## InfoNorth

## The Dynamic North:

## Northern Climate Change from an Anthropological Perspective

by Sabrina Peric

N RECENT YEARS, the University of Calgary's Department of Anthropology and Archaeology has fostered faculty expertise in circumpolar history, cultures, and environments. With five faculty members currently dedicated to research in the circumpolar North, we have been in a unique position not only to offer new courses on northern and Indigenous issues, but also to deepen the university's existing research and teaching connections with northern communities.

In 2016, I had the opportunity to offer a new, Yukon-based field school for undergraduates entitled "The Dynamic North: Climate, Economy and Culture in Anthropological Perspective." This field school, coordinated by the University of Calgary's Group Study Program, ran its pilot program for five weeks in May and June 2016 and will continue to be offered every two years.

While field schools in Yukon are not new, so far most of them have been situated within natural science or archaeology degree programs. The Dynamic North, however, aims to provide students with an unrivalled opportunity to learn firsthand about the resilience of northern Canadian societies and the challenges they face in an era of climate change, with an emphasis on contemporary environmental politics. Furthermore, students can learn experientially about the research methods, cross-cultural ethics, and politics central to social science and qualitative research in the North. I have especially emphasized the importance of meeting with and learning from northern residents themselves.

With this goal in mind, I tried throughout the program to connect student research interests with deeper forms of community engagement, especially with northern Indigenous and non-Indigenous residents, local grassroots and non-profit organizations, the Yukon Government and Yukon First Nations self-government institutions. A primary goal of this program was encouraging students to critique the idea, traditionally taught in southern universities, that a researcher alone should formulate the main research questions, driven largely by her or his own interests. Students were pushed to think about what community-based research looks like and how researchers might respond to research questions formulated by Northerners, research designed by northern communities, and research carried out by Northerners in partnership with universities and other research institutions.

The Dynamic North program offers students a unique environment for learning directly about the social impacts of climate change and conducting research with people and communities in the Kluane region of Yukon. While climate change is a global phenomenon, it is also experienced locally; it is interpreted, explained, and lived in local contexts. And while climate change may be a distant reality for Canada's southerners, Yukoners have disproportionately felt the impacts of climate and weather change.

Throughout the program, students were encouraged to engage meaningfully not only with northern residents, but also with each other. The small size of the program (11 students and one instructor) encourages close discussion and group projects. The Faculty of Arts at the University of Calgary, as well as the Department of Anthropology and Archaeology, generously provided tuition support and additional funding for two post-secondary students from Yukon enrolled in the field school during its pilot year. We hope to continue engaging Yukon students in future years by providing tuition and funding competitively, with preference going to students from the communities in the Kluane region and from the traditional territories of the Kluane First Nation (KFN) and Champagne and Aishihik First Nations (CAFN).

The diversity of ideas and experiences present in the group of 11 students was apparent at the start of the program, when students gathered in Calgary for a week of classes on the politics of climate change and the methods anthropologists use to study the complex effects of climate change. Students discussed not only competing definitions of climate change, but also questions of scientific authority in climate matters and the effects of environmental change on already existing social inequality. The impacts of climate change and its challenges for communities are diverse, but one defining characteristic is that they vary significantly from one location to another and will depend highly on political and socioeconomic conditions. Students examined geographies of race and power in post-Katrina New Orleans and debated whether or not Fort McMurray residents evacuated by recent wildfires should be considered "climate refugees." Guest lecturers were Angie Tucker, a feminist Métis scholar and currently a master's candidate at the University of Calgary, and Daniela Navia (MA, U. of Calgary). After this week of intense discussions, the group

departed for Whitehorse for the first part of the Yukon Field School.

After our arrival in Whitehorse, we immediately left for the Kwanlin Dün Cultural Centre to attend the Yukon Food Security Roundtable, organized by the Arctic Institute of Community-Based Research (AICBR). AICBR is a Whitehorse-based, non-profit organization that carries out timely, cutting-edge community-based research in Yukon through cross-sectoral partnerships with Indigenous, territorial, and federal governments, academics, and the private sector. Within the context of changing environmental systems, food security has emerged as a central idiom through which Yukon residents express uncertainty about the future. The availability of store-bought, fresh, and traditional foods was an urgent matter discussed by both guest speakers and a community audience that evening in Whitehorse. Speakers included Diana Bronson, Executive Director of Food Secure Canada, who discussed whether a national food policy is possible; Kathleen Wayne, Manager of Family Nutrition Programs, Alaska Department of Health and Social Services, who described Alaska-specific social welfare programs designed to combat food insecurity; and Dr. Joseph Leblanc, Executive Director of the Social Planning Council Sudbury, who suggested new ways to think about Indigenous food sovereignty in northern regions and the adoption of Indigenous solutions to food insecurity, such as centralized distribution and cold storage of traditional foods.

