

Scattered **BONES**

O WEN BEATTIE, an assistant professor of anthropology at the University of Alberta, believed King William Island might still hold secrets of the Franklin expedition disaster, information that could be exposed by the use of the latest equipment and methods employed in physical anthropology. He believed at least one last pilgrimage in the interests of science was warranted. His initial survey, which would take two Arctic summers to complete, would again follow that rock-strewn trail down which a straggling procession of British seamen had made their desperate retreat.

An aura of doom hung over desolate King William Island during the nineteenth-century visits of M'Clintock, Hall and Schwatka. And for many years after the Franklin disaster, evidence of the tragedy remained fresh. Beattie planned his survey of the island's south and west coasts in a manner that would be meticulous, even though by 1981, 133 years would have passed since the disaster and he wondered what, of the 105 men who died on the island and in nearby Starvation Cove, endured. He would be the first to

apply the techniques of forensic anthropology to investigations into the Franklin expedition.

Beattie had studied archaeology at Simon Fraser University in British Columbia. As a graduate student, he concentrated on the human skeleton, with advanced training requiring dissection courses in primate and human anatomy. His doctoral research in physical anthropology involved two areas of study: the analysis of hundreds of prehistoric skeletons from the northwest coast of North America; and the use of chemical analysis of bone to aid in the identification of modern human remains relating to forensic investigations. After joining the University of Alberta in 1980, his primary interests continued to grow in the area of human identification studies, or forensic anthropology, a subdiscipline of physical anthropology.

Although the Franklin expedition's failure was of considerable historical importance, it was first and foremost a mass disaster, involving multiple human deaths linked to a single, catastrophic event. It represented an unresolved forensic case, a fact in no way altered by the time that had passed. (If such a tragedy were to occur today, it would be investigated along precisely the same lines as would the carnage resulting from, for example, a modern-day train wreck, fire or airplane crash, using exactly the same scientific techniques to interpret skeletal and preserved soft tissue remains.) Given this fact, Beattie planned to collect any skeletal remains found on King William Island, then try to identify physical evidence that would support or disprove the conventional view of the expedition's destruction through starvation and scurvy. He intended to look for information on health and diet, for indications of disease, for evidence of violence and for information as to each individual's age and stature. There was also a remote chance that a victim's identity could be established, through dental features such as gold teeth and crowns, or through personal belongings found in association with a body.

Because of his special training in forensic anthropology relating to human identification, Beattie had assisted in numerous investigations conducted by medical examiner's offices, the Royal Canadian Mounted Police and other police agencies, and had testified in court as an expert witness. On King William Island, he planned to apply this expertise to a far older and greater mystery.

Beattie prepared for his Arctic journeys by studying sites identified by nineteenth-century searchers, and on 25 June 1981, set out from his cramped office on the thirteenth floor of the Henry Marshall Tory Building on the University of Alberta campus in Edmonton to investigate the Franklin expedition sites for the first time. First, he boarded a Boeing 727 to Yellowknife, the capital of the Northwest Territories, then flew on past the Arctic Circle to the central Arctic transportation centre of Resolute, a tiny community of 168 people nestled on the south coast of Cornwallis Island. Travelling with Beattie was co-investigator and Arctic archaeologist James Savelle.

A truck from the Polar Continental Shelf Project picked up the two researchers at the terminal in Resolute; they were then driven to nearby barracks where they met up with field assistant Karen Digby. The Polar Shelf, an agency of the Canadian government, provides a vital service by supplying scientists and researchers in Canada's far north with logistical and air support. Beattie, Savelle and Digby soon met Polar Shelf base-manager Fred Alt, picked up a short-wave radio, a 30.06 rifle and 12-gauge shotgun, and prepared for a Twin Otter aircraft to carry them into the field.

From Resolute, the research team flew to Gjoa Haven, an Inuit community on the southeast coast of King William Island, where Inuit students Kovic Hiqiniq and Mike Aleekoo joined the team as assistants. Hiqiniq and Aleekoo arranged for two hunters to carry the researchers and their equipment by snowmobile the next day, south across ice-clogged Simpson Strait. There, at Starvation Cove, an inlet on the North American mainland that sprawls and

meanders inland for several miles, it is believed that the last of Franklin's men perished.

