REVISITING "DM SIBILHAA'NM da laxyuubm gitxaała (picking abalone in gitxaała territory)":

Vindication, Appropriation, and Archaeology*

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I E'S IN THE KITCHEN. SMILING. We're all there – my sisters, my mother, me. We're waiting as he prepares the *bilhaa* (abalone) for dinner. He has brought a feed home and is preparing to fry them.

I'm not quite sure how old I was – maybe five, maybe six. I doubt it was the first time I'd had *bilhaa* but it's my first real memory of these tasty mollusks. Dad had a big bag filled with live *bilhaa*. He would reach into the bag and take out a red/purple ear-shaped shell. Holding its orange foot up in his left hand he used his other to deftly scoop out the meat with a small knife. The guts were cleaned away, the black coating scrubbed off with steel wool, and then into a bowl it went to await the next step.

The shells, once the foot had been removed, revealed a shiny iridescent sheen that captivated me. I twisted them back and forth, amazed at how the insides caught and reflected the light. Years later I saw the same sparkling light shine as my field crew emptied a bucket auger full of soil at the village site of Ks'waan. Green-grey flecks sparkled in the light as we shifted the sample back and forth on the collecting tray: "Abalone!" But I am jumping ahead.

With the bowl filled with the shelled *bilhaa*, my father then laid out a tea towel on the kitchen counter. The *bilhaa* were placed on the cloth, covered, and then lightly beaten with a wooden tenderizing mallet. From this stage the *bilhaa* were dipped in an egg wash, floured, and fried lightly with butter in a cast-iron frying pan. Dinner was exquisite.

^{*} In a previous article, "Dm sibilhaa'nm da laxyuubm Gitxaała: Picking Abalone in Gitxaała Territory" (Menzies 2010), I outline an argument in support of the long-standing practice of Gitxaała consumption and harvest of bilhaa. This article re-examines the earlier argument with new empirical data documenting Gitxaała bilhaa harvests for at least two millennia.

Seafood is the food of my family. As with many north coast British Columbian people – Aboriginal or not – we eat the food that shares our world. My childhood in the 1960s was still a time in which most working-class people ate unprocessed foods. I grew up with jarred vegetables from my grandmother's garden, fresh/frozen fish from my father's boat, foraged berries from our backyard, oolichans, *bilhaa*, and many other foods shared with us by family and friends. These experiences and memories shape my conception of the place of my family and my ancestors along the north coast of British Columbia.

This article explores *bilhaa* – abalone¹ – as both object and metaphor of the Gitxaała.² Gitxaała, the Indigenous nation of which I am a member, is located on the north coast of British Columbia (Figure 1). We are people of the salt water, people who have always lived along the outer shores, on the ocean's extreme edge: *gyaaks*. This notion of living at the extreme edge is both an idea and a reality. Within this is a concept of human resilience and durability: as the *bilhaa* clings to the rocky outer beach subjected to the crashing surf and thrives, so, too, does Gitxaała. It makes us strong. It is also a material fact that our villages, resource-harvesting areas, and spiritually important places are located at extremes. Villages are not found inside protected inlets but at the seaward mouth. Spiritual sites are far out to sea or high atop inland mountains. Like the *bilhaa*, Gitxaała are a people of the outer shore, we are durable, and we have always been here in *laxyuup* Gitxaała (Gitxaała territory).

Laxyuup Gitxaała is comprised of the lineage territories of house groups that make up modern-day Gitxaała. Lach Klan, the primary contemporary village of Gitxaała, is located on Dolphin Island about fifty kilometres to the southwest of Prince Rupert (Figure 1). Laxyuup Gitxaała is an expanse of land and ocean that stretches from Ts'ibassa's oolichan processing territory along the shores of the Nass River south to the house territories of Txa-gyet, walp Gitnagunaks at 'To'tsip (Moore Islands). The central core of the laxyuup extends about 240 kilometres north to south from around Prince Rupert into what non-Gitxaałans call the Great Bear Rainforest and includes the islands of Porcher,

¹ For the most part I use "*bilhaa*." This refers to the local northern abalone (*Haliotis kamts-chatkana*). In cases in which the original source uses "abalone," or in cases that refer to non-Indigenous utilization, I use "abalone" in place of "*bilhaa*."

² Non-Indigenous researchers typically identify Gitxaała as part of the ethnolinguistic category Tsimshian. We Gitxaała, however, have always seen ourselves as a separate people who share a common cultural history with the people who come from the Skeena River (that is what Tsimshian means, "people of the river"). Gitxaała oral history tells us that our community has always been on the coast and that other people have entered into our *laxyuup* (territory) and become neighbours over the *longue durée* of time.

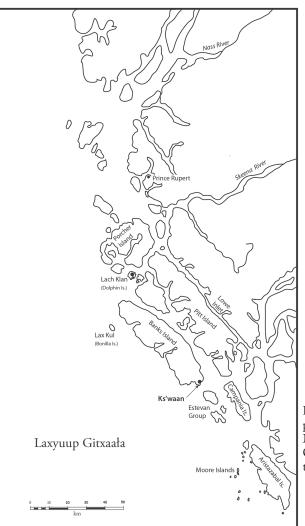


Figure 1. Key locations in paper within Laxyuup Gitxaała. Map designed by Kenneth Campbell based on information by C.Menzies.

Pitt, Banks; the Estevan Group; Aristazabal Island; Moore Island; and portions of Campania Island (Figure 1). The *laxyuup* also includes much of the mainland to the east of Pitt Island around the *laxyuup* of He:l at Komodah (Lowe Inlet). This is a vast territory.

