ARCTICVOL. 60, NO. 1 (MARCH 2007) P. 7–16

Further Documentation Supporting the Former Existence of Grizzly Bears (*Ursus arctos*) in Northern Quebec-Labrador

STEPHEN LORING1 and ARTHUR SPIESS2

(Received 7 June 2005; accepted in revised form 2 August 2006)

ABSTRACT. The discovery in 1976 of a grizzly bear (*Ursus arctos*) skull in an 18th-century Labrador Inuit midden effectively ended speculation about the former existence of the species in the barrenlands of northern Quebec and Labrador. We analyzed a photograph of a bear skull taken in 1910 at an Innu camp in the Labrador interior (east of the George River), which appears to be that of a grizzly bear. Coupled with previously unpublished historical accounts by Lucien Turner (Smithsonian naturalist in northern Quebec, 1881–83) and William Duncan Strong (anthropologist in Labrador, 1928–29), Innu oral history accounts, and archaeological evidence, this photograph further substantiates the theory that a small number of grizzly bears were present in the Quebec-Labrador peninsula and survived into the 20th century.

Key words: Labrador, barren-ground grizzly bear, *Ursus arctos*, Innu, William Brooks Cabot, Lucien Turner, William Duncan Strong

RÉSUMÉ. En 1976, la découverte d'un crâne de grizzli (*Ursus arctos*) sur un tertre inuit du Labrador remontant au XVIII^e siècle a mis fin à la formulation d'hypothèses à propos de l'existence de cette espèce sur les terres stériles du nord du Québec et du Labrador. Nous avons analysé la photo d'un crâne d'ours prise en 1910 à un camp innu dans l'intérieur du Labrador (à l'est de la rivière George), et il semblerait que ce crâne soit celui d'un grizzli. Cette photographie, alliée aux récits historiques inédits de Lucien Turner (naturaliste du Smithsonian dans le nord du Québec de 1881 à 1883) et de William Duncan Strong (anthropologue au Labrador de 1928 à 1929), aux récits historiques des Innus transmis oralement et à des documents archéologiques, vient étayer davantage la théorie selon laquelle un petit nombre de grizzlis aurait évolué dans la péninsule du Québec-Labrador et aurait survécu jusqu'au XX^e siècle.

Mots clés: Labrador, grizzli de Richardson, Ursus arctos, Innus, William Brooks Cabot, Lucien Turner, William Duncan Strong

Traduit pour la revue Arctic par Nicole Giguère.

HISTORY OF RESEARCH ON THE LABRADOR GRIZZLY BEAR

In the summer of 1975, archaeologist Steven Cox recovered the skull of a grizzly bear (Ursus arctos) from a test-pit placed in the midden in front of a mid to late 18th century Labrador Inuit sod house at Kivalekh (Okak-1: HjCl-1) on Okak Island (Spiess, 1976; Spiess and Cox, 1976; Cox, 1977). The discovery of the Okak grizzly bear skull effectively confirmed reports by Innu (the Algonkian Indians of the Quebec-Labrador peninsula), Hudson's Bay Company and Moravian furtraders, and biologists that a small population of grizzly bears in Labrador had survived into the early 20th century (Fig. 1). Before the bear skull was found, a small, disparate literature addressed the history of this claim: in addition to citations provided by Spiess and Cox (1976), see also Wallace (1932), Polunin (1949), Anonymous (1953), Elton (1954), Banfield (1959), Harington et al. (1962), Wright (1962), and Veitch and Harrington (1996). In the first decade of the 20th century, Labrador attracted a surprising number of explorers and naturalists, most of whom were apparently aware of the stories surrounding the rumoured giant "red" bear of the barrenland plateau bordering the George River. However, although they contributed to the anecdotal literature, none of these travelers seem to have returned with verifiable remains of the barren-ground grizzly bear. This paper presents two previously overlooked items of evidence: a photograph taken in 1910 by American engineer William Brooks Cabot, an avocational ethnologist and northern explorer, and an account by Smithsonian naturalist Lucien M. Turner. We believe these materials make a substantial contribution towards placing a former small but viable population of barrenground grizzlies in the Ungava region of northern Quebec and Labrador.

WILLIAM BROOKS CABOT AND THE LONG POND BEAR SKULL

Between 1899 and 1925, William Brooks Cabot made frequent trips into the interior of the Quebec-Labrador

¹ Arctic Studies Center, Smithsonian Institution, PO Box 37012, NMNHMRC-112, Washington, D.C. 20013-7012, U.S.A.; lorings@si.edu

² Maine Historic Preservation Commission, 55 Capitol Street, State House Station 65, Augusta, Maine 04333, U.S.A.; Arthur.Spiess@maine.gov