On 27 June 1981, the five researchers made the grueling twelve-hour journey over hillocks and cracks in the ice on ~~kummiq~~, traditional sledges once hauled by dog teams, but in this case pulled by snowmobiles. Sitting atop a mound of equipment and supplies, each firmly grasped hold of both sides of the komatik, as every icy obstacle along the way threatened to dislodge them. Joining them on the journey was the wife of one of the hunters carrying an infant tucked inside her *amauti*, or hooded parka. The temperature was seasonal, hovering between zero and 41°F (-17.5°C and 5°C).

Beattie and Savelle hoped to survey Starvation Cove, looking for relics or remains of the hardiest men from the doomed expedition, but the land is extremely low, marshy and sandy, and was almost completely covered by meltwater that summer, making such work all but impossible. The snowmobiles soon continued on, carrying the researchers a short distance north to a temporary Inuit fishing camp on Richardson Point. Dining that night on raw and boiled seal meat and raw caribou, they questioned their hosts about possible European gravesites on the south coast of King William Island. One possible site was described as lying on a high crest of land at Peabody Point, along their planned route.

The first actual survey work of the field season was conducted in the early morning the following day. A mist hung over the researchers as they walked over Richardson Point, which is just $\frac{2}{3}$ mile (1 km) wide. Besides prehistoric and historic Inuit campsites (the locations of which were mapped by Savelle), nothing was found. Disappointed that any evidence of Franklin expedition crew members on the North American mainland remained hidden, the five-member survey team parted company with the Inuit hunters and crossed back over Simpson Strait to the southern coast of King William Island near Booth Point, hauling their supplies and equipment, including a canoe, themselves.

There, $1\frac{1}{2}$ miles (2.5 km) west of Booth Point, they located the partial skeleton of the single individual from the Franklin expedition referred to in the 1869 expedition account of Charles Francis Hall. The unusual scatter of bones was found outside a tent circle associated with the expedition. It was a significant discovery, and it raised hopes that other Franklin remains would be located that summer. Once work at the Booth Point site was complete, the survey party then continued westward along the south coast of the island. (The grave identified by the Inuit fishermen they had visited at Richardson Point was located at Peabody Point, but it was actually an Inuit burial from the early 1900s. Because of its more recent origin, the remains were not investigated.)

At Tulloch Point, where in 1879 Frederick Schwatka had discovered what was believed to be a Franklin expedition grave, the researchers also found skeletal remains, though Beattie and Savelle would identify anatomical and cultural features that confirmed the skeleton was actually the mid-nineteenth-century remains of an adult Inuk male. Another burial site thought to have been of Franklin expedition origin, identified by Canadian explorer William Gibson in 1931, turned out to contain the remains of an adult Inuk female, also probably from the nineteenth century. Both of the latter sites were mapped and bone samples collected for further analysis. What became clear, though, was that at least some of what were Inuit graves had been mistaken for those of Franklin's men by researchers, further confounding Beattie's attempts to piece together the circumstances surrounding the expedition's destruction.

On 5 July, as the research team surveyed the coastline west of Tulloch Point, the large white dome of the Distant Early Warning (DEW) Line Station at Gladman Point came into view—nearly 16 miles (25 km) away. It was strange to see this Cold War relic on the tundra. But such radar stations are not uncommon in the Canadian Arctic: twenty-one dot the landscape from Alaska to Baffin Island. Built in the 1950s as a line of defensive warning against air

attack from the Soviet Union, the stations had been modernized in recent years and were continuing their function of maintaining sovereignty over Canada's airspace.

After hours of hiking, the party reached a reasonably long slow-moving river that required the use of their canoe to cross. Once on the other side, and within a few miles of the station, they began to set up camp. While Digby, Hiqiniq and Aleekie were about this routine task, Beattie and Savelle walked to the station. They were warmly greeted, and over the next day the tired crew were treated to hot coffee, fresh fruit and showers.

