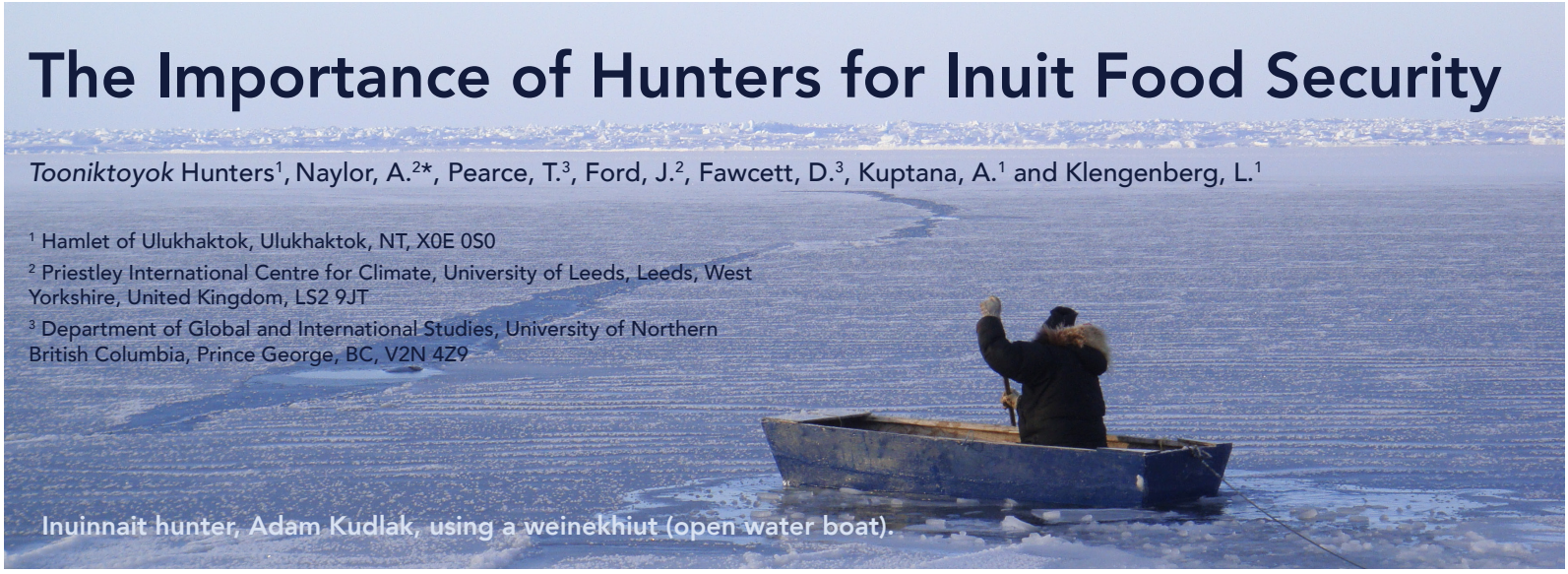
The Importance of Hunters for Inuit Food Security

Tooniktoyok Hunters[1], Naylor, A.[2]*, Pearce, T.[3], Ford, J.[2], Fawcett, D.[3], Kuptana, A.[1] and Klengenberg, L.[1]

[1] Hamlet of Ulukhaktok, Ulukhaktok, NT, X0E 0S0
[2] Priestley International Centre for Climate, University of Leeds, Leeds, West Yorkshire, United Kingdom, LS2 9JT
[3] Department of Global and International Studies, University of Northern British Columbia, Prince George, BC, V2N 4Z9



Inuinnait hunter, Adam Kudlak, using a weinekhiut (open water boat).

Executive Summary

Subsistence hunting represents a crucial and sustainable means of food production for many Inuit communities, and has significant economic, dietary, and cultural importance. The rising costs associated with hunting in the modern-day, however, are now preventing some Inuit from participating in subsistence, with implications for future food security, health, and wellbeing. This research examined the economic costs of subsistence hunting in the Arctic among Inuit hunters from Ulukhaktok, NWT. The research documented how much it costs to participate in subsistence, what quantity of foods were produced from subsistence practices, and how much it would cost to replace country foods with imported equivalents of the same edible weight at stores. Data were collected by 10-Inuit hunters over 12-months between 2018-2019 through the use of GPS tracking and bi-weekly interviews focusing on a range of topics, including costs incurred and food harvested per trip. Key findings include:

- Harvesting fish and wildlife was on average more economical than purchasing store-bought alternatives, even after accounting for the Nutrition North subsidy.
- It costs between 9.6% and 49.7% more to buy meat from the store than it does to harvest the same edible weight in meat from hunting.
- The cost of country-food per kilo was lowered the more productive a hunter was, demonstrating the importance of supporting full-time hunters.

Annual Individual Productivity	Cost of country food per-kilo (with supplies use, ammunition, capital costs, and depreciation) (CAD$)	Total annual cost of traditional food (CAD$)	Equivalent replacement store-bought food cost/ kilo (CAD$)	Total annual replacement cost of store-bought food (CAD$)	Cost of store bought food per kilo vs. country food
800kg	$15.50	$12,403.94	$16.99	$13,592.00	109.6%
1,000kg	$13.84	$13,841.94	$16.99	$16,990.00	122.7%
1,200kg	$12.73	$15,279.94	$16.99	$20,388.00	133.4%
1,400kg	$11.94	$16,717.94	$16.99	$23,786.00	142.3%
1,600kg	$11.35	$18,155.94	$16.99	$27,184.00	149.7%

Table 1: Costs associated with the harvesting of country food at different rates of annual productivity in Ulukhaktok, compared with the cost of purchasing the equivalent mass of meat in stores.