[©] The Arctic Institute of North America

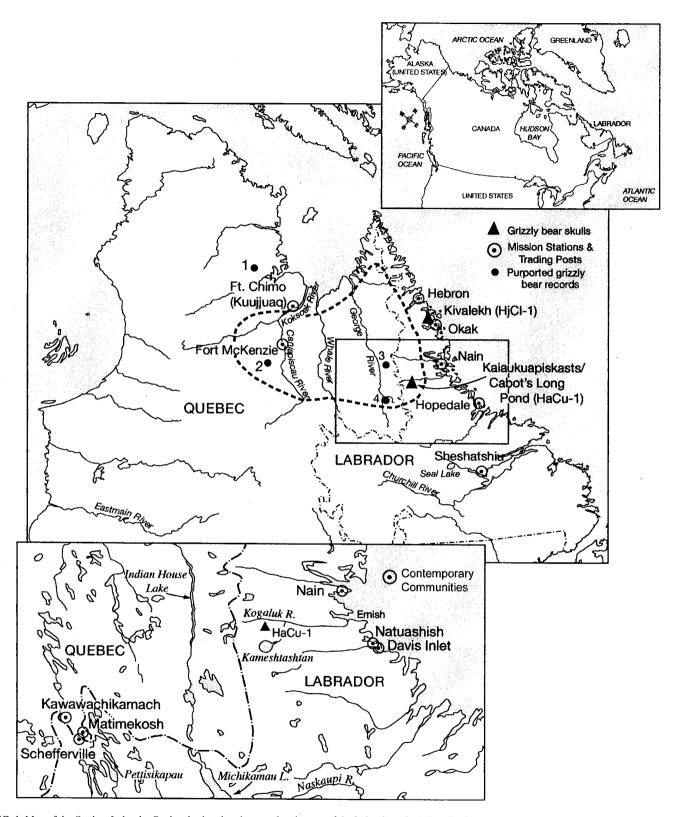


FIG. 1. Map of the Quebec-Labrador Peninsula showing the postulated range of the Labrador grizzly bear in the late 19th and early 20th centuries (within dashed line). Numbers show locations of purported grizzly bear records: 1) R.C.A.F. sighting in 1948 (Wright, 1962), 2) footprints seen by A.P. Low in 1894 (Low, 1897); 3) Grizzly bear killed in 1894 according to Prichard (1911); and 4) Koehler's big bear, 1928 (Michelin, 1976).

peninsula (Cabot, 1920; Loring, 1986–87, 1987, 1997). Cabot was fascinated by the opportunities to meet and travel with Innu families, who still practiced a cariboubased subsistence lifestyle. In 1910, Cabot traveled inland

with three white companions. Returning from the Innu camp at Tshinutivish on Mushuau-nipi (Indian House Lake/Lac Hutte Sauvage), Cabot made a brief overland trek to the shores of Kameshtashtan (Lake Mistastin) to



FIG. 2. William Brooks Cabot's "Split-Rock camp" at Kaiaukuapiskasts (Cabot's Long Pond) on the Innu travel route from Emish (Voisey's Bay) to Mushuaushipu (the George River), WBC1905.105. William Brooks Cabot collection, National Anthropological Archives, Smithsonian Institution.

investigate the prominent headland at the western end of the lake where, he had been told, "the old-time Indians got their arrow-head material" (Cabot, 1920:285). On their return to the Innu travel route between Tshinutivish and Emish (Voisey's Bay), the party fell in with a small group of Innu hunters returning from a trading trip to Nain. They lunched together at the beginning of the long portage to the west end of Kaiaukuapiskasts (Cabot's Long Pond). Unlike the Innu Cabot had encountered earlier, these hunters seemed agitated and glum, and the two groups soon parted. Cabot later noted in his diary (1910): "At the end of the portage we found the ground smoking from quite a fire, which had run over the moss and among the dry wood for some acres. Our cache of some flour, clothes, cartridges, and bacon were in a tree visible from the split rock & in the burned area. My strong first thought was that the Indians had burned the cache, at any rate it was destroyed...I thought they might have lighted the knoll as an offering to a fine bear skull on a long pole there" (Figs. 2 and 3). Farther along, at the base of the high portage where Cabot had earlier cached the canoe used on their upstream travel, they found the canoe had been damaged and tobacco taken. Cabot (1910: 18 August) notes, "They had taken the tobacco but nothing else. The two manifestations were simply a message that we were not welcome. I was a good deal jarred, after the good relation of the past years... I think the large party alarmed them. They must protect this country from white usage, with its furs, game distribution & possible occupation for mining. Yet I did believe they

would take my past with them as standing for more than it did." Cabot was deeply troubled with this rejection delivered by the Innu. His book contains no mention of it, nor does any explanation accompany a distant photograph of the bear skull offering that appears there (Cabot, 1920). In the process of curating and cataloging Cabot's papers at the National Anthropological Archives, the senior author identified a series of previously unpublished images of this bear skull offering.