It was while they were visiting the station that they learned of an amazing coincidence. A few days prior to their arrival, one of the station personnel had, while hiking, discovered a moss-covered human skeleton on the tundra's surface within a mile of the station. This discovery was reported to the closest Royal Canadian Mounted Police detachment at Spence Bay (today called Takoyoak). When Beattie and Savelle and their group arrived at Gladman Point, the constable stationed at Spence Bay was on his way in his small plane to investigate the discovery. When he arrived he met up with the surveyors, and Beattie and Savelle both accompanied the constable and station personnel when they went to view the bones. As it turned out, the skeleton was that of a prehistoric Inuk male. His remains had rested above ground for hundreds of years. It was remarkable that, considering the hundreds, perhaps thousands, of people who had been to the station during its construction and period of operation, the skeleton was discovered only a few days before a forensic anthropologist and archaeologist literally wandered up to the station's front door.

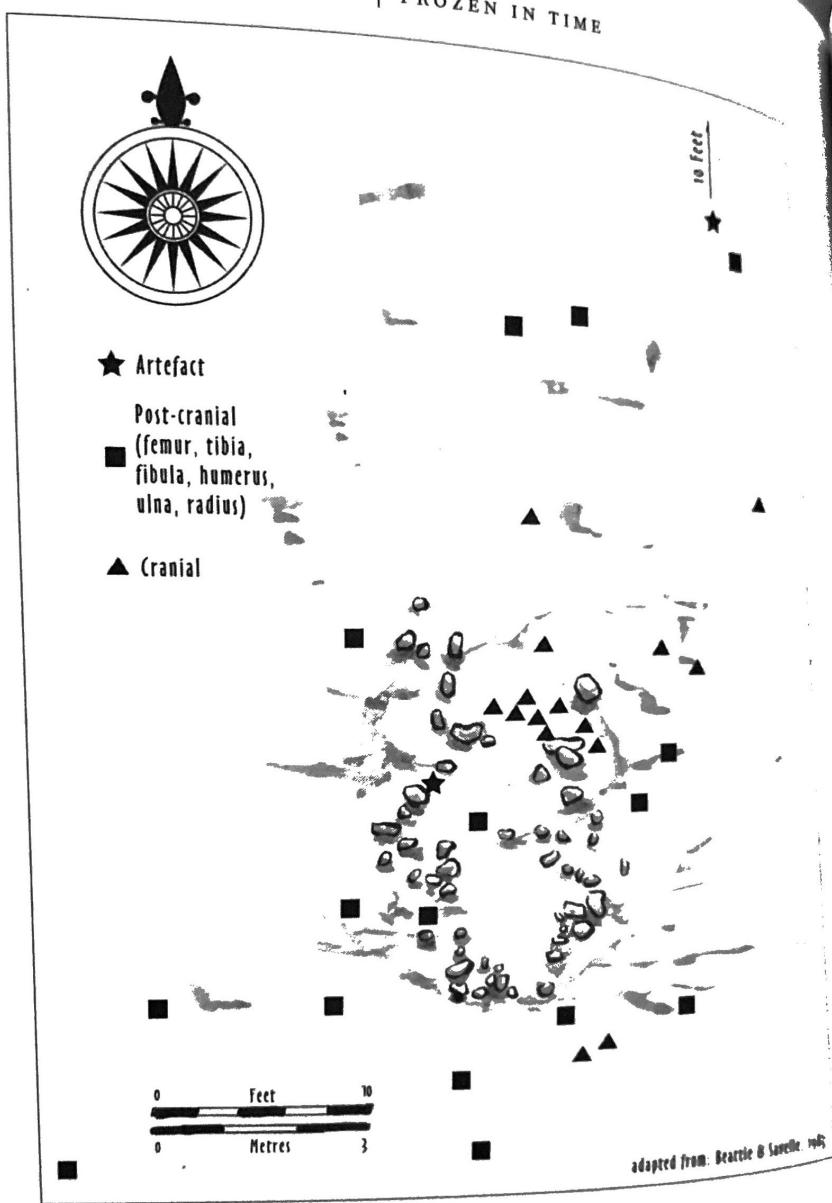
The Gladman Point skeleton was the last to be found that summer. Beattie returned to Edmonton in late July, disappointed that the remains of only one of the 105 officers and men who had deserted the *Erebus* and *Terror* had been located. It was possible that the physical evidence of scurvy identified on the Booth Point remains would be one of few notable accomplishments of the 1981