The legacies of colonialism have disrupted the customary respect accorded to *laxyuup* Gitxaała. This has had implications for the biological health of creatures such as *bilhaa* (Menzies 2010) and our community's well-being. Colonial forces, arriving first as merchant adventurers in the late 1700s and then as invasive colonists tirelessly working to displace and expropriate Indigenous peoples, have recreated legal forms and replaced and erased pre-existing place names. Armed with science, surveying instruments, and the artistry of cartography, these colonists have striven to redefine the Indigenous landscape and, in so doing, to corral and diminish our long-standing Indigenous presence. In addition, some Indigenous elites today have formed alliances of economic interest with the colonialists to assert claims to territory that are more reflective of the colonizer's imagination than they are of the ancient territories (see, for example, Sterritt et al. 1998). While this article is not the place to directly address these issues as they pertain to the nature and extent of *laxyuup* Gitxaała, it is important to highlight that it is rooted within a customary Indigenous framework. A Gitxaała perspective is taken as the underlying and guiding principle with regard to understanding the authority and jurisdiction of Indigenous polities. This is an explicitly Indigenous framing of the question at hand.

For many readers, my explicit centring and prioritizing of an Indigenous perspective will raise questions regarding method and theory. Some may well ask whether or not I have placed myself into a logical paradox by, on the one hand, critiquing the scientism of archaeology and then, on the other, using those same methods to unsettle the status quo. How can one critique a perspective and then deploy methodological elements of that same perspective? I see neither contradiction nor problem in appropriating tools and techniques from anthropology and applying them within an Indigenous framework. When my uncle lights the fire in his smokehouse with a propane torch his smoked fish is still smoked fish. That his fire sits in a pink ceramic bathtub merely adds to the picture. Indigenous peoples are not fated to be locked in the amber of a colonial imagination. This article is one example of the continuation of Indigenous authority to establish a research agenda and to appropriate and deploy the tools and techniques that make sense to us. It makes no claim to be archaeology – mainstream or Indigenous (see, for example, Nicholas 2010). While some Indigenous colleagues work and write from within the discipline of archaeology (see, for example, White 2011) and use their location as an Indigenous person to engage in a conversation within their chosen discipline, I am doing something rather different here: I am explicitly foregrounding an Indigenous intellectual framework (Menzies 2013). In this article I am, like a home handyman, borrowing tools from several different tool kits while claiming to be neither carpenter, plumber, nor electrician. Put more directly, the discipline is Indigenous, the tools include archaeology.

In revisiting the question of *bilhaa*, this article is informed by the historical principle of vindicationism. Drawing inspiration from the

writings of Black Radical theorists C.L.R. James and W.E.B. Du Bois (Bogues 2014), vindicationism "reflects the work of scholars to 'set straight the oft-distorted record of the Black experience and to fill in the lacunae resulting from the conscious or unconscious omission of significant facts about Black people"(Drake 1987, xviii, cited in Foster 1997, 2). Just as scholarship in the United States has consciously and unconsciously distorted and overlooked black experience, so has North American scholarship consciously and unconsciously distorted and overlooked Indigenous experience and knowledge. This article contributes to a vindicationist and revanchist Indigenous scholarly tradition in which the dominant intellectual tradition's failure to see, hear, and recognize *bilhaa* is confronted directly.

THE SEA OTTER/ABALONE DILEMMA

There is a genre of storytelling persistent among ecologists and their kin that posits a contradictory and antagonistic relationship between sea otters and abalone. It is part of a larger genre of stories that decries the so-called myth of "the ecological Indian" (Krech 1999). Draped in irony and tragedy, the story goes roughly like this:

In the beginning there were beautiful kelp forests along the seashore of BC. Living among these kelp forests were wondrous creatures: sea otters, rock cod, greenling, numerous birds, snails, and other fish. It was a biodiversity Eden. Then came a rapacious human intervention: a combination of expansionary European and American traders conspiring with local Indigenous populations who were wilfully casting aside ecological principles for wealth. Once the sea otters were exterminated the shorelines became barren lands overpopulated by sea urchins and abalones. As time passed the Indigenous peoples, now incorporated within a global world system, had forgotten that they never had many abalone or urchin before and started to believe that they had always eaten abalone. Many years later the new true ecologists have to struggle to correct the record and to explain that when there were lots of sea otters nobody noticed the abalone.

Over the past decade I have had numerous conversations with many ecologist and archaeological colleagues in which versions of the above story pop up.

Trevor Orchard, in his 2007 PhD dissertation, summarizes the key points of the ecologists' and archaeologists' conversations. Through a detailed analysis of zooarchaeological data gathered from Gwaii Haanas National Park, Orchard examines the impact Haida predation on sea otters during the maritime fur trade had on local marine ecologies. Drawing upon ethnographic and historical observations, Orchard puts forward the standard assumption that, "following extirpation of sea otters, 'abalone and sea urchin subsequently became a favourite food of the Haida'" (Grzybowski and Slocombe 1988, 472, cited in Orchard 2007, 59). Orchard continues: "The prevalence of sea urchins and abalone in the nearshore waters of Haida Gwaii, and thus their prevalence in the Haida diet, may largely represent a pattern that appeared after the extirpation of sea otters ... In earlier times, sea urchins and abalone were undoubtedly less abundant, and were likely restricted to relatively small-bodied crevice-dwelling populations that were less impacted by otter predation" (81).³

Sea otters, as perceived in this story, kept urchin and abalone populations repressed and thus the kelp forest ecology flourishing. The extirpation of sea otters is considered to have led to the creation of a sea urchin barrens denuded of kelp:⁴ "Ultimately, an increase in sea urchins towards the end of the fur trade period is expected to have resulted in a decreasing prevalence of kelp and a corresponding decrease in kelpassociated taxa, such as species of greenling, rockfish, and herring" (Orchard 2007, 176).