The Long Pond Skull Analysis

The Cabot photograph (Fig. 4) is a left oblique view of a defleshed bear skull tied near the top of a spruce pole. The viewpoint is about 45° anterior of a direct lateral view and perhaps 20° or 30° below horizontal. There is a good view of the anterior dentition and the left upper premolarmolar row from the lateral aspect. The mandible is attached with sinew or twine to the skull, in its proper anatomical position. The base of the occipital bone appears to have been removed, perhaps to access and remove the brains of the animal. Interestingly, this same bone breakage pattern was observed on the Okak grizzly bear skull, as well as on black bear (*Ursus americanus*) skulls hung in the trees at more recent Innu camps (Fig. 5).

While it is difficult to judge the size of the skull without an accurate scale indicator in the photograph, the spruce pole to which it is attached suggests the skull size is modest. Without the specimen in hand, it is not possible to

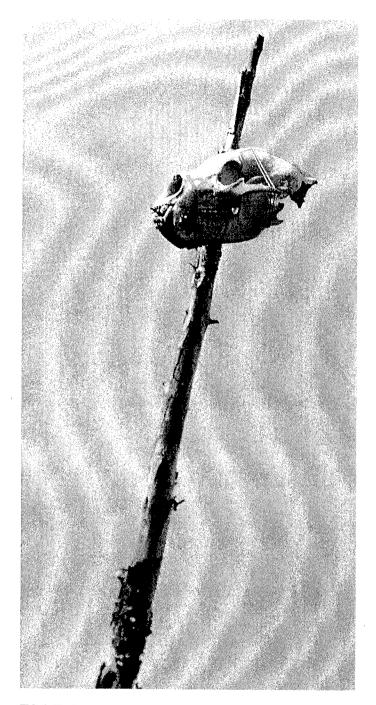


FIG. 3. The bear-skull offering at Kaiaukuapiskasts, WBC1910.161. William Brooks Cabot collection, National Anthropological Archives, Smithsonian Institution.

take the tooth length and palatal width measurements that helped identify the Okak grizzly skull (Spiess, 1976; Spiess and Cox, 1976). Differential identification of grizzly bear from black bear can be made on the combined lengths of M1 and M2 relative to palatal width. Tooth length longer than palatal width is a characteristic of *Ursus arctos*. The greater combined tooth length in *U. arctos* is partly due to a well-developed posterior basin on M2, compared to the buccally reduced posterior basin or "heel" on M2 in *U. americanus*. Unfortunately, these tooth characteristics are not clearly visible in the photograph of the

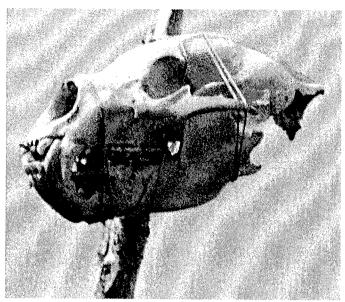


FIG. 4. Close-up of the Kaiaukuapiskasts bear skull, WBC1910.161. William Brooks Cabot collection, National Anthropological Archives, Smithsonian Institution.

Kaiaukuapiskasts/Long Pond skull. We could use only the general shape of the skull in lateral aspect to make a specific species determination.

The skull in the Cabot photograph demonstrates a clear upward concavity in the frontal-nasal region. In Merriam's (1918) terms, the frontal shield is moderately sulcate and the frontal-nasal region is slightly dished, exactly matching the Okak specimen in the form of the frontal-nasal region. Since the comparisons with the Cabot photograph must be at a gross morphological level, we established a simple typology for the amount of dorsal concavity (dish or dip) from the frontal bone area at the eye sockets to the posterior edge of the nasal opening. No concavity was classified as "straight"; concavity less than that shown on the Cabot photo was "slightly sulcate"; equal concavity was "moderately sulcate"; and more concavity was "deeply sulcate."

We used our typology when we examined a series of grizzly (n = 6) and black bear (n = 15) specimens in the Smithsonian (U.S. National Museum) mammalogy department. The grizzly bear skulls were from the Northwest Territories (the "barren-ground grizzly"), whereas the black bear skulls were from Ontario, Nova Scotia, and Newfoundland-Labrador. The Northwest Territories grizzly bears are generally smaller than grizzly bears farther to the west along the Arctic coast (Rausch, 1963). Comparisons with these Northwest Territories specimens may be most appropriate, because grizzly bears from the west coast of Hudson's Bay and Southampton Island were the likely source of the Labrador Grizzly population (Banfield, 1964; Spiess, 1976). Recent research has shown barrenground grizzly bears can easily cover vast distances (Gau et al., 2004).

The "straight" form of frontal-nasal region occurred only in black bears among the specimens we examined.



FIG. 5. Ritual disposal of black bear skulls and caribou antlers in a tree at J.B. Pastiwet's camp, Flowers Bay, Labrador, July 1982. Photograph by Stephen Loring.

Half of the 16 black bears exhibited this form, while the other half had a slightly sulcate form. In the six grizzly bear specimens we examined, the frontal-nasal regions ranged from slightly sulcate to deeply sulcate. Two were equal in degree of concavity to the Cabot photo and the Okak specimen (moderately sulcate), one was less sulcate, and three were more sulcate (Table 1).

