, we often benefit professionally and economically from studying the past of the disenfranchised. We owe it to the communities we work with to use our popularity to bolster public perception of their community-enriching efforts. Within the context of sustainability-oriented projects, we can do this by linking archaeology to the projects it informs, and making those links straightforward and apparent to the general public.

Case Study: Living off the Bay – Past & Present

To illustrate these concepts in action, we present the *Living off the Bay – Past & Present* project and our ongoing use of archaeological investigations at Nukaunlth Village (45PC19) to reinvigorate traditional foodways within the descendant community. We begin by introducing this community, the SBIT.

The Shoalwater Bay Indian Tribe

The Shoalwater Bay Indian Reservation lies at the mouth of Willapa Bay in southwestern Washington, created by presidential executive order in 1866. Approximately 75 of the roughly 350 enrolled members live on the reservation. Driven by limited access to traditional foods and a declining fishing fleet, most residents live a modern western life. Without these traditional practices there is a gaping hole in the community's collective consciousness and today, a new generation yearns for connection and a sense of history.

Whether a friend or enemy, no one leaves a Shoalwater home hungry: every visitor occasions a meal. A blessing is given, guests acknowledged, and by tradition, elders eat first. Though most meals today consist of western foods, special occasions call for traditional foods, such as, shellfish, salmon, deer, and elk. Even more important than the food is what the gathering brings. Elders tell stories about gatherings many years ago; people offer stories and traditional songs as thanks to the cooks and hosts. Old friends reunite, business deals are made, and feuds are settled or sometimes started. In the

modern world life is handled in the meeting room or the office. In the traditional world all matters are dealt with at the dinner table.

Thousands of years of Chinookan and Lower Chehalis life changed in the brief 150 years since contact. Now the SBIT hope to swing the pendulum back to center and combine ancient and modern customs to form a better community. The SBIT Education Program was created to preserve, protect, and promote the heritage and history of the collective members of SBIT and to actively promote and facilitate cultural activities. Likewise, the SBIT seeks to preserve traditional knowledge about native food resources and ancestral diets as local food sources dwindle.

Nukaunlth Village Excavations

The SBIT Education Program aims to use data from the Nukaunlth Village site to help establish food sovereignty and revive locally sourced foodways, particularly fishing and shellfish harvesting. Since 2014, the authors have worked collaboratively to meet the priorities of the SBIT Education Program and in 2017 they conducted archaeological research at this site. The SBIT chose Nukaunlth for this research because it is particularly important to their cultural patrimony, adjacent to their reservation and on land they recently acquired (**Figure 2**). Nukaunlth is rich in information pertaining to past foodways and research on such a site gives the tribe ownership over their history and further resonates with the contemporary community for lying just beyond their backyards.

Figure 2. Site location relative to the SBIT reservation

Research on Nukaunlth began by determining the nature, extent, and age of the site. We then sought to ascertain (1) the makeup of the larger subsistence system within which marine resource consumption was situated pre- and protohistorically and (2) the importance of marine resources among Chinook and Lower Chehalis peoples living at Nukaunlth. We used probe surveying to determine the dimensions of the site, followed by small-scale archaeological excavation targeting middens (**Figure 3**).