HAMLET OF ULUKHAKTOK

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

UNIVERSITY OF LEEDS

ECRG

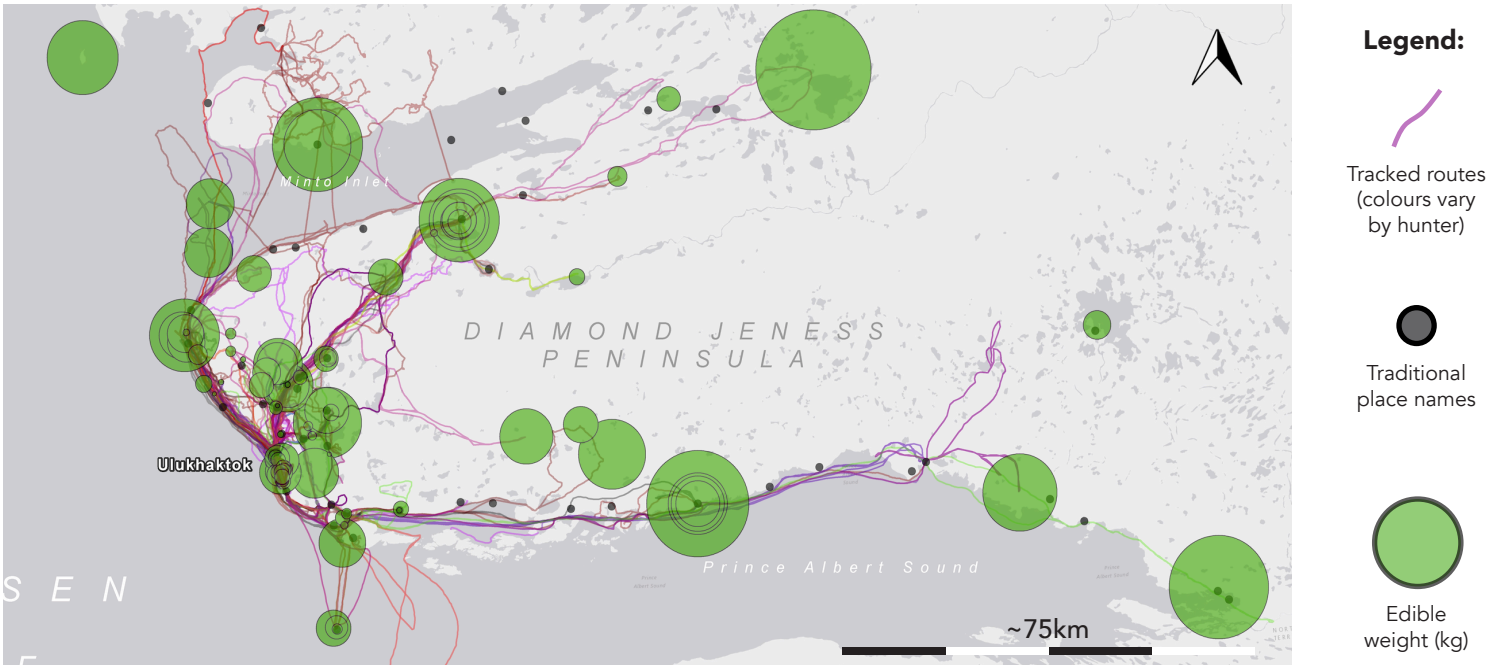


Figure 1: Tracked trails (n = 173), spanning Dec 2018 – Dec 2019, with location and edible weight of harvest (kg) illustrated by green circles. Size of circles is directly proportional to harvest mass in kilograms.

Results

- 173 hunting trails were tracked between December 2018 – December 2019 (Figure 1).
- For trips with full datasets were available (n = 33), country foods were harvested by individuals at a supplies-used cost of CAN$7.19 per kilo of edible weight.
- Cost-per-kilo was calculated based upon market prices of gasoline ($CAN8.418/gl), heating fuel (CAN$23.14/gl), and oil (CAN$9.99/l), in addition to the variable prices of other supplies (i.e. food) indicated by participants. Ammunition use was estimated retrospectively at a cost of $CAD1 per kilo of edible weight.
- An analysis of capital equipment costs conducted in 2016 calculated the financial outlay associated with hunting (covering the purchase of equipment and its years of depreciation) to be CAN$6,271.55 per hunter per annum in Ulukhaktok. Inflation adjusted, this was CAN$6,651.94 in 2019.

Conclusions

This research shows that despite Government-funded food subsidy programs like Nutrition North, it remains more economical to derive meats from the land in some areas of the Arctic than it is to purchase the same mass of meat from stores. This is especially true for those not employed within the wage-based economy, as they are not liable to lose a day's earnings whilst out hunting. It should also be noted that there is a considerable ethos of sharing associated with country foods as compared with store-bought alternatives, which may hold implications for broader community-scale food security, and country foods have been shown to often be far nutritionally superior to store-bought alternatives. Although some regional bodies provide hunting subsidies, such as the Inuvialuit Harvesters' Assistance Program and the Nunavut Harvester Support Program, it should be noted that these grants are often for small equipment items, or to values that do not meet the costs needed to actively participate in ongoing subsistence hunting. Inuit do not currently receive a federal subsidy for consumables, such as oil, gas, ammunition or heating fuel. Our findings suggest that there is a need to re-evaluate current top-down food subsidies in favour of locally-supported, culturally relevant opportunities to increase harvester's access to hunting equipment, supplies and fuels.