Thus, the specimen photographed by Cabot falls in the middle range of this small grizzly bear sample, and has a greater degree of concavity than any skulls in the eastern Canadian black bear sample. On an impressionistic basis, it "looks like" the Northwest Territories grizzlies both in overall ruggedness and in degree of concavity of the frontal-nasal region. Given the small sample size of the comparative collections, and recognizing that tremendous variation in skull morphology exists in both black bear and grizzly bear populations (Craighead and Mitchell, 1982; Virgl et al., 2003), we acknowledge that this attribution cannot be conclusive.

LUCIEN TURNER'S ACCOUNT OF THE UNGAVA GRIZZLY BEAR

The literature on Labrador's mysterious grizzly bear is a motley corpus, for the most part derived from fur traders, visiting naturalists, and explorers. It was aptly summarized by Elton (1954) and Spiess and Cox (1976). In the course of our research, we discovered a previously overlooked account of the Labrador grizzly bear in the papers of Lucien M. Turner (1848–1909), an intrepid Smithsonian naturalist with over a decade of northern fieldwork in Alaska, the Aleutian Islands, and northern Quebec-Labrador (Loring, 2001).

Turner had a joint appointment with the U.S. Signal Service and the Smithsonian Institution to man a meteorological and geomagnetic research station in Ungava Bay as part of the United States involvement with the First International Polar Year (Barr, 1985). In 1882-84, he spent a year and half at Fort Chimo, the Hudson's Bay Company post at the mouth of the Koksoak River, where the presentday community of Kuujjuaq is located in Nunavik, the settled land-claim area of northern Quebec. Following the tradition of late 19th century naturalists, Turner engaged in a wide variety of collecting pursuits, as time permitted, in addition to his official observations. He made expansive collections of plants, birds, fish, and insects for the Smithsonian and took the first known photographs in Arctic Quebec. Turner befriended visiting parties of Innu and Inuit families that came to the Company post to trade, and he acquired a spectacular assemblage of tools, clothing, models, and artifacts from them. He later published the results of his ethnographic collecting, augmented with oral histories and folktales, in his Smithsonian classic,

TABLE 1. Comparative examination of black bear and grizzly bear skulls at the U.S.N.M. Sex as recorded on specimen tag. Age is based on basic anial bone fusion, mostly fused and tightly fused bones are judged adult. Frontal-nasal shape is explained in the text.

USNM#	Sex	Age	Provenance	Frontal-nasal shape	Comparison with Cabot photo frontal-nasal concavity
Ontario Bla	ck Bears (U	l. americanus):			
6583	_	juvenile	_	slightly sulcate	less than photo
259797	M	juvenile	-	straight	less than photo
259798	-	adult	-	straight	less than photo
259799	_	adult	-	straight	less than photo
Nova Scotia	a Black Bea	rs (U. americanus):			
222744	-	_	_	slightly sulcate	less than photo
234237	M	_	_	slightly sulcate	less than photo
238721	M	juvenile	_	straight	less than photo
243996	_	juvenile	_	straight	less than photo
243998	_	juvenile	_	straight	straight
243999		juvenile	_	slightly sulcate	less than photo
244000	-	juvenile	-	straight	less than photo
Newfoundla	and Black B	ears (U. americanu	(s):		
168751	M	_	Newfoundland	slightly sulcate	less than photo
203276	-	_	near Nain, Labrador	straight	less than photo
210005	M	_	Cartwright, Labrador	slightly sulcate	less than photo
294020	F	_	Nain, Labrador.	slightly sulcate	less than photo
35388	M	-	Hamilton Inlet, Labrador	slightly sulcate	less than photo
Northwest '	Territories C	Grizzly Bears (U. an	ctos);		
6552	M	_ `	Anderson River	moderately sulcate	equal to photo
6548	F	=	Franklin Bay	slightly sulcate	less than photo
7146	M	_	Franklin Bay	moderately sulcate	equal to photo
218287	M	_	Coppermine River	deeply sulcate	more than photo
6255	M	_	Anderson River	deeply sulcate	more than photo
6540	-	. -	Franklin River	deeply sulcate	more than photo

Ethnology of the Ungava District (2001 [orig. 1894]). Turner had prepared a more inclusive monograph on the wildlife of Ungava, which unfortunately was never completed or published (Turner, n.d.). In it he provided brief descriptions of Ungava wildlife that are augmented with knowledge derived from his Innu and Inuit informants. He recognized the presence of three distinct species of bears from northern Quebec and adjacent Labrador: polar bear (Ursus maritimus), American black bear, and grizzly bear. Arguably among the preeminent naturalists of his day (Harper, 1964), Turner had considerable firsthand experience with northern wildlife and the fur trade. His observations are important in substantiating the former presence of a grizzly bear population in northern Quebec-Labrador and are presented here in their entirety (Turner, n.d.: 1452 – 1455):