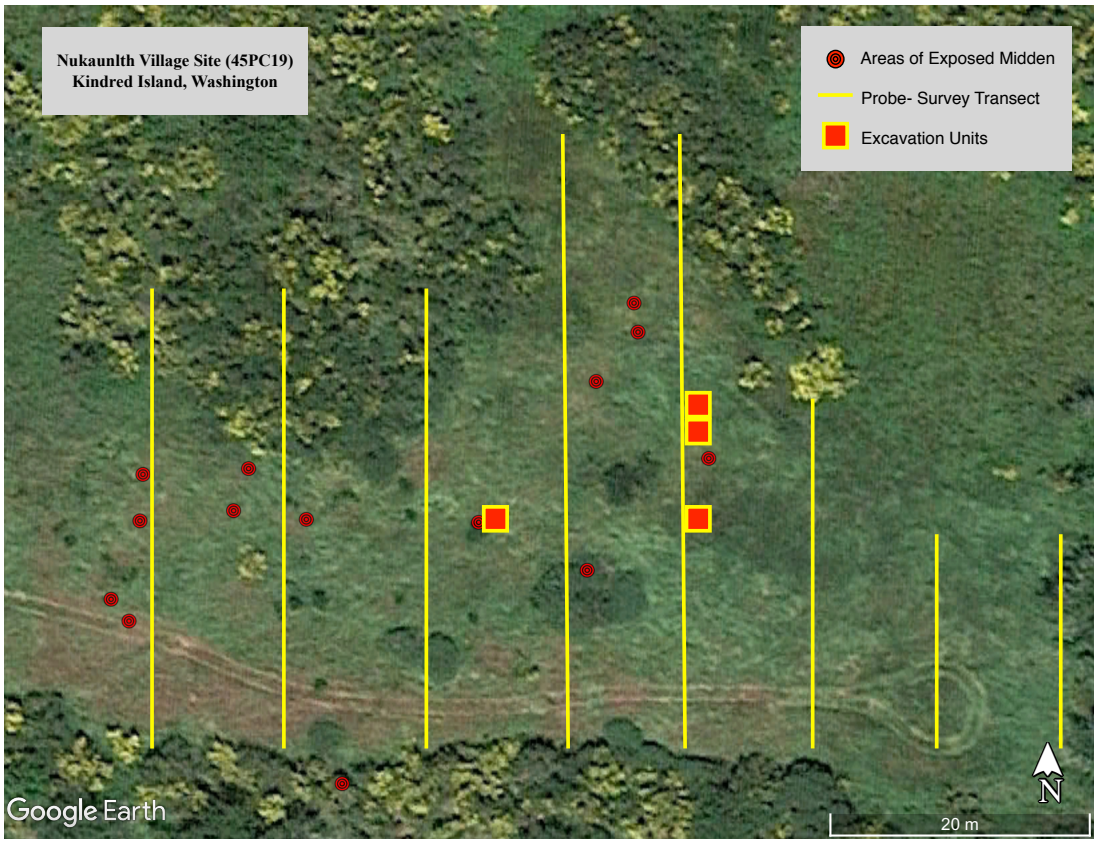

Figure 3. Location of probe survey transects and excavation units.

Data from these investigations characterize the site as a small village with two primary periods of occupation: a small prehistoric occupation dating to within 200 years prior to the January 26, 1700 Cascadia Tsunami (Atwater et al. 2016) followed by a florescence of occupation post-Tsunami through the protohistoric period. Excavations revealed at least one house structure surrounded by substantial shell midden deposits. While analyses are still ongoing, a preliminary examination shows that the inhabitants of this village focused subsistence efforts on marine resources. By far, shellfish dominate the assemblage, comprising up to 95% by weight of the faunal remains recovered. This is likely an overestimation and further analysis of MNI and meat yields will refine this data. However, this preliminary analysis hints at the daily importance of

shellfish in the lives of those living at Nukaunlth. Non-shell faunal remains also show an emphasis on other marine resources including salmon, sturgeon, flounder and sea otter. Combined, sea mammal and fish remains comprise 72% by weight and 80% by count of the non-shell faunal assemblage. Substantial quantities of whale remains were uncovered at the site, and suggest at least some investment in scavenging or hunting whale.

From Outcomes to Impact

From these investigations we are producing four tangible outcomes. Each relates to the ways in which archaeology can contribute to sustainability discourse outlined earlier.

SBIT Cultural Museum Exhibit. The SBIT Cultural Museum was established in 2017, but at that time the SBIT lacked archaeological materials to exhibit there. Our work was the first SBIT-initiated archaeological project and provides an excellent opportunity to develop unique ways to display materials that exemplify the cultural significance of the Nukaunlth site and the importance of the local environment to past foodways. Construction of the exhibit, entitled *Living off the Bay: Past & Present,* is underway. This exhibit will establish Nukaunlth as a site containing abundant cultural and scientific information through sections describing the use of resources from the aquatic, terrestrial, and botanical landscapes. Each section contains a collection display, informational board, and local artwork that illustrate the value of these landscapes to the past and present communities. This will help establish the cultural infrastructure for food revitalization

within the community and use archaeology's mass appeal to sell those efforts to people outside the community.

Living off the Bay – Past and Present Education Kit. An education kit that highlights the same themes as the museum exhibit will bring the SBIT's revitalization project into K-12 classrooms throughout Washington state. This kit is designed to (1) promote understanding and appreciation of past and present native cultures and foodways and (2) foster a sense of stewardship for natural and cultural resources. For each theme, the kit contains an overview, corresponding activity lesson plan and materials, laminated photographs, artifact replicas made by local artists, and samples of natural materials. This education kit capitalizes on archaeology's ability to capture children's imagination so that they may become cultural and environmental stewards in their local community.

