

THESIS AND DISSERTATION ABSTRACTS

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While conducting research for my master's thesis, I came across the Australian Archaeological Association's journal *Australian Archaeology*, which has a reoccurring section dedicated to dissertation and thesis abstracts. This got me thinking that a similarly styled section in *AJA* would be beneficial in promoting student-derived arctic and subarctic anthropological research relative to Alaska.

The new section will include abstracts of recent theses and dissertations and will regularly appear in future issues of *AJA*. The inaugural edition of this section consists of two abstracts from Canadian universities, two from Alaska universities, and one from a Scottish university. Two of the abstracts represent archaeological research, two are derived from cultural anthropological studies, and one is based on medical/cultural/biological research. Hopefully you will find this new section as beneficial as I did when I came across the Australian equivalent.

SHADES OF GREEN: THE SOCIAL NATURE OF YUKON FORESTS

Jodie Asselin

Ph.D. dissertation, 2013, Department of Anthropology, University of Alberta, Edmonton

ABSTRACT

This work is an exploration of forests as understood and encountered from varied and overlapping perspectives in the Yukon Territory. Focusing on nonindigenous Yukon residents who hunt, trap, work, recreate within, and aim to protect Yukon forests, it addresses the origins and implications of diverse forest perspectives in Canada's north as well as the correlation and interaction of these perspectives with indigenous cultural, economic, political, and historic forest connections. As a means of exploring the origin of forest perspectives, the author focuses on four key areas: Yukon forest history and its connection to contemporary forest views, divergent user experiences and knowledge of forests, the implications of regulation and boundaries on the forest experience, and the role of imagination in forest perception. As multilocal and multivocal place, forests are approached as consisting of overlapping meanings that are

far more complex than use-based distinctions allow for. As a result, many contradictions become apparent: that Yukon forests are experienced as both pristine wilderness and as places of intensive human use, as places of freedom while also being bound by bureaucracy, and as the focus of competing forms of environmentalism from unexpected sources. A number of points arise from the examination of such contradictions, including the potential for used spaces to once again be experienced as wild, how deliberately simplified self-narratives can mask complex human-environment relations, and how the language surrounding forest use and management is not necessarily based on common understandings of forests experience. Rather than focusing on forests as the background to broader social or economic issues, this work examines the multilocal and multivocal nature of forests as a means to better understanding local views, actions, and relationships between forest users. Set within the shifting priorities and economic and political realities of the far north over the last century, this examination of divergent forest perspectives explores human-environment relations in Canada's north with an eye towards contemporary resource management and consultation processes. This work is based off of anthropological fieldwork that took place in the Yukon

Territory between 2008 and 2010. Methods included archival research, interviews and participant observation.

Online at <https://era.library.ualberta.ca/public/datastream/get/uuid:36e1c134-3f9b-447a-951e-1ce378ba85a3/DS1>

“NEVER SAY DIE!” AN ETHNOGRAPHIC EPIDEMIOLOGY OF *H. PYLORI* BACTERIAL INFECTION AND RISK PERCEPTIONS IN AKLAVIK, NWT

Sally Carraher

Ph.D. dissertation, 2013, McMaster University, Department of Anthropology

ABSTRACT

Helicobacter pylori is a bacterium that infects the human stomach lining and is known to cause peptic ulcer disease and stomach cancer. This infection has become a major concern of indigenous peoples living in the Mackenzie Delta of the NWT, where both *H. pylori* infection and stomach cancer occur with greater frequency than in southern Canada and the United States. Some initial analyses of data gathered on income, housing and household living conditions, and other socioeconomic factors suggest that indigenous residents of Aklavik who live with greater social inequities may have an elevated prevalence of chronic *H. pylori* infection—a pattern that resembles high *H. pylori* prevalence in other marginalized populations across the world. I joined the Canadian North *Helicobacter pylori* (CANHelp) Working Group in 2010 to conduct participant observation in the Aklavik *H. pylori* Project (AHPP) and identify ways that ethnography can be integrated into the ongoing multidisciplinary research program.

Between September 2011 and June 2012, I lived as a participant observer in Aklavik, NWT (population ~625). During this time, I led an epidemiological field study of *H. pylori* incidence and reinfection. We found that the prevalence of this infection has diminished (and reinfection is relatively rare so far) amongst long-term project participants. However, the community as a whole has remained extremely concerned about *H. pylori*, especially in light of two new stomach cancer diagnoses in the community since the AHPP started. I examined how different risk perceptions emerge from processes of “making sense” of *H. pylori* as a “pathogen” or as a “contaminant” and de-

scribed how these different constructions inform people’s risk-avoidance strategies.

Indigenous residents of this community perceive historical colonialism as the source of contemporary social inequities. Local narratives of cancer as well as *H. pylori* reference notions of “contamination” that is perceived to have been introduced to the Arctic through the physical and cultural pollution of historic colonialism and boom-and-bust economic projects. Local perspectives clash with scholarly narratives, which assert more broadly that human health often improves (and more specifically, that the frequency of *H. pylori* infection generally decreases) when a society modernizes its socioeconomic system and increases standards of living. Ethnography of these contrasting, yet entangled, views can make visible the lenses through which different groups of actors perceive, experience, understand, and react to *H. pylori* infection.