Ursus richardsoni, Audubon & Back

A species of Bear supposed to be the Barren Ground Bear is well known to inhabit the sparsely timbered tracts along George's River from within thirty miles of its mouth to the headwaters. This animal is not plentiful, although common enough and too common to suit some of the natives who have a wholesome dread of it. It may be somewhat strange but it is nevertheless a certainty that it is not an inhabitant of the Koksoak valley south of latitude 56 degrees, but confines itself in the more northern portion of its range to the area between the coast range of hills along the Labrador

coast and the George's River valley, ascending that region to the headwaters and there striking across the country to the westward north of the "Height of Land". South of 55 degrees it is not known to occur that I have any trustworthy information of. The Indians affirm that only within recent years has this animal taken a freak ['whim, fancy'] to extend its range to the westward of the headwaters of Georges' River. The coloration of the Brown or Barren Ground Bear is so variable as at times to be a dirty yellowish brown to a dark grizzly.

I was informed that this animal is extremely savage, rushing up on its foe with a ferocity characterized by no other species of Bear. Its eyesight is limited from the position of the eye hence the animal has its vision directed only immediately in front of it. At the distance of thirty yards it is, while feeding, incapable of seeing the approach of a hunter who takes advantage of this defect and approaches only while it is engaged in feeding upon berries and other vegetable products. When the animal raises its head the person remains motionless and easily escapes detection. If, however, the animal observes anything moving on the horizon it immediately goes to that direction and if the track is discovered it relentlessly pursues the person. Only under most favorable circumstances will an Indian attack it. The Eskimo seldom traverse the area occupied by this huge beast.

A single young (rarely two) is brought forth in late April, not attaining adult size for three or four years. The adults rarely take to their winter habitations until early November and emerge as soon as the warm days of spring have removed portions of the snow from the tracts overgrown with bushes which afford a precarious living for the animal which when it came from its den was apparently as fat as when it lay down for its five months of semi-lethargic condition. In the course of three weeks the animal appears, in spring, as a huge mass of skin and bones, tottering over the uneven surface, scanning every foot of ground for a morsel of food to satiate its ravenous appetite. The flesh of everything is consumed as food by this species. Unfortunately I was unable to procure a specimen of this animal although a large reward was offered for an individual. I saw two skins of it and was unable to discover any appreciable difference between them and those of the Barren Ground Bear from other localities.

Biologists familiar with grizzly bear behavior will recognize the close conformity of Turner's report with recent grizzly bear studies (Nagy et al., 1983; Jonkel, 1987). The fact that barren-ground grizzly bears often appear fat and healthy when emerging from their winter hibernation, a condition that under the constant search for food, soon deteriorates, was widely noted by other early naturalists (Anderson, 1913; Strong, 1930).

Additional Accounts of the Labrador Grizzly Bear

Several accounts pertaining to the former existence of grizzly bears in Labrador augment Elton's (1954) detailed compilation. On a subsequent trip to Labrador in 1921, William Cabot traveled with a small party of Innu from Sheshatshiu up the Naskaupi River to the old Innu portage route to Seal Lake. Tshenish, the leader of the group, told Cabot that he had often heard the "Naskapi" talk about the barren-ground bear, which they called *Matēshu*. It was not as black as the common bear, larger, and wicked, and it was known to attack hunters. According to Tshenish, an Innu from Sept-Iles named Tapi Dominique saw one around 1911, but was afraid to shoot it (Cabot, 1921).

William Duncan Strong, an American anthropologist attached to the Rawson-MacMillan Sub-Arctic Expedition, spent the winter of 1927-28 camped with a band of Innu near Davis Inlet and Voisey's Bay (Leacock and Rothschild, 1994). A keen naturalist, Strong eagerly collected information from his Innu companions about the birds and animals in the region. He published a short account of these observations (Strong, 1930), which is augmented by his field notes (Strong, 1928–29, Vol. I, Notebook 3:105; Leacock and Rothschild, 1994). Strong's principal Innu informants appear to be Mishta-Napesh (Edward Rich) and Shushepish (Joe Rich). Both were knowledgeable about the barren-ground bear (métācū or méh-tah-shue) but claimed that no one had seen it, or its tracks, for many years. From them Strong learned that about 1870, Cé kan, an Innu hunter from Pettisikapau Lake, had killed three of these bears with a muzzle loader after the bears attacked a woman. Perhaps this was an

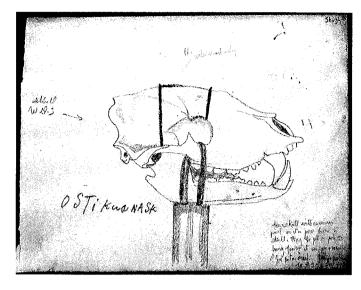


FIG. 6. "Bear skull with ceremonial paint on it – jaws bound to skull. May be put on pole or hung from it." Drawing of skull by William Duncan Strong, placement of red "ceremonial" lines on the cranium by Shushepish (Joe Rich), 3/15/28. Drawing in Strong (1928–29).

instance of a sow perceiving a threat to her cubs, for the Innu claimed that the brown bear was a solitary creature that usually left people alone. Strong was unable to learn the name of the bear's governing spirit—its "chief," or "animal master"—suggesting that by 1928 knowledge of the animal was already fading.