The other side of this conversation considers the fragility of *bilhaa* shells and the lack of diagnostic features to make a decisive identification (a point raised by my colleagues upon first seeing *bilhaa* shells in *Ks'waan*, as is discussed below). In a private e-mail communication (27 May 2011), one archaeologist explained to me: "In my experience, abalone can only be easily identified if the gross morphology (i.e., the distinctive ridges, holes, etc.) of the shells are intact. Small fragments rapidly blend together. Red Turban shells, for example, which are also common in [these] middens look very similar to abalone in small fragments – they both share the same 'mother-of-pearl' sheen and are coarsely similar in terms of external morphology." So, if the first scientific explanation – sea

³ The south and west coast of Banks Island is noted as a good habitat for sea otters according to wildlife ecologists Gregr et al. (2008). Gitxaała fisheries guardians have told me of increased sightings of reintroduced sea otters over the past few years as they recolonize their former pre-fur trade territories.

⁴ Szpak et al. (2012) make a convincing argument that sea otter populations on the north coast were not allowed to reach their maximum population extent due to Indigenous hunting of otters and their exclusion from valuable shellfish harvesting areas. The authors' interpretations reflect the exploration of a hypothesis derived from Indigenous people's comments concerning how conflicts with otters were handled. This approach is part of a growing movement among contemporary scholars to listen more closely to Indigenous communities than may have been the case in the past.

otters keep the abalone population below a level usable by humans – is not fully sufficient, we can resort to diagnostic characteristics as an alternative explanation for the absence of abalone. Thus, even if some abalone may have been harvested, due to the fragility of the shell of our local variant, this is not likely to have occurred in significant quantities. The story concludes with an equivocal ending regarding whether or not Indigenous peoples of the northern coast harvested abalone prior to European and American arrival.

Ultimately, the sea otter/abalone dilemma is a story of ill-gotten goods. We have the gratuitous destruction of sea otters for mere material gain, which is ironically rewarded by a new food: abalone. Then, as abalone populations decline and Indigenous communities lay claim to a privileged access based upon long-standing customary rights, the storyteller reminds us that, in fact, abalone is a new food in the pantheon of Indigenous foods, even if it was occasionally eaten in the past. This variant of colonial folklore (Brody 1975) is deaf – consciously or unconsciously – to the histories told by Indigenous peoples.

SEARCHING FOR BILHAA

In an earlier paper (Menzies 2010), I outline the oral history of picking *bilhaa* in Gitxaała territory, compare Gitxaała practices with the devastation of industrial harvesting methods, and assert that this shows evidence of a long-standing practice of harvesting *bilhaa*. Aside from a few trace indications, we have no direct empirical evidence (excluding oral history) that might establish the time depth of *bilhaa* harvesting in Gitxaała territory. Through conversations with archaeological colleagues I have tried to locate research that documents material evidence of *bilhaa*, but to little avail.⁵ In this article I revisit my early concern with *bilhaa*,

⁵ Blake (2004, 109-10) is an exception. Drawing from excavations in the Fraser Valley, he identifies three Californian abalone pendants and a fourth fragment that may be northern pinto abalone (*bilbaa*). Though there is a brief discussion of the potential provenance of the Californian abalone, there is no similar consideration of the possible fragment of *bilbaa*. There is a literature based on work in California (see, for example, Erlandson, Rick, and Braje 2009). However, the context in California is quite different than that of north coastal British Columbia in terms of species harvested and the general ecological environment. Les Field's wonderful book, *Abalone Tales* (2008), is a powerful example of collaborative anthropology that draws upon a Californian case study. It is one of the few publications that addresses (as I do here) both contemporary and ancient Indigenous relations with abalone. As I described previously (Menzies 2000), published sources dealing with *bilbaa* harvesting in British Columbia are rare. For recent studies dealing with Indigenous use of other shellfish, see Lepofsky et al. (2005) and Deur et al. (2015). While archaeological and ecological sciences consider shellfish a comparative grouping, that is not the case from an Indigenous perspective, according to

but I now have the advantage of empirical data documenting Gitxaała *bilhaa* harvests extending back in time at least two millennia.

Sigidmnaa'nax (matriarchs) Agnes Shaw, Charlotte Brown, Violet Skog, and Janet Moody all described in some detail the old ways of harvesting *bilhaa*: steaming the harvest on the beach in the sand with heated rocks, skunk cabbage leaves, and water, and then drying the cleaned meat in the sun or near a slow fire. These women insisted that *bilhaa* was something that Gitxaała had always harvested. They were puzzled by claims of ecologists and other non-Gitxaała who suggested that *bilhaa* was a post-sea-otter-extermination food (cf. Cannon and Burchell 2009, 1055). "How could our grandmothers' grandmothers have taught us how to prepare *bilhaa* if it was something we only just learned to do," one matriarch asked.⁶

Agnes Shaw and Charlotte Brown describe harvesting *bilhaa* on the west coast of Banks Island. This small area, an inlet behind Bonillia Island, is a place of at least three habitation sites (occupied from at least 2500 BP to the present) and an extensive complex of stone fish traps (see Smethurst 2014 for a detailed analysis of the fish traps and associated faunal assemblages). The smokehouse that Agnes Shaw and Charlotte Brown describe would have been capable of processing at least three thousand fish at one time (Menzies 2012). Janet Moody also describes harvesting *bilhaa* on Banks Island (Menzies 2010, 217). These matriarchs all described how dried *bilhaa* were traded to people from upriver for, among other things, moose meat, oolichan grease, and soapberries.

Like most women of their generation (these women are in their late seventies to nineties today), a great deal of their time was spent living and working in the hereditary territories of their families. The annual cycle of food harvesting and preparation involved extensive periods of time at special resource harvesting sites for such foods as seaweed, halibut, *bilhaa*, seal, deer, goat, and salmon. Charlotte Brown describes the work of collecting seaweed on Banks Island. While she was at Banks Island as a child and as a young woman with her family (at her uncle's and father's traditional site) she would also be involved in picking *bilhaa* (Menzies 2010, 217):

which social-ecological relationships are more critical in defining relevant comparator groups (see Butler 2004 on Gitxaała taxonomy).