In my dissertation, I argue that there is a need to explicitly acknowledge that the social inequities associated with *H. pylori* infection today have historical roots from approximately a century of colonial history in Aklavik. Multivocal ethnography can contribute to epidemiological analyses by adding a broader historical, geographic, and political context to our understandings of contemporary health inequities and facilitating cross-cultural understandings of different ways of knowing and responding to the perceived risks of *H. pylori* infection. Developing collaborative, multifaceted understandings should be useful for the AHPP’s ongoing knowledge translation component, and consensus truths can be built collaboratively between outside researchers and indigenous Arctic communities as these groups work together in an ongoing, and community-driven, research project.

DENDROCHRONOLOGY ON THE KENAI PENINSULA, ALASKA: DATING HISTORIC STRUCTURES USING TREE-RING ANALYSIS

Tiffany Curtis

Master’s thesis, 2013, Department of Anthropology, University of Alaska Anchorage

ABSTRACT

In an effort to better understand key events in the EuroAmerican settlement of the Kenai Peninsula, the remains of wooden structures found within the Kenai National Wildlife Refuge boundaries were dated using

dendrochronology. Events such as the fur trade, gold mining, homesteading, and settlement patterns across the peninsula were examined using dendrochronological analysis coupled with ethnohistoric accounts. Samples from fifty-five structures were analysed, with construction dates estimated for forty-two of them using both COFECHA and CDendro statistical analysis software. A multimodal distribution of construction activity was reflected by the tree-ring date frequency. The first peak occurred at the beginning of the American Period, circa 1870. The second peak occurred during the Gold Rush/Homesteading Period that began at the turn of the twentieth century, circa 1897–1915. The third and largest peak coincided with the Great Depression, which brought people into the region possibly to create better lives for themselves and their families. A final small peak coincides with Alaska statehood. Settlement patterns shifted during these periods from a concentration in the south around Lake Tustumena to more remote regions along water transportation routes and along modern transportation corridors with the establishment of railways and the Sterling Highway.

TAPHONOMIC ANALYSIS OF FISH REMAINS FROM THE MINK ISLAND SITE (XMK-030): IMPLICATIONS FOR ZOOARCHAEOLOGICAL AND STABLE ISOTOPIC RESEARCH

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Ph.D. dissertation, 2013, Department of Anthropology,
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ABSTRACT

This dissertation is focused on shedding the taphonomic overprint at the Mink Island site (XMK-030) to assess temporal variability of the fish bone assemblage and to establish sample selection criteria for stable isotope ($\delta^{15}\text{N}$, $\delta^{13}\text{C}$) analysis. These retrospective data may be used to identify the causes and consequences of long-term variability in local fish assemblages when combined with modern fisheries and paleoceanographic data. To use these data, it is essential to account for the effects of biostratinomic and diagenic agents. Intertaxa and interelemental differences in bone density, shape, size, protein, and lipid content result in differing preservation and contamination potential. Without mitigating for the effects of these biostratinomic and diagenic agents, temporal changes in abundance may

be skewed in favor of skeletal elements that best survive destruction. Moreover, stable isotope values may reflect differences in preservation and contamination rather than variability in ecosystem structure and function.

The results of several experiments conducted to assess preservation and contamination levels of Mink Island fish bones revealed that:

1. preservation and contamination potential are linked with completeness percentages and burial duration, but not with bone volume density;
2. Pacific cod dentaries that are intact, unburned, and free of visible contaminants are best suited for stable isotope analysis;
3. the modified Bell pretreatment method is validated for archaeological fish bones; and
4. because color-affecting contaminants cannot be removed without heat, color-based methods are unsuitable for assessing the cooking/burning stage of archaeological fish bones.

Interactions among humans and fishes at Mink Island were assessed using a four-stage resource depression and intensification model. The Mink Island occupants shifted their focus from small flatfishes during Stage I (7500–4500 cal BP), to Pacific cod and sculpins during Stages II (4500–2800 cal BP) and III (2800–900 cal BP), to a mixture of taxa (sculpins, cods, herring, and salmon) during Stage IV (900–400 cal BP). A decrease in Pacific cod fork lengths indicates that resource depression occurred during Stage II. Taxonomic proportion, evenness, salmon index, and skeletal element representation data demonstrate that salmon intensification did not occur during any stage at Mink Island.

NEVER ALONE: NARRATIVES OF SPIRITS IN AN ALASKAN YUP'IK COMMUNITY

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Ph.D. thesis, 2013, Department of Anthropology, University
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ABSTRACT

This thesis examines the meaning and use of narratives of spirits in the settlement of Scammon Bay, a Central Yup'ik community of about 500 people on the southwestern shore of the Bering Sea in Alaska. During my ethnographic fieldwork in the settlement from 2007 to 2010, I learned that the majority of villagers over three years

old routinely tell and listen to stories about spirits to interact, build relationships, and engage with their nonhuman neighbours. I contend that Scammon Bay people's narratives of spirits make powerful statements about the well-being of, and disorder in, the world. These stories illustrate how spirits are responsive beings who are part of Scammon Bay's sentient environment. I argue that they are aware of, and reactive to, human actions and people's moral failings. Most residents consider telling and listening to stories about their nonhuman neighbours an empowering act through which they shape the behaviour of themselves and those around them, while indirectly commenting on their own experiences within the settlement's history of colonial domination. I hypothesise that narratives of spirits provide healing measures for community members by offering a means to articulate their modern-day social ills in a nondisruptive fashion, thus strengthening Yupiit's resilience in circumstances of rapid social change. By analysing the connection between storytelling and culture change, this thesis explores the ways that the people of Scammon Bay use narratives of spirits to find meaning, understanding, and hope in their lives.