Strong notes the propitiative behaviors the Innu direct towards all bears and bear remains. He was told that after killing a bear, a hunter would rest his weapons and game bag in the bear's arms as a show of respect for the animal's prowess, and that the old men would often take a sweat to honor the bear, as it was the bear that built the first sweat house of which it is very fond. He notes (1928-29, Notebook 3:36) that "All bear skulls are bound together and put up on poles. Old males, and sometimes others, have eye sockets painted red. These things make bear's soul feel good, and assure the hunter more bears to kill because he has treated the bear well" (Fig. 6), and later (Strong, 1930:5): "Nearly every old summer camp of the Naskapi is marked by bears' skulls set on posts, for these Indians perform many rites to appease the spirit of this important animal."

Finally, in 1928 an American gentleman explorer, Herman Koehler, led a small party overland from Voisey's Bay to the George River, eventually making his way to Michikamau and the Churchill River. Nearly 50 years later, John Michelin, his guide on that trip, reminisced about his own encounter with a large, unusually coloured bear: "Coming across from Voisey's Bay we saw a big red bear about 16 feet long. I and his son [Hans Koehler] saw the bear, he took our track and went to our canoe. He was standing up to the foot [the stern] of our canoe and smelling in under the nose [the bow] of her. The canoe was 16 feet. We never moved 'til he was out of sight" (Michelin, 1976:36).

INNU ORAL HISTORY AND ARCHAEOLOGY

The fact that many late 19th century and early 20th century travelers to northern Labrador and Ungava Bay, however fleeting their visits, knew about the Labrador grizzly and were compelled to comment on its presence is strong prima facie evidence of the bear's continued presence in Labrador into the early 20th century. Testimony from local Inuit and Innu families forms the basis of much of the anecdotal literature on the Labrador grizzly. Since the discovery and recognition of the grizzly bear skull from Okak in the mid-1970s, the senior author has had the opportunity to talk about bears in general, and grizzly or "brown" bears specifically, with a number of Inuit, Innu, and Labrador Metis hunters. While several older hunters and trappers were aware of some of the historical grizzly bear accounts, no one had experienced or knew of any firsthand grizzly sightings or encounters.

The 1918 Spanish influenza, brought to Labrador on board the Moravian Mission's annual resupply ship Harmony, devastated Inuit and Innu communities and camps all along the coast. The high mortality, especially among middle-aged and elderly community members, resulted in an "oral history bottleneck" that severely curtailed the "library" of traditional ecological knowledge passed on to succeeding generations. Furthermore, with the adoption of village life over the last 40 years, much country-based knowledge has gradually withered; yet some older Innu hunters are still familiar with the word *matashu*, as a large, dangerous, yellow-brown bear that figures in Innu oral histories and legends (Lefebvre, 1972; Savard, 1985, 2004). The possibility that some Innu elders may yet retain a memory of the Labrador grizzly is hinted at in a 2004 interview conducted in Natuashish between anthropologist Peter Armitage and Francis Benuen (Mishta-Pinashue). Benuen reported that before he was born (in 1930), his father had once killed two matashu cubs, but his father had never seen the mother bear, nor heard any other tales about it (Peter Armitage, pers. comm. 2005). Many descendants of the Innu who formerly hunted in the George and Koksoak river valleys, traded at the Hudson's Bay Company posts at Fort Chimo (Kuujjuaq) or Fort Mckenzie (abandoned 1939) on the Caniapiscau, and subsequently moved to the vicinity of Schefferville in 1956 now reside in the communities of Kawawachikamach and Matimekosh. It may be there that further oral histories pertaining to the Labrador grizzly can be derived.

Although certainly extirpated from its former range in the northeastern portion of the Quebec-Labrador peninsula, the grizzly bear of the barrengrounds retains a ghostly presence in the imagination of some older Innu hunters. The region around Kameshtashtan (Lake Mistastin), including the Kogaluk River drainage where Cabot photographed the bear skull in 1910, seems to have been a core area for the small grizzly bear population that apparently survived into the 20th century. Kameshtashtan sits in the depressed basin formed by an ancient meteorite impact crater, which shelters a forested

oasis of spruce surrounded by tundra-covered hills strewn with boulders. The area forms a dramatic ecotone between forest and tundra that supports an unusual variety and concentration of animals. Twice annually, portions of the George River caribou herd pass through the region. Since 1999 the senior author, working cooperatively with the Tshikapisk Foundation, has been conducting archaeological and ethnohistorical research in the region. From an archaeological perspective, the former presence of the grizzly bear might be inferred from the large stone caches and the walled cliff crevasses that the Tshikapisk team has identified in the vicinity of caribou crossing places. The large number of animals that could be taken during the migration often exceeded immediate needs, so that meat, fat, and furs would be cached for retrieval later in the season (Loring, 1997; Stopp, 2002). Cached food also had to be protected against wolves, black bears, and wolverines, but the substantial size of some of the Kameshtashtan boulder caches suggests they may have served to protect against more robust creatures.