⁶ The section that follows, which references conversations and interviews with Agnes Shaw, Charlotte Brown, Violet Skog, Janet Moody, Matt Hill, and Jeffrey Spencer, is modified from a previously published paper (Menzies 2010, 217-18). All quotations from these elders are from interviews conducted through my research and from conversations I have had with them.

May at Banks – we got seaweed, *bilbaa* – there was lots of it. They were too big to cook in the stove so we would dig in the sand and put leaves inside. Then we put hot rocks on top with a hole in the top. We'd pour in water and steam them. Then we'd hang them to dry after they were cooked. We used skunk cabbage leaves. After the fishing was done we'd stay and dry fish. Sometimes seven hundred fish. We'd hang them up and dry them. We got halibut woks [thin sliced, dried fish] when we got seaweed. We would move into a small camp with just two houses to dry the halibut.

Bilhaa were easy to pick: there were so many that you could hear them making noise, their shells hitting together. (Most of the older people with whom I have spoken have commented, at one time or another, on the noise that the *bilhaa* used to make before the *K'mskiwah* [non-Indigenous] harvesters reduced the local stock. The *bilhaa* would gather in large clumps, and the sound of their shells hitting one another was clearly audible.) Charlotte Brown wasn't able to recall how many *bilhaa* her family harvested ("lots" was her comment), but it was sufficient to have *bilhaa* as a regular food throughout the winter and to use to trade with peoples from the Skeena, Nass, and Kemano for goods such as soapberries and oolichan grease.

Sm'oogyit (Chief) Matthew Hill explained to me that a typical family group might harvest about 225 kilograms of *bilhaa* for the winter. Even more would be harvested to prepare for a *yaawk* (feast). *Sm'oogyit* Jeffrey Spencer, in an interview in February 2002, made the following comment about the *bilhaa* harvest and abundance and its importance as part of household food provisioning:

Bilhaa: There was really lots round here. No one bothered you if you catch one hundred pounds. Not anymore, they all go to the Chinese. In Vancouver I went to buy some sea cucumbers in Chinatown. I went to buy seven, thinking it would be maybe fifty dollars. For a seven-inch live one it was thirty-five dollars. That's our livelihood taken away from us. So now we just live on bologna and wieners. *Bilhaa*, we used to boil them and then string them. Hang them in the smoke house. When you want to cook it, soak in salt water you get from the ocean. There was no such thing as a deep freeze or run out of power. Cockles and clams, we did the same thing. We smoke seal, sea lion. Slice them up and smoke them. Salmon and seafood – that's how we survived.

From these conversations and interviews with Gitxaała elders I saw a possible answer to the question of why my archaeological colleagues were having trouble finding material evidence of *bilhaa* in coastal village sites. The process of preparing the *bilhaa* for long-term storage may lead to disposal of the shells at the high tide mark on the upper beaches in front of habitation sites. This, combined with the relatively fragile *bilhaa* shell, would make it far less visible in the anthropogenic deposits. These stories also provided some hope for my search as it seemed reasonable to assume that the best place to find *bilhaa* shells would be in proximity to a food preparation hearth.

The elders' reflections establish the practice of harvesting *bilhaa* in the late nineteenth century and into the twentieth. These oral histories establish the memory of a long-standing practice – a practice that was taught and transmitted from grandmother to granddaughter, mother to child, in accordance with Gitxaała protocols of intergenerational knowledge transfer. Thus, from a Gitxaała perspective, these oral accounts establish not simply a recent, post-sea-otter-extermination practice but also a long-standing Gitxaała practice that has its roots in the distant past. This form of Indigenous knowledge has been overlooked, at times explicitly denied, in what little discussion of *bilhaa* exists in the *K'mskiwah* literature.⁷

Bilhaa, while conspicuously absent in the conversations of Northwest Coast archaeologists, turns up everywhere in Gitxaała conversations. Most telling is its presence in the cautionary tale about external research (Menzies 2004, 2010). Here *bilhaa* figure as an object of a study conducted by community outsiders – government biologists who want to save *bilhaa* from overfishing yet whose research and management practices contributed to the extirpation of local *bilhaa* stocks in the first place (Menzies 2010).

Bilhaa figure in other stories about outsiders. One storytelling genre highlights outsiders' lack of local knowledge and familiarity with *bilhaa* and other local seafood. One might call what follows the purple clam story or, perhaps, the traditional Gitxaała chow mein story. In this account, a Department of Fisheries and Oceans enforcement officer, a police officer, or perhaps a visiting archaeologist happens to be in the village during a community dinner. The visitor is invited to join in. At the dinner the visitor is observed to be enjoying one dish in particular, going up for seconds several times. Later that evening the visitor asks someone what was in the dish. "Purple clams," someone might say, or "That's traditional Gitxaała chow mein." "It's good," the visitor says. Afterwards there is much amusement over the fact that the visitor was

⁷ See Sloan (2003, 2005) for discussions of abalone from an ecologist's perspective based on Haida Gwaii. While he does not explicitly deny the possibility of Haida abalone harvests prior to the extermination of sea otters, his perspective can be summed up as, at best, equivocal.

clearly enjoying *bilhaa* but was completely unaware that that was what he had been eating.

While one cannot say whether or not this is a true story (especially since, in 1990, the government of Canada turned the harvesting and consuming of *bilhaa* into a criminal act), it is certainly true in essence: those who lack intimate knowledge of the environment; who have never spent time examining, harvesting, or searching for *bilhaa*; don't see it even when they are in fact eating it. In my search for *bilhaa* I have tried to determine why it is that archaeologists seem to be unable to find it in other places in and around Gitxaała territory. Surely it can't be because it's not there. I wonder if, like the DFO officer, they are encountering it but don't know it?