Our first five days in Whitehorse were filled with vivid impressions of and continued discussions about the food security roundtable, lecture-hikes in Miles Canyon to learn the environmental history of resource extraction in the Yukon Territory, walks along the Yukon River, and a visit to the MacBride Museum of Yukon History. The museum helped the group to understand official representations of Yukon history, but also to delve into settler colonial relations in the context of the Klondike Gold Rush. After a warm welcome from Dr. Deb Bartlette, VP Academic at Yukon College, we spent an afternoon learning about ongoing archaeological and ethnological projects from Norman Easton, who took us on a hike through the Yukon College's Boreal Worlds, along with Scott Gilbert from the Renewable Resource Management Department at Yukon College. A later visit to Whitehorse also provided an opportunity to meet with Khâsha (Stephen Reid), a Dákwanjè (Southern Tutchone) language teacher at the Elijah Smith School, who argues that revitalization of Indigenous languages and cultures is crucial to self-governance in northern communities and to tackling the complex present and future challenges that Northerners face. In all, our time in Whitehorse introduced students not only to an already long northern environmental history, but also to the realities of living in the North today and the continuing impacts of colonialism in the Canadian context.

Before leaving Whitehorse for Kluane, field school students spent a leisurely day in Carcross where we were able to climb the dunes in the Carcross Desert (Fig. 1), enjoy smoked salmon on the shore of Bennett Lake, and learn



FIG. 1. The Dynamic North field school students after hiking to the top of the dunes in the Carcross Desert. Bennett Lake is in the background.

about the history of land-claim processes and negotiations in the Yukon through a lecture and *Voices of Vision*, a unique podcast series on Indigenous self-government featuring trailblazers such as David Joe, Sam Johnston, and Angie Joseph-Rear.

On the way to Kluane country, we stopped at Kwäday Dän Kenji 'Long Ago Peoples' Place,' a traditional culture camp near the community of Champagne, where Harold Johnson and Meta Williams welcomed us for the day (Fig. 2). Kwäday Dän Kenji intends to document the life of the people who lived in this region, traveled according to the season, and lived on the area's abundant salmon, berries, and other foods. When Harold Johnson first started work on Kwäday Dän Kenji more than 20 years ago, he consulted Champagne and Aishihik Elders meticulously on the structures and interpretive program at the camp. Harold and Meta now take school groups, local residents, youth, tourists, and student visitors on tours of their culture camp and passionately share their culture and their stories. In addition to our shorter visit to Kwäday Dän Kenji, we returned toward the end of the field season to help Harold and Meta rebuild parts of the camp for the upcoming busy summer. We hauled trees and leaves and stripped spruce logs of their bark, and we also enjoyed Meta's homemade chili and bannock.

After a very busy five days, we finally left the Whitehorse area for our home base for the next few weeks: the Arctic Institute of North America's Kluane Lake Research Station (KLRS) in the southwest Yukon. Situated next to the largest non-polar ice sheet in the world and in the shadow of the St. Elias Mountain Range, KLRS provides an ideal location to learn about not only the changing climate, but also the colonial history of Canadian environments and the continued aftermath of colonial land policy. Station Managers Sian Williams and Lance Goodwin were welcoming and supportive throughout our stay at KLRS. Students were grateful to be learning on the traditional territories of both KFN and



FIG. 2. Harold Johnson speaks with field school students about smoking fish at Kwäday Dän Kenji, near Champagne.

CAFN and within the area of Kluane National Park, part of a large cross-border UNESCO World Heritage Site encompassing immense glacier and icefield landscapes. Because of this unique landscape, communities on KFN and CAFN traditional territory are subject to the daily realities of this changing environment: flooding, glacial surge, droughts, permafrost degradation, and new weather patterns, but also changes in wildlife ecology, ungulate, and fish populations and therefore a sharp decline in the availability of traditional foods.