Curriculum for the SBIT Diet and Nutrition Class. The SBIT already has a diet and nutrition class at their wellness center, focused on improving the health of SBIT members. Archaeological data from the Nukaunlth excavations will be incorporated into a module relating to native foodways for the course. This module will teach the local community about native foods, ancestral foraging and hunting techniques, cooking practices, natural resource stewardship, and the importance of cultural patrimony in Willapa Bay. In particular, it will disseminate information about culturally important food practices from a time when western settlers had minimal impact on the lifestyles of the SBIT. Each session will conclude with a community meal that incorporates native food and cooking practices. With this module, we hope to further create cultural infrastructure by translating the subsistence practices of a known, nearby archaeological

site into modern healthy food practices. Following the success of this yearlong module, we hope that the SBIT continues to teach the module for the foreseeable future.

Archaeological Data for Legal Rights. Because the SBIT is federally recognized through executive order, rather than through a signed treaty, Washington State does not recognize their right to hunt, fish, or gather on their traditional territory. This is due to an oversight in the 1974 Boldt Decision that reaffirmed the rights of treaty tribes but gave no decision regarding the rights of executive order tribes. Fishing permits are prohibitively expensive and the last professional fisher of the community retired in 2017. The SBIT's two closest options for food are now the local gas station (stocked mostly with nutrient-poor foods) and distant grocery stores (the nearest a 25-minute drive away).

Though the SBIT wish to reaffirm their rights to fish and collect shellfish traditionally, their federal recognition by executive order complicates their path to achieving this. In truth, we are still determining how best to proceed legally. However, Nukaunlth's geographic and temporal location may make archaeological data pertaining to subsistence practices from this site particularly useful in future court cases. Nukaunlth is geographically very close to the modern SBIT reservation, which makes the cultural connection between the two difficult to deny. Likewise, people occupied Nukaunlth during the historic period and abandoned it a mere eight years prior to the executive order granting the SBIT a reservation. We believe these links between Nukaunlth, the executive order, and the SBIT reservation will be crucial to reaffirming the legal rights necessary to revitalize traditional foodways and restore local sustainable food sources.

Conclusion

Archaeology most commonly advances public perceptions of sustainability through uncovering past sustainable practices that can inform current conservation efforts. While this certainly enriches sustainability discourses, we believe that archaeology can contribute in another way. In this paper we have put forth the ways in which archaeology is particularly well suited to advocate for Indigenous grassroots efforts to revive traditional and sustainable foodways amidst the pressure of globalization. Our work is very much in progress and we look forward to seeing the tangible outcomes develop, grow, and empower the community. The most successful sustainability projects are not top-down approaches, but ground-up actions by Indigenous and local communities most threatened by global forces.

We have also argued that archaeology is more than the data that it generates. For communities wounded by colonization, archaeology can be identity generating, culturally potent, politically uplifting, and a productive translator to a public steeped in a western value system. We conclude by stressing that while the discipline should be used to help Indigenous sustainability programs, archaeologists must serve as advocate and allies in these projects. To be successful, this help must be situated within a collaborative approach that recognizes the cultural expertise of the community and Indigenous authority to use their ancestral cultures to creatively assert their modern identities.

References Cited

Anderson, Ian, Bridget Robson, Michele Connolly, Fadwa Al-Yaman, Espen Bjertness, Alexandra King, Michael Tynan, Richard Madden, Abhay Bang, Carlos E A Coimbra, Maria Amalia Pesantes, Hugo Amigo, Sergei Andronov, Blas Armien, Daniel Ayala Obando, Per Axelsson, Zaid Shakoor Bhatti, Zulfiqar Ahmed Bhutta, Peter Bjerregaard, Marius B Bjertness, Roberto Briceno-Leon, Ann Ragnhild Broderstad, Patricia Bustos, Virasakdi Chongsuvivatwong, Jiayou Chu, Deji, Jitendra Gouda, Rachakulla Harikumar, Thein Thein Htay, Aung Soe Htet, Chimaraoke Izugbara, Martina Kamaka, Malcolm King, Mallikharjuna Rao Kodavanti, Macarena Lara, Avula Laxmaiah, Claudia Lema, Ana María León Taborda, Tippawan Liabsuetrakul, Andrey Lobanov, Marita Melhus, Indrapal Meshram, J Jaime Miranda, Thet Thet Mu, Balkrishna Nagalla, Arlappa Nimmathota, Andrey Ivanovich Popov, Ana María Peñuela Poveda, Faujdar Ram, Hannah Reich, Ricardo V Santos, Aye Aye Sein, Chander Shekhar, Lhamo Y Sherpa, Peter Skold, Sofia Tano, Asahngwa Tanywe, Chidi Ugwu, Fabian Ugwu, Patama Vapattanawong, Xia Wan, James R Welch, Gonghuan Yang, Zhaoqing Yang, and Leslie Yap

2016 Indigenous and tribal peoples' health (The Lancet–Lowitja Institute Collaboration): a population study. *The Lancet* 388(10040):131–157. DOI:10.1016/S0140-6736(16)00345-7.