AN INDIGENOUS APPROPRIATION OF ARCHAEOLOGY

The *Laxyuup* Gitxaała Research Project involved an explicit Indigenous appropriation of archaeological methods and techniques framed within a Gitxaała intellectual tradition (see Menzies 2013 for a discussion of why it is time to stop using Indigenous peoples as data sources or laboratories for testing external theoretical frameworks).⁸ Our objective was not to create a uniquely Indigenous method; rather, it was to conduct an Indigenously led project dealing with questions raised within our community. I often, half jokingly, ask people, "What makes a backhoe Indigenous?" The same question applies to research methods and tools: What makes them Indigenous? I would suggest that the answer is power, authority, and jurisdiction. In other words, it's ultimately about who is in charge of the process.

As Indigenous peoples we are not opposed to adapting old tools or adopting new ones. If I can dig a ditch with a heavy-duty backhoe in

⁸ In my paper, "Standing on the Shore with Saaban" (Menzies 2013), I outline the all too familiar response of non-Indigenous colleagues to work that challenges settler privilege, particularly in relation to how our communities are considered as simple sources of data or laboratories upon which to test external theories and models. Some readers will find it important to draw out distinctions between those who use Indigenous peoples as data sources and those who do not; but simply naming names does not encompass the point. In other words, the very edifice of so-called Western scientific research related to Indigenous peoples is, from an Indigenous perspective, all the same. There is no gentle spectrum of really-bad to kind-ofnice. Fundamental questions such as: Who holds the authority and jurisdiction to conduct a study? Who sets the questions? What is the extent of our Indigenous participation? While it is clear that there are non-Indigenous researchers whom one might consider "fellow travellers," their existence does not fundamentally alter the established relations of power and authority that continue to subjugate and colonize Indigenous peoples and Indigenous practices. Social science research is implicated in the colonial process (Gough 1968). This point is relevant here but is not central to my concern with a disciplinary blindness to *bilbaa*.

less than a day why should I spend several weeks doing the same thing with a wooden tool? A common feature of humanity is our capacity to adapt and innovate. Our proposed research program planned to do just this: to adapt our own Indigenous intellectual tradition to address the general question of what constitutes our *laxyuup* by adopting, in part, an archaeological approach towards the reconstruction of the past. We did this through a study of the relationship between *laxyuup* Gitxaała and the material record recovered from our own villages, cultural sites, and harvesting facilities. Archaeologically, we sought to clarify our understanding of: (1) regional patterns of use and occupancy throughout the southern reaches of *laxyuup* Gitxaała, (2) village size and population profiles, and (3) the ancient diet and related resource utilization profile of Gitxaała and our ancestors. All this was framed within a social and intellectual world peopled by memories and practices that criss-crossed families, space, and place and that ultimately constituted our understanding of *laxyuup* Gitxaała.

We conducted our archaeological research in an area that Gitxaała use extensively and intensively. Yet there had been virtually no archaeological research conducted in this region. In 1938, Philip Drucker (1943, 73-80) excavated a site in the adjoining territory of the Gitga'at Nation and explored at least two sites located within Gitxaała territory. Three decades later, Bjorn Simonsen (1973) conducted a brief coastal survey that included some parts of Gitxaała territory and an excavation within the modern territory of Kitasu at Grant Anchorage in Higgins Pass, about a hundred kilometres south of our research area. Since that time, and aside from various cultural resource management surveys related to potential resource extraction and industrial development,⁹ there has been no other significant archaeological research in the region. Our project, beginning in 2009, is the only sustained archaeological research to be conducted within the southern reaches of *laxyuup* Gitxaała (Menzies 2015).

The closest sustained archaeological research in the greater Tsimshian region has centred on Prince Rupert Harbour, where, in the 1960s, George MacDonald began an ambitious program of excavation. Mac-Donald built upon earlier work conducted in the general area by Harlan Smith, Diamond Jenness, Maurice Barbeau, Charles Borden, and Philip Drucker. Later, Gary Coupland, David Archer, and others continued

⁹ Cultural resource management studies tend to be "proponent driven"; that is, the developer hires and sets the terms of reference for the work. Most of these consulting reports contain boilerplate descriptions, with an introduction on "the people," a brief description of fieldwork, then a list of recorded archaeological features (e.g., culturally modified trees [CMTS], canoe runs, fish traps, village sites). Most features described in these reports are CMTS.

MacDonald's research (MacDonald and Cybulski 2001). In the absence of detailed fieldwork elsewhere on the north coast of British Columbia, the results of the Prince Rupert region research has shaped an orthodox view in which Prince Rupert Harbour is seen as the primary focus of habitation and economic activity across the broader region. Continued research in this area by Kenneth Ames (2005), Ames and Martindale (2014), David Archer (2001), and Gary Coupland (1985) elaborates upon and reinforces a Prince Rupert harbour-centric academic orthodoxy. This imbalance calls out for additional work, such as the *laxyuup* Gitxaała project, that can reveal the far more complex and detailed processes and dynamics of the wider Tsimshian world.

Our archaeological research was structured by a Gitxaała familiarity with our landscape. All of the places that we visited and sampled were places that existed within contemporary memory and practice. Even the few places that members of the research team thought that they had stumbled upon and discovered were ultimately revealed to be known places with names, histories, and living people who could talk about them. At the places we studied we deployed four specific archaeological tools or techniques: (1) topographical mapping, (2) probe and percussion core sampling, (3) bucket auger sampling, and (4) small (one cubic metre) hearth excavations (Cannon 2000a, 2000b). Between 2009 and 2013 we visited seventeen Gitxaała residential locations and several dozen intertidal stone alignment sites (McKechnie 2009; Menzies 2015; Smethurst 2014). Within this larger framework we were guided by two tactical objectives: (1) searching for material evidence of *bilhaa* and (2) searching for Gitxaała places visited by early *K'mskiwah* travellers.