In Kluane country, classroom sessions at KLRS focused on food and water security in the Yukon-Alaska borderlands and the changing meanings of land and food in this region over the past 150 years. These sessions were complemented by activities at cultural centres, along hiking trails in Kluane National Park, at historical sites, and in meetings with local residents. John Fingland provided an amazing overview of the southwest Yukon's history from the perspective of a CAFN citizen at the Da Ku Cultural Centre. Weaving his own life story and experience into a larger story of Tlingit and Southern Tutchone encounters in the geographical areas stretching between Champagne and Aishihik, John presented a different vision of past, present, and future for field school students. Our day at Da Ku was unforgettable and emphasizes just how unique it is not only as a teaching facility but also as a place to celebrate the culture of Champagne and Aishihik First Nations Dän ('people').

Parks Canada graciously allowed our group to spend a day at the abandoned Agriculture Canada Experimental Farm in Haines Junction, where we discussed the history of agriculture in the Yukon and its impact on people's relationship to land, as well as Indigenous-settler relations.

We hiked the incredible Sheep Creek Trail in Kluane National Park to a viewpoint overlooking the Kaskawulsh Glacier forelands and St. Elias Mountains (Fig. 3), while learning from Dr. Brian Lanoil, a University of Alberta microbiologist who was based at KLRS, about anthropogenic climate change and changes in northern microbial



FIG. 3. Field school students arrive at an outdoor classroom on the Sheep Creek Trail, Kluane National Park.

ecologies. Students also hiked up a rock glacier overlooking Dezadeash Lake, and learned about the aftermath (both environmental and social) of the building of the Alaska Highway at Soldier's Summit.

One of the highlights of the trip was the opportunity to attend a meeting of the Dän Keyi Renewable Resource Council (DKRRC) in Destruction Bay. Renewable resource councils were one of the institutions set up in response to the Umbrella Final Agreement for Yukon First Nations Self-Governance in 1994. These local co-management bodies established in areas where land claims have been signed give local communities a voice in managing renewable resources (e.g., fish, wildlife, habitats, forestry). DKRRC is the co-management council made up of elected representatives from the Kluane First Nation (50%) and the Yukon Government (50%) responsible for Kluane First Nation Traditional Territory. Students sat in on a meeting of the DKRRC and heard about projects concerning caribou populations, fish health in Kluane Lake, water monitoring, and wildlife response to infrastructure projects. Before and after the meeting, they were able to ask questions of DKRRC members Peter Upton and Pauly Wroot and see one of the unique institutions through which Yukon communities actively participate in governance. As a result of this meeting, future field school students may have the opportunity to participate in a longer-term wildlife sighting research project initiated by DKRRC.

Another highlight of the trip was an extended meeting with AICBR personnel Jody Butler-Walker, Norma Kassi, and Katelyn Friendship, who met with students for an afternoon and evening to discuss AICBR's decades-long commitment to northern wellness in all Yukon communities and unequaled collaborative partnerships with Yukon First Nations. For many students, the meeting with AICBR was one of the most important events of the field school. It highlighted not only that innovative, capacity-building research could be conducted outside of the academic system, but that it also could be northern-directed, northern-run, and



FIG. 4. Field school students spent an afternoon at the Whitehorse Community Garden learning from Randy Lamb about growing local food in southern Yukon.

aligned with the priorities of northern communities. In particular, Jody, Norma, and Katelyn highlighted a collaborative project of KFN and the University of Waterloo to examine toxins in Kluane Lake fish populations—a critical matter for local subsistence diets. Local response to climate change remains a key research priority for AICBR.

As food was a central way for us to see the impacts of climate change, students participated in some experiential learning activities related to community gardening and food sovereignty. Students met with Randy Lamb, an agrologist at Yukon Agriculture, but also president of the Downtown Urban Gardeners' Society (Fig. 4). After learning how growing your own food differs in the Yukon and hearing Randy's forecast for food security in a changing North, we participated in a work bee at the Whitehorse Community Garden, where students not only weeded many beds, but also planted potatoes and transplanted onions. The final activity, formulated as the culmination of students' hands-on learning about growing food, was to plan, build, and plant a new garden at KLRS, using mostly local seeds. Though students began to see seeds germinate by their departure, we were happy to hear that the KLRS kitchen and visiting researchers were already enjoying our spinach, greens, dill, radishes, and kale in early August.