Given the propitiative practices the Innu observed in disposing of all animal remains, and especially those of bears, it seems unlikely that much future trace of the grizzly bear's tenure will be revealed through archaeology at ancestral Innu sites in the Quebec-Labrador interior (although additional finds, like the Okak grizzly skull, are possible at Labrador Inuit sites, where trophies of interior hunts might have been brought out to the coast). Bears, especially the barren-ground grizzly bear, are more likely to be a subject of discussion in the country than in town, so it is not surprising that memories of them should now be fleeting and insubstantial. Eighty-five years have passed since Cabot and Strong sought to elicit information about the bear. Since then, the Innu have adopted village life and largely abandoned full-time subsistence practices, further eroding their reservoirs of memory and country-based knowledge. Soon no memory of grizzly bears will remain among the people of the Ungava region, and the case for the bears' former existence in northern Quebec and Labrador will have to be based solely on recovered faunal remains, historical accounts, and Cabot's photograph from Long Pond.

ACKNOWLEDGEMENTS

Colleagues at Tshikapisk, an Innu experiential educational facility based in Sheshatshiu and Kameshtashtan, especially Anthony Jenkinson and Napes, have provided insights, support, and direction for this paper, as has Peter Armitage, an independent anthropologist and consultant for Innu Nation, who has provided us with references, Innu place names, and orthography. Under Tshikapisk auspices the senior author, accompanied by Eric Penunsi, Joachim Benuen, Makaktan (Jonathan Pinette), Jason Nuna, and Michel Andrew, revisited Cabot's old camp at Kaiaukuapiskasts in September 2005, confirming the location where the bear-skull photograph was taken and documenting the historic Innu site (HaCu-1) at this locality.

The authors wish to thank Linda K. Gordon, Collection Manager, Division of Mammals at the Smithsonian's National Museum of Natural History, for providing us with access to the bear skulls at the Smithsonian's Museum Support Center in Suitland, Maryland. Alasdair Veitch, Robert Gau, and a third anonymous reviewer provided greatly appreciated comments and insights that considerably enhanced this paper. The authors alone remain responsible for its shortcomings. The senior author owes a lasting debt of gratitude to Joseph R. Coolidge of Sandwich, New Hampshire, the grandson of William Cabot, who, one memorable day in October 1980, bequeathed a trunk containing his grandfather's Labrador photographs and journals. These papers and photographs are now part of the William Brooks Cabot collection at the Smithsonian's National Anthropological Archives. And lastly, the authors thank William Fitzhugh and Steven Cox, who led the way to Labrador and started us down the path that has come this far.

REFERENCES

- ANDERSON, R.M. 1913. Report on the natural history collections of the expedition. In: Stefánsson, V. My life with the Eskimo. New York: The Macmillan Company. 436–527.
- ANONYMOUS. 1953. Expedition to Ungava, summer 1953. Arctic 6(4):277-278.
- BANFIELD, A.W.F. 1959. The distribution of the barren ground grizzly bear in northern Canada. National Museums of Canada Bulletin 166:47–59.
- _____. 1964. Grizzly territory. Natural History 73:22–27.
- BARR, W. 1985. The expeditions of the first International Polar Year, 1882–1883. Technical Paper No. 29. Calgary, Alberta: The Arctic Institute of North America, University of Calgary.
- CABOT, W. 1905. 1905 Diary, William Brooks Cabot collection. Washington, D.C.: National Anthropological Archives, Smithsonian Institution.
- ——. 1910. 1910 Diary, William Brooks Cabot collection. Washington, D.C.: National Anthropological Archives, Smithsonian Institution.
- ——. 1920. Labrador. Boston: Small, Maynard & Co.
- ——. 1921. 1921 Diary, William Brooks Cabot collection.
 Washington, D.C: National Anthropological Archives,
 Smithsonian Institution.
- COX, S. 1977. Prehistoric settlement and culture change at Okak, Labrador. PhD dissertation, Department of Anthropology, Harvard University, Cambridge, Massachusetts.
- CRAIGHEAD, J.J., and MITCHELL, J.A. 1982. Grizzly bear *Ursus arctos*. In: Chapman, J.A., and Feldhamer, G.A., eds. Wild mammals of North America. Baltimore: John Hopkins University Press. 515–556.
- ELTON, C. 1954. Further evidence about the barren-ground grizzly bear in northeast Labrador and Quebec. Journal of Mammalogy 35:345–357.
- GAU, R.J., McLOUGHLIN, P.D., CHASE, R., CLUFF, H.D., MULDERS, R., and MESSIER, F. 2004. Movements of subadult male grizzly bears, *Ursus arctos*, in the central Canadian Arctic. Canadian Field-Naturalist 188:239–242.