As noted previously, Gitxaała *sigidmnaa'nax* described to me their memories of harvesting and processing *bilhaa* in the late nineteenth and early twentieth centuries. Their descriptions contained clues as to where one might find material evidence of *bilhaa*. *Bilhaa* were first steamed in the shell in pit fires on the upper beach. Then the shells were removed and the *bilhaa* were threaded onto cedar dowels to be dried hanging over the cook stoves in the early twentieth-century cabins. Most of the shells were discarded near the cooking fires. From this, one could assume that a reasonable place to search for material evidence would be along the seaward margins of habitation sites in areas known to have *bilhaa* nearby. These accounts also provided clues as to why material evidence might not be readily found: discarding shells near the upper beach would make it likely that, over the years, they would be destroyed and washed away by wave action.

We were also interested in seeking out places within Gitxaala territory that had been visited by early K'mskiwah travellers. To aid us we had two primary sources: (1) extant Gitxaała oral history and (2) the diaries and ships' logs of the early travellers who visited the territory in the late eighteenth century. Gitxaała oral history documents early encounters with European and American sailors and their ships, particularly near Lax Kul (Bonilla Island) and Ks'waan (at the south end of Banks Island). The ships' logs, notably those of James Colnett (Galois 2004) and Jacinto Caamano (Wagner and Newcombe 1938), provide ethnographic details and geographic descriptions of encounters with Gitxaala people. While the location of Caamano's Gitxaala encounter is known to have been Citevats village on southeastern Pitt Island, prior to our work no archaeological research had been conducted there (although it was recorded as an archaeological site: FhTj-I). Colnett's Gitxaała encounter was thought to have occurred near Calamity Bay, on Banks Island, but the trader's journal indicates his imperfect comprehension of the details and extent of local Gitxaała use and occupancy of the area (Galois 2004). Drawing upon contemporary memories of customary sites near Calamity Bay, we were able to locate the village of Ks'waan. Our good fortune was complemented by also finding clear material evidence of *bilbaa* use at the same location. Thus the two objectives of our search came together in one location: the village of Ks'waan at the south end of Banks Island (Figure 1).

In June 2010, nearing the end of one of our field trips, we spent a day surveying the shoreline of Calamity Bay and a series of coves and small inlets to the east of it. We located a host of culturally modified trees (CMTS) and a fish trap at the end of one of the small inlets but were not able to locate the village we were seeking. Later that summer, during a planning discussion at the start of a field trip, one of the older crew members said that he was pretty sure the village we were looking for was a place where his father once had a trapping cabin. He had spent some time there as a young child. With his description we were able to go directly to the village. As it turned out, we had only missed it by a few hundred metres on our earlier trip.

The day we stepped ashore at *Ks'waan* it was raining so hard that we had no hope of staying dry. We were committed to being drenched. Our main boat was anchored in the nearest safe cove. To get to *Ks'waan* required a thirty-minute run through the wind and rain in a five-metre open skiff. Once we had the skiff secured to the beach we glanced around: it was patently obvious we were standing in front of a large village. Those

of us who have grown up on this coast have seen many such places. The village front rose up perpendicular to the beach in a wall about three metres high and extended approximately 120 metres parallel to shore. We could see the telltale signs of clams and other shells bleeding out of the sharp rise at the edge of the beach. Scrambling up the front of the village we came to a long flat platform area. I pushed a probe into the ground and could hear the characteristic grind of shell against metal. It was shell! We could see it in the probe: confirmation that we were standing on layers of anthropogenic deposits, later documented to include two full terraces that contained evidence of having supported at least eight large plank houses (Menzies 2015).

Over the course of three field visits to *Ks'waan* (August 2010, May 2011, and June 2011), we conducted bucket augering in seventeen locations and collected sixteen percussion core samples and a column sample from an exposed stratigraphic profile at the front of the village. We also excavated a hearth feature to a depth of approximately one metre, collected an additional column sample from this location, and mapped the extent of the village. The most exciting realization was that this place had significant quantities of *bilhaa* shell.

Bilhaa was observed in multiple auger sample locations, both in front of the village at the beach, where we could clearly see the exposed anthropogenic deposits of the village, and, in its largest quantities, in the one-by-one-metre hearth excavation. My non-Gitxaała colleagues initially met the first sight of abalone sparkling and glistening on the sample tray with disbelief. As I exclaimed with delight at the sight of the green-grey flecks spilling out of the auger bucket, the more practised eyes of my colleagues saw only various shell fragments. They were concerned that my initial conclusions were not properly based in scientific method. This is not an uncommon response within the intellectual tradition of scientific scepticism. Shortly thereafter, one of the team located an intact *bilhaa* shell clearly lodged in the soil matrix at the front of the village. This was enough to convince the most sceptical among us that we had indeed found clearly identifiable *bilhaa* within the village deposits.

The iridescence of the *bilhaa* shells sparkled in the flash of the camera (Figure 2). These shells appeared everywhere on the exposed matrix at the front of the village. We carefully extracted a piece of shell, and, holding it in our hands, we could see the characteristic reddish-purple outer shell (Figure 3) and a diagnostic nacreous flattened area (the columella), which looks like a flat shelf, on the underside of the shell (Figure 4). With this knowledge in hand we proceeded to search more systematically for material evidence of *bilhaa*.

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Figure 2. *Bilhaa* found in situ, midden face, *Ks'waan*. Figure 3. Large fragment of *bilhaa* showing red-purple outer shell. Figure 4. Columella of bilhaa.