Like the new KLRS garden, spaces of relaxation were also a time for learning. We ate delicious baked goods at the Village Bakery in Haines Junction, but also met up with Kluane Adamek (a former Jane Glassco Fellow with the Gordon Foundation, an advisor to former First National Chief Shawn Atleo, and current Director of Government Relations for Northwestel) to hear her perspective, as a KFN citizen, on the future of the Yukon. The Village Bakery also provided the setting for a concert by Ed Peekeekoot, a Cree singer-songwriter and storyteller, at the Bakery's Friday night salmon bake. Towards the end of our visit, students enjoyed a huge moose meat barbecue, followed by intense rugby playing on the Kluane Lake



FIG. 5. Field school students at the Jilkaat Kwaan Heritage Center in Klukwan, Alaska, hearing from Kimberly Strong about future plans for its newly opened culture camp.

beach—an amazing evening that we shared with about 50 neighbours of KLRS from the communities of Haines Junction, Destruction Bay, and Burwash Landing.

Lastly, students visited Alaska for three days towards the end of the trip. The visit to Alaska allowed students to understand firsthand some of the cross-border challenges in this part of the world, as well as the cultural and historical continuities across the USA/Canada border. While based in Haines, Alaska, students visited the Sheldon Museum, toured Fort Seward, and had lunch at the Fireweed Restaurant, where we were joined by restaurant owners Adam Richard (who is also the chef) and Amelia Nash to learn about the ins and outs of running a business in a northern town. Adam and Amelia also provided their own perspectives on the challenges of attempting to eat locally in a changing environment and climate. In particular, they focused on how Alaskan tourism has changed local eating patterns, food storage, and procurement dramatically since the rise of the cruise ship industry in Alaska. On the way back to Kluane, we also spent a day in the village of Klukwan at the newly opened Jilkaat Kwaan Heritage Center (JKHC), a celebration of Chilkat Tlingit culture and arts. Tribal Council President Kimberly Strong took us on a tour of the newly opened culture camp (Fig. 5) and the heritage center and told us the stories surrounding the clan houses, as well as the history of Chilkat blanket weaving and the famous Whale House wall screen, now on display at JKHC.

Two main educational objectives of this program emerged from beginning to end. The first objective was to give field school students an opportunity to learn firsthand about the history, politics, environments, societies, and cultures of the Yukon, thereby attempting to remove a long-standing disconnect between residents of Canada's southern regions and their northern counterparts. This field school assumes that an important goal of a university's academic programs is to produce well-informed and thoughtful

citizens who can contribute positively to our joint life in this country. Using AINA's established infrastructure in the Yukon and building on existing research relationships with southwestern Yukon communities and residents, this field school tried to strengthen the interest of participating undergraduates in crucial issues affecting the residents of northern Canadian regions, but also to bring these students into contact with post-secondary Yukoners who share many of their same concerns.

The second educational objective of this field school was to give students an opportunity to learn about community-based research in northern communities by introducing them to both northern research design and the ethical considerations of working in northern communities, both Indigenous and non-Indigenous. Many students agreed that fieldwork, and especially building trust and community, were some of the most difficult aspects of research and that these experiences are not readily accessible from a faraway university classroom. Only by participating in a field school, experiencing a new place, and meeting new people can one come to appreciate the complexities of community-based research.

Historically, anthropologists were among the first to document the extensive nature of climate change impact on communities, particularly at northern latitudes. Elders in particular reported changes in caribou populations, insect diversity, sea mammal habits, and ice conditions that directly affected their existence (e.g., Nuttall, 1998; Krupnik and Jolly, 2002; ACIA, 2004). The impacts of climate change are diverse, and so are the challenges they pose for communities, but one defining characteristic of these impacts on communities is that they are *place-specific* and *path-dependent* (Hess et al., 2008). In other words, a community's vulnerability will vary significantly from one location to another and will also depend greatly on their political and socioeconomic conditions. The

Dynamic North field school therefore stressed at all times the importance of community-centred approaches to climate change, which anthropologists are in a unique position to conduct. Field school students learned about the tenets of community-based research, about the ethics of research—including special attention to the value of collaborative methods—and the value of approaching social research on climate change through *multiple ways of knowing* (e.g., local knowledge, traditional knowledge, and science).

Because of the space constraints of this article, I was not able to properly describe all of the field school activities and thank all of the wonderful people who contributed to making our experience an unforgettable one. To everyone who helped us on our journey—Shå w níthän, gunalchéesh, mahsi cho and thank you!

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