Boyd, Robert

1985 The introduction of infectious diseaseamong the Indians of the Pacific Northwest, 1774-1874. Unpublished Ph.D. dissertation. University of Washington, Seatttle.

1990 Demographic history, 1774-1874. In *Handbook of North American Indians*, edited by W. Suttles, 7: Northwest Coast: Smithsonian Institution Press, Washington.

1999 *The Coming of the Spirit Pestilence*. UBC Press, Vancouver.

Braje, Todd. J., Doug J. Kennett, and Jon M. Erlandson

2007 Human impacts on nearshore shellfish taxa: a 7,000-year record from Santa Rosa Island, California. *American Antiquity* 72:735–756.

Cannon, Aubrey, and Megan Burchell

2009 Clam growth-stage profiles as a measure of harvest intensity and resource management on the central coast of British Columbia. *Journal of Archaeological Science* 36(1050–1060).

Charlton, Guy

2015 The Law of Native American Hunting, Fishing and Gathering Outside of Reservation Boundaries in the United States and Canada 39:103.

Chino, Michelle, Darlene Haff, and Carolee Dodge-Francis

2009 Patterns of Commodity Food Use among American Indians. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health* 7(2):12.

Cleland, Charles E.
2011 *Faith in paper: The Ethnohistory and Litigation of Upper Great Lakes Indian Treaties*. University of Michigan Press, Ann Arbor, Michigan.

Corntassel, Jeff
2008 Toward Sustainable Self-Determination: Rethinking the Contemporary Indigenous-Rights Discourse. *Alternatives: Global, Local, Political* 33(1):105–132. DOI:10.1177/030437540803300106.

Corntassel, Jeff, and Cheryl Bryce
2012 Practicing Sustainable Self-Determination: Indigenous Approaches to Cultural Restoration and Revitalization. *The Brown Jounal of World Affairs* 18(11):13.

Coté, Charlotte
2016 "Indigenizing" Food Sovereignty. Revitalizing Indigenous Food Practices and Ecological Knowledges in Canada and the United States. *Humanities* 5(3):57. DOI:10.3390/h5030057.

Desmarais, Annette Aurélie, and Hannah Wittman
2014 Farmers, foodies and First Nations: getting to food sovereignty in Canada. *The Journal of Peasant Studies* 41(6):1153–1173. DOI:10.1080/03066150.2013.876623.

Desse-Berset, Nathalie
2011 Ancient sturgeon populations in France through archaeozoological remains, from prehistoric time until the eighteenth century. In *Biology and Conservation of the European Sturgeon Acipenser sturiol. 1758*, pp. 91–115. Springer.

Elliott, Bethany, Deepthi Jayatilaka, Contessa Brown, Leslie Varley, and Kitty K. Corbett
2012 "We Are Not Being Heard": Aboriginal Perspectives on Traditional Foods Access and Food Security. *Journal of Environmental and Public Health* 2012:1–9. DOI:10.1155/2012/130945.

Erlandson, Jon M., Torben C. Rick, and Todd. J. Braje
2009 Fishing up the food web?: 12,000 years of maritime subsistence and adaptive adjustments on California's Channel Islands. *Pacific Science* 63(4):711.

Espey, David K., Melissa A. Jim, Nathaniel Cobb, Michael Bartholomew, Tom Becker, Don Haverkamp, and Marcus Plescia
2014 Leading Causes of Death and All-Cause Mortality in American Indians and Alaska Natives. *American Journal of Public Health* 104(S3):S303–S311. DOI:10.2105/AJPH.2013.301798.

Frison, Emile A.
2016 *UniformityToDiversity*. International Panel of Experts on Sustainable Food Systems.

Gracey, Michael, and Malcolm King
2009 Indigenous health part 1: determinants and disease patterns. *The Lancet* 374(9683):65–75. DOI:10.1016/S0140-6736(09)60914-4.

Grey, Sam, and Raj Patel
2015 Food sovereignty as decolonization: some contributions from Indigenous movements to food system and development politics. *Agriculture and Human Values* 32(3):431–444. DOI:10.1007/s10460-014-9548-9.