- HARINGTON, C.R., MACPHERSON, A.H., and KELSALL, J.P. 1962. The barren ground grizzly bear in northern Canada. Arctic 15(4):294–298.
- HARPER, F. 1964. The friendly Montagnais and their neighbors in the Ungava Peninsula. Museum of Natural History Miscellaneous Publications 37. Lawrence: University of Kansas.
- JONKEL, C.J. 1987. Brown bear. In: Novak, M., ed. Wild furbearer management and conservation in North America. Toronto: Ontario Ministry of Natural Resources. 457–473.
- LEACOCK, E., and ROTHSCHILD, N., eds. 1994. Labrador winter: The ethnographic journals of William Duncan Strong. Washington, D.C.: Smithsonian Institution Press.
- LEFEBVRE, M. 1972. Tshakapesh: Récits Montagnais-Naskapi. Série cultures amérindiennes 4. Quebec City: Ministère des affaires culturelles du Québec.
- LORING, S. 1986–87. O darkly bright. Appalachia 46(2):29–45.

 ———. 1987. Arctic Profiles: William Brooks Cabot (1858–1949). Arctic 40(2):168–169.
- ——. 1997. On the trail to the Caribou House: Some reflections on Innu caribou hunters in Ntessinan (Labrador). In: Jackson, L., and Thacker, P., eds. Caribou and reindeer hunters of the Northern Hemisphere. London: Avebury Press. 185–220.
- ——. 2001. Introduction. In: Turner, L., Ethnology of the Ungava District, Hudson Bay Territory. Washington: Smithsonian Institution Press. vii—xxxii.
- LOW, A.P. 1897. The Labrador Peninsula. In: Grinnell, G., and Roosevelt, T., eds. Trail and camp-fire. New York: Forest and Stream Publishing Company. 15-50.
- MERRIAM, C. 1918. Review of the grizzly and big brown bears of North America. North American Fauna 41:1–136.
- MICHELIN, J. 1976. Travel with Koehler. Them Days 1(3):34-37.
- NAGY, J.A., RUSSELL, R.H., PEARSON, A.M., KINGSLEY, M.C.S., and LARSEN, C.B. 1983. A study of grizzly bears on the barren-grounds of Tuktoyaktuk Peninsula and Richards Island, Northwest Territories, 1974–1978. Edmonton, Alberta: Canadian Wildlife Service.
- POLUNIN, N. 1949. Arctic unfolding. London: Hutchinson.
- PRICHARD, H.H. 1911. Through trackless Labrador. London: William Heinemann.
- RAUSCH, R. 1963. Geographical variation in size in North American brown bears, *Ursus arctos* L., as indicated by condylobasal length. Canadian Journal of Zoology 41:33-45.
- SAVARD, R. 1985. La voix des autres. Montreal: Éditions de l'Hexagone.
- ———. 2004. La forêt vive: Récits foundateurs du peuple Innu. Montreal: Boréal.
- SPIESS, A. 1976. Labrador grizzly (*Ursus arctos* L.): First skeletal evidence. Journal of Mammalogy 57(4):787–790.
- SPIESS, A., and COX, S. 1976. Discovery of the skull of a grizzly bear in Labrador. Arctic 29(4):194–200.
- STOPP, M. 2002. Ethnohistoric analogues for storage as an adaptive strategy in northeastern Subarctic prehistory. Journal of Anthropological Archaeology 21:301–328.
- STRONG, W. 1928–29. Labrador notebooks, 1928–1929. William Duncan Strong papers. Washington, D.C.: National Anthropological Archives, Smithsonian Institution.

- TURNER, L. n.d. Lucien Turner Ungava Manuscript. Record Group 7192, Box 1. Washington, D.C.: Smithsonian Institution Archives.
- ——. 2001 [orig. 1894]. Ethnology of the Ungava District, Hudson Bay Territory. Washington, D.C.: Smithsonian Institution Press.
- VEITCH, A.M., and HARRINGTON, F.H. 1996. Brown bears, black bears, and humans in northern Labrador: An historical perspective and outlook to the future. Journal of Wildlife Research 1:245–250.
- VIRGL, J.A., MAHONEY, S.P., and MAWHINNEY, K. 2003. Phenotypic variation in skull size and shape between Newfoundland and mainland populations of North American black bears, *Ursus americanus*. Canadian Field-Naturalist 117(2):236-244.
- WALLACE, W.S., ed. 1932 [orig. 1849]. John McLean's notes of a twenty-five years' service in the Hudson's Bay Territory. Toronto: The Champlain Society.
- WRIGHT, B. 1962. Wildlife sketches. Fredericton: Brunswick Press.