The initial finding of *bilhaa* had been in bucket augers, but this collection technique often pulverizes fragile materials as the auger is twisted into the ground. Although we typically wet-sieved the samples through a one-millimetre mesh, I was concerned that the force of the water, combined with the physical action used for sieving, would destroy beyond recognition any bilhaa fragments in the samples. So rather than wet sieving we dried the samples and hand-picked visible bilhaa shells out of a selection of the auger samples. Only *bilbaa* shells that were clearly and unambiguously identifiable were collected. After recovering as much bilhaa shell as we could, the remainder was then sieved using standard stacked soil sorters with mesh sizes of 1 millimetre, 2 millimetres, 6.3 millimetres, and 12.5 millimetres. Faunal materials from \geq 2 mm fractions were identified (animal bone by Rebecca Wigen at the University of Victoria; shell by Naomi Smethurst at the UBC Museum of Anthropology; see Menzies 2015). For the purpose of this analysis eight of our seventeen auger samples were examined (due to cost factors we essentially selected every second sample for analysis). The eight examined auger samples each contained *bilhaa*, although it was not abundant relative to other shellfish, with sample mass varying from a mere fraction of a gram to slightly more than eight grams (Table 1). These masses are aggregated over multiple levels examined in each auger test, which sampled from the surface to as deep as we could go in about thirty-centimetre increments.¹⁰ At Ks'waan the deepest auger test with *bilbaa* was 3.42 metres below surface.

Results from the hearth excavation additionally revealed significant quantities of *bilhaa*. This excavation, within one of the large house platforms fronting the village, reached a depth of one metre below surface (Figure 5). The material removed was dry-sieved on site through sixmillimetre mesh. *Bilhaa* shell, worked bone, stone, and other artefacts were retained. Our excavation field notes recorded intact *bilhaa* shells first being recovered from seventy-five centimetres below surface in a shell-rich matrix that also included *ts'maay* (barnacle), *'yaans* (black katy chitons), *ts'ak* (gumboot chitons), *ts'a'ax* (clams), *gaboox* (cockle), *hadza'üült* (dog whelks and periwinkle), *gyels* (mussel), *dzik'wits* (red urchin), and *aswit* (green urchin).¹¹ The northwest corner of the excavation unit, from seventy-five centimetres to one metre in depth, was particularly shell-rich, and this location was where the majority of *bilhaa*

¹⁰ In retrospect, a sample increment of ten centimetres would have been preferable. Hindsight, as they say, is 20/20.

¹¹ These species were identified in the field. Subsequent laboratory analysis provides a far more extensive list of shellfish and fish. See data compiled by Wigen and Smethurst presented in Menzies (2015).

Mass of identified bilhaa shell per sampled auger test from 1mm mesh, Ks'waan

Auger test number	Depth below surface at deepest level of bilhaa recovery (cm)	Bilhaa (g)
ATı	259	I.47
AT ₅	177	0.04
AT ₇	288	1.59
AT ₉	132	0.01
АТп	105	0.05
AT1015	205	7.14
AT ₁₇	342	8.06
AT19	151	0.49



Figure 5. Russ Gamble, Jon Irons, and Naomi Smethurst excavating hearth at Ks'waan.

was found. Once the excavation was completed to a depth of one metre, faunal samples were collected in arbitrary ten-centimetre increments from the exposed profile in the northwest corner. Individual levels were collected in ten-centimetre increments.

The analysis of shellfish from the column sample, summarized in Table 2, further documented *bilhaa*, *dzik'wits*, and *aswit* (grouped together as urchin), and *'yaans* and *ts'ak* (grouped together as chiton). While many other species of shellfish (see above) were observed in this sample, I focus on the relative comparison of this socially relevant and ecologically integrated group,¹² within which I observed a significant amount of *bilhaa*. The co-occurrence of urchin and chiton speaks to the exposed coastal setting nearby and indicates the ecology of the harvested intertidal area.

As opposed to the crushing effects of the bucket auger, excavation by hand allowed us to recover nearly intact bilhaa shells even though we utilized a coarser mesh (6.35 millimetres). However, the shells were easily fragmented, and even with gentle handling would break into ever-smaller pieces. These observations are consistent with those of other researchers regarding the fragility of northern abalone shells recovered from archaeological contexts (see, for example, Orchard 2007).

I wondered how many bilhaa might be represented by the mass of shell we recovered from the column sample. To evaluate the potential quantity of bilhaa represented in archaeological deposits, I weighed an empty bilhaa shell of modest size (about ninety-by-sixty millimetres) obtained from a beach near the village to provide a rough estimate of one whole bilhaa for every twenty-seven grams of bilhaa shell fragments. This is, of course, a highly problematic estimate fraught with all manner of error, yet there is relevance to considering how much bilhaa may have been harvested and what our data might suggest in terms of potential harvest levels. We refined this estimate by examining the bilhaa shell fragments for evidence of the columella, the flat shelf-like ridge of shell that forms a right-angled shell fragment (Figure 4). Because these shell portions are thicker and thus more durable, they are more likely to be represented in our collected shell fragments than are flatter, thinner pieces of bilhaa shell. When our excavated samples were examined for

¹² Sea urchin, *dzik'wits* (red/purple) and *aswit* (green), and chiton, '*yaans* (black katy chitons) and *ts'ak* (gumboot chitons), are socially important foods that are often harvested in the same or similar locations as are *bilhaa*. Also, these are invertebrates that co-exist in a similar ecological niche. For these reasons I include in the table only the relative proportions of the three species. Additional analyses of the shellfish assemblages recovered from this site is presented in Menzies (2015).

70-80

80-90

90-100

100-105

1.0

T.O

1.0

0.5

10.7

29.8

27.4

14.7

TABLE 2

EU-1

EU-1

EU-1

EU-1

excavat	ion unit 1		1	0 0			Ū		
		Vol						%	
Test ID	Depth below	RAW		Purple			%	Urchin	%
	Surface	SAMPLE	Bilhaa	URCHIN	Chiton	TOTAL	Bilhaa	BY	Chiton
	(centimetres)	(L)	(G)	(G)	(G)	(G)	BY MASS	MASS	BY MASS

0.0

1.3

3.1

0.5

6.2

5.8

18.6

10.0

16.8

37.0

49.1

25.3

63

81

56

58

0

4

6

2

37

16

38

40

Comparative samples by mass and percentage of bilhaa, urchin, and chiton from Ks'waan excavation unit 1

pieces of the columella, the number of potential individual specimens increased to about four per litre of excavated volume. Each column sample level represents approximately one litre of anthropogenic sediment (i.e., 10 x 10 x 10 cm). Similarly, the hearth excavation represents a single cubic metre (i.e., one thousand litres). From this we can suggest that the layer that held the most significant volume of bilhaa, from seventy-five to one hundred centimetres below surface, could have contained approximately 250 bilhaa. Despite the uncertainty in this calculation, this estimate provides an indication of the potential harvest conducted by the residents in one portion of this village.