Grocke, Darren R., and Dylan P. Gillikin
2008 Advances in mollusc sclerochronology and sclerochemistry: tools for understanding climate and environment. *Geo Marine Letters* 28:265–268.

Groesbeck, Amy S., Kirsten Rowell, Dana Lepofsky, and Anne K. Salomon
2014 Ancient Clam gardens increased shellfish production: adapative strategies from the past can inform food security today. *PLoS ONE* 9(3):e91235.

Gundersen, Craig
2007 Measuring the extent, depth, and severity of food insecurity: an application to American Indians in the USA. *Journal of Population Economics* 21(1):191–215. DOI:10.1007/s00148-007-0152-9.

Kealiikanakaoleohaililani, Kekuhi, and Christian P. Giardina
2016 Embracing the sacred: an Indigenous framework for tomorrow's sustainability science. *Sustainability Science* 11(1):57–67. DOI:10.1007/s11625-015-0343-3.

King, Malcolm, Alexandra Smith, and Michael Gracey
2009 Indigenous health part 2: the underlying causes of the health gap. *The Lancet* 374(9683):76–85. DOI:10.1016/S0140-6736(09)60827-8.

Kuhnlein, Harriet V., Food and Agriculture Organization of the United Nations, and McGill University (editors)
2013 *Indigenous peoples' food systems & well-being: interventions & policies for healthy communities*. Food and Agriculture Organization of the United Nations ; Centre for Indigenous Peoples' Nutrition and Environment, Rome : Ste. Anne de Bellevue, Quebec.

Lambrides, Ariana B. J., and Marshall I. Weisler
2016 Pacific Islands Ichthyoarchaeology: Implications for the Development of Prehistoric Fishing Studies and Global Sustainability. *Journal of Archaeological Research* 24(3):275–324. DOI:10.1007/s10814-016-9090-y.

Lemke, Stefanie, and Treena Delormier
2017 Indigenous Peoples' food systems, nutrition, and gender: Conceptual and methodological considerations. *Maternal & Child Nutrition* 13:e12499. DOI:10.1111/mcn.12499.

McGuire, Randall H.
2008 *Archaeology as political action*. xv, 294 p. : vols. xv, 294 p. : University of California Press, Berkeley :

McKechnie, Iain
2007 Investigating the complexities of sustainable fishing at a prehistoric village on western Vancouver Island, British Columbia, Canada. *Journal for Nature Conservation* 15(3):208–222. DOI:10.1016/j.jnc.2007.05.001.

M'intosh, William
1823 *Thomas Johnson and Graham's Lessee v. William M'Intosh 21 U.S. 8 Wheat. 543*. February 28.

Patel, Raj
2009 Food sovereignty. *The Journal of Peasant Studies* 36(3):663–706. DOI:10.1080/03066150903143079.

Rick, Torben C.
2011 Weathering the storm: coastal subsistence and ecological resilience on Late Holocene Santa Rosa Island, California. *Quaternary International* 239:135–146.

Robertson, Dwanna L.
2015 Invisibility in the Color-Blind Era: Examining Legitimized Racism against Indigenous Peoples. *American Indian Quarterly* 39(2):113. DOI:10.5250/amerindiquar.39.2.0113.

Satterfield, Dawn, Lemyra DeBruyn, Carolee Francis, and Aiko Allen
2014 A Stream Is Always Giving Life: Communities Reclaim Native Science and Traditional Ways to Prevent Diabetes and Promote Health. Edited by Jennie Joe and Robert Young. *American Indian Culture and Research Journal* 38(1):157–190. DOI:10.17953/aicr.38.1.hp318040258r7272.

U.S.
1974 *U.S. v. Turtle Mtn. Band of Chippewa Indians, 612 F.2d 517*. December 12.

Vernon, Rachel
2015 A Native Perspective: Food is More Than Consumption. *Journal of Agriculture, Food Systems, and Community Development*:1–6. DOI:10.5304/jafscd.2015.054.024.

Wesner, Chelsea
2013 Traditional foods in native America. Part I: a compendium of stories from the Indigenous food sovereignty movement in American Indian and Alaska Native communities. Edited by Native Diabetes Wellness Program (U.S.), Centers for Disease Control and Prevention (U.S.); National Center for Chronic Disease Prevention and Health Promotion (U.S.). Division of Diabetes Translation., and Native Diabetes Wellness Program (U.S.). Traditional foods in native America ; part I.

Wesson, Cameron
2013 Rumors of Our Demise Have Been Greatly Exaggerated: Archaeological Perspectives on Culture and Sustainability. *Sustainability* 5(1):100–122. DOI:10.3390/su5010100.