Charcoal samples were collected and submitted for radiocarbon dating. They came from three levels in the hearth excavation unit and three levels at the front of the village where the first whole bilhaa shell was recovered (Table 3). Samples from the hearth excavation were recovered from sixty to sixty-five centimetres below surface, a mid-point at a depth of eighty to eighty-five centimetres, and the bottom of the excavation at a depth of one hundred to 105 centimetres. Charcoal samples from the front of the village were recovered from twenty to twenty-five centimetres below surface, a mid-point at a depth of fifty-five to sixty centimetres, and from the bottom of the exposure level at a depth of 130 to 135 centimetres. This approach was designed to provide bracketing age estimates for the bilhaa recovered from the column sample taken from the walls of the excavation unit. The calibrated ages presented in Table 3 show the clear antiquity of bilhaa harvesting and use, demonstrating a continuity of practice of almost fifteen hundred years. This should unequivocally dispel any ideas that the harvest and consumption of bilhaa was a postcontact, post-sea otter coastal phenomenon on the BC coast (or at least within *laxyuup* Gitxaała). From both the auger samples and the column sample from a stratigraphic exposure along the front beach wall of the village,

TABLE 3

Calibrated radiocarbon dates from Ks'waan excavation unit 1 and from the beach front deposits.*

Excavation area	Radiocarbon laboratory sample number	Material dated	Depth below surface (cm)	Radiocarbon age	di3C value	Calibrated years before present (cal yr BP) 2-sigma range
Unit 1	AA102102	charcoal	60-65	1978 ±41	-21.9	2034-1825
Unit 1	AA102103	charcoal	80-85	2094 ± 45	-26.1	2297-1946
Unit 1	AA102104	charcoal	100-105	2134 ± 41	-23.3	2305-1995
Beach front	AA102099	charcoal	20- 5	658 ± 38	-24.2	675-554
Beach front	AA102100	charcoal	55-60	644 ± 39	-22.2	670-551
Beach front	AA102101	charcoal	130-135	853 ± 39	-26.2	905-686

* Dates were calibrated on the IntCal13 curve (Reimer et al. 2013) using OxCal 4.2 (Ramsey and Lee 2013).

we know that bilhaa is found from near the surface to a tested depth of 3.4 metres. All of our tests (auger, core, or excavation) showed evidence of continuous human occupation for several millennia, continuing into the mid-twentieth century.

In addition to the ubiquitous observations of multiple species of bilhaa and other shellfish, many other animal species were identified. These include twenty-eight species of fish, six species of mammal, one species of bird, and seventeen species of invertebrates (Menzies 2015).¹³ Five of the six identified mammal species were recovered by hand from the exposure eroding along the front of the site, including *k'oon* (northern fur seal), *t'iibn* (northern sea lion), *dziiw* (Pacific white-sided dolphin), *ptoon* (sea otter), and *wan* (mule deer). *Haas* (domestic dog) was the only mammal species identified from the auger sample assemblage, which recovered considerably fewer intact mammal bones relative to the beach exposure.

As Orchard notes in reference to archaeological sites in southern Haida Gwaii, greenling, rockfish, and herring exist in association with kelp forests and might be expected to show declines if faced with the expansion of an urchin barrens, a context speculated to coexist with increased bilhaa populations (Orchard 2007, 175-76). The *Ks'waan* fish assemblage shows stable, consistent presence of greenling (28 percent of NISP), herring (29 percent of NISP), and rockfish (4 percent of NISP)

¹³ Rebecca Wigen identified vertebrate specimens using the comparative collection at the University of Victoria. Naomi Smethurst identified invertebrate samples at the University of British Columbia. See Menzies (2015) for detailed reports.

from near the surface to our deepest samples, showing no evidence of significant temporal variation. Other species include salmon (31 percent of NISP), halibut (2.5 percent of NISP), and a number of others, ranging from 1.3 percent to 0.04 percent of NISP.

Taken in its entirety, the data from *Ks'waan* provide empirical substantiation for what Gitxaała matriarchs and community members have known all along: bilhaa is a traditional Gitxaała food. *Bilhaa* is harvested from locations that provide a range of other marine resources, including sea urchin, chiton, halibut, greenling, rockfish, and sea otters. Although more work remains in the analysis of our data, this examination of bilhaa is a reassuring vindication of Gitxaała knowledge.

CONCLUSION

Visiting with my dad in late December 2014, I asked him when he first remembered eating bilhaa. "I was two," he said without a blink. "We always had them. Someone would get them. Ed [Smoygyet Tsibassa, Edward Gamble, my father's maternal grandfather] would bring them to us. Family, friends, they got them. We would get them. When I ran my own boat I knew where to go. We always had them."

Bilhaa have always been there. We have always had them, have always known how to find them, have always eaten them, shared them, and traded them. We have always known this. It is only in the context of colonization that our memories have been challenged. Experts on culture, history, language, and laws think that they can correct us with their external systems of disbelief and compel us to deny what we know. So delicious that these same experts must now sit down at our table and be served up a platter of bilhaa that we have found with their very own tools and techniques.

My search for bilhaa has taken me out into my ancestral home, over the waterways, and ashore at villages and places Gitxaała have always known and valued. As we took up the shovels and trowels of archaeology, as we appropriated their ways as our own, we knew that we could now say yet again what we have always known to be true: we have always harvested bilhaa and we intend to continue doing so well into our future.

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