survey. But it had been important to learn that previous searchers had almost certainly mistaken Inuit burials for those of Franklin's sailors. In addition to the small contributions to the archaeological record made that summer, the historical record had at least been further clarified and corrected.

Tiny pieces of the bone samples collected from both the Franklin sailor's skeleton and the Inuit skeletons were soon sent to a laboratory for trace element analysis. Use of such analytical techniques on skeletal remains is common, as various elements found in bone can provide information about problems in diet and possible deficiency disorders. Then, weeks later, while Beattie and Savelle redrew maps and reviewed field notes at the University of Alberta offices, the scatter of the bones found at Booth Point returned to bother them. For nearly all of the skull fragments had been found near a group of larger stones at what was identified as the entrance to the tent structure, while bones from the arms and legs were found more loosely scattered around the outside of the stone circle. What was initially thought to have been the remains of a sailor who had been left behind at a campsite, either near death or already dead, now began to reveal more ominous secrets.

In late September, when Beattie and Savelle were preparing the first report on the summer's research, they were forced to acknowledge what had been implied by the evidence at the site from the beginning: They had found the first physical evidence to support Inuit accounts of cannibalism among the dying crewmen.

While studying the right femur found at the site, Beattie confirmed that three roughly parallel grooves measuring .02-.04 inches (.5-1 mm) in width and up to $\frac{1}{2}$ inch (13 mm) in length had been cut into its back surface. The cut marks were made by a metal implement, suggesting intentional dismemberment. Fracture lines indicated that the skull had also been forcibly broken; the face, including both jaws and all the teeth, was missing. Evidence that the body had been intentionally dismembered was further supported by the selective parts of the skeleton found: the head, arms and legs.



Map depicting scatter of human remains and Franklin-era artefacts around a tent circle at Booth Point, King William Island.

Besides the face, most of the skeleton was missing, including the twenty-four ribs, sternum (breastbone), all twenty-four vertebrae of the back, the three large bones of the hip (sacrum and two innomates), the two clavicles (collar bones) and the two scapulas (shoulder blades).

Scattered Bones

Cut marks on

Top end chewed off by anim

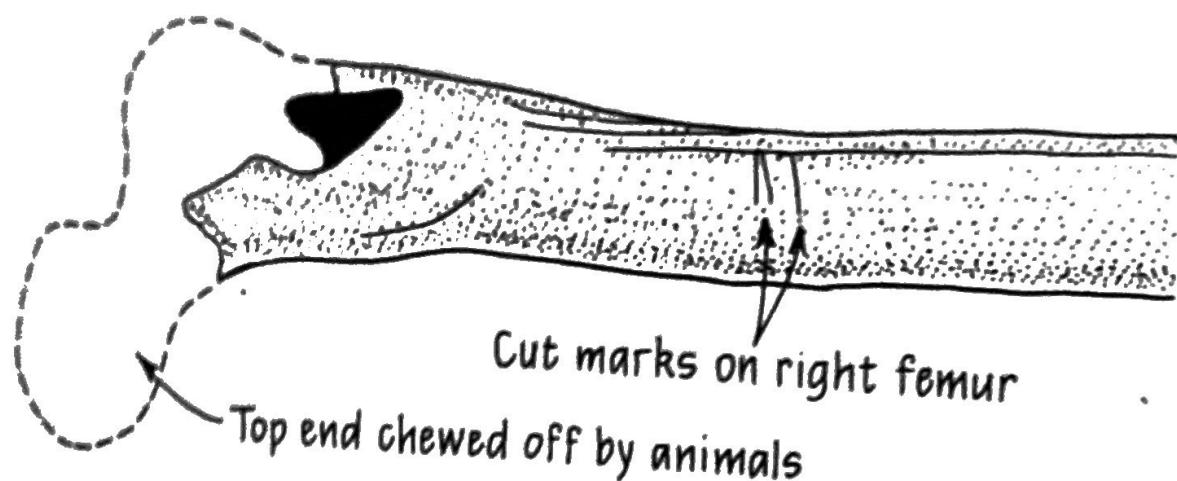
Hudson's Bay Company searcher John Rae considered the ghastly possibility of cannibalism among the crew. In the spring of 1854, Rae was given a description of the men's final days by Inuit who also had in their possession artifacts. Rae recorded their description:

From the mutilated state of many of the bodies found in the kettles, it is evident that our wretched countrymen, driven to the last resource—cannibalism—still existed.

The response to this testimony was immediate. The British simply refused to believe it. Charles Dickens, who followed the Franklin search closely, argued that such an occurrence represented the "flower of the tribe." It was the highest degree improbable that such an extremity of hunger, alleviate themselves by such terrible means."

Dickens then attacked the sources of the information. "Wards, he said:

In weighing the probabilities and source, the foremost question is, what was the nature of the men. What becomes of the lost Arctic voyagers is placed,



Hudson's Bay Company searcher John Rae was the first to hear of the ghastly possibility of cannibalism among Franklin expedition crewmen. In the spring of 1854, Rae was given details of the expedition's final days by Inuit who also had in their possession a variety of artefacts. Rae recorded their descriptions of a shocking sight:

From the mutilated state of many of the corpses and the contents of the kettles, it is evident that our wretched countrymen had been driven to the last resource—cannibalism—as a means of prolonging existence.

The response to this testimony was immediate and fierce. Many Britons simply refused to believe cannibalism was possible. Charles Dickens, who followed the Franklin search closely, spoke for them when, in 1854, he argued that Franklin expedition crewmen represented the "flower of the trained English Navy . . . it is the highest degree improbable that such men would, or could, in any extremity of hunger, alleviate the pains of starvation by this horrible means."

Dickens then attacked the source of the stories, the Inuit, as "covetous, treacherous and cruel . . ." Writing in *Household Words*, he said:

In weighing the probabilities and improbabilities of the 'last resource,' the foremost question is—not the nature of the extremity; but the nature of the men. We submit that the memory of the lost Arctic voyagers is placed, by reason and experience, high

above the taint of this so-easily allowed connection; and that the noble conduct and example of such men, and of their own great leader himself, under similar endurances, belies it, and outweighs by the weight of the whole universe the chatter of a gross handful of uncivilised people, with a domesticity of blood and blubber.

United States Chief Justice Charles Patrick Daly, president of the American Geographical Society, went a step further, charging that Franklin was “murdered by the Indians, who had already imbued their hands in the blood of white travellers.” Rae fought back, arguing,

I consider it no reproach, when suffering the agony to which extreme hunger subjects some men, for them to do what the Esquimaux tell us was done. Men so placed are no more responsible for their actions than a madman who commits a great crime. Thank God, when starving for days, and compelled to eat bits of skin, the bones of ptarmigan up to the beak and down to the toenails, I felt no painful craving; but I have seen men who suffered so much that I believe they would have eaten any kind of food, however repulsive.

Fifteen years later, Rae received corroboration from Charles Francis Hall, who had also heard the tales of cannibalism and reported them in much greater detail. Even today, the stories are abhorrent. The Inuit reported finding boots “that came up high as the knees and that in some was cooked human flesh—that is human flesh that had been boiled.” Wrote Hall: “Some bones had been sawed with a saw; some skulls had holes in them.” Other bodies found nearby had been carefully stripped of all flesh, “as if some one or other had cut it off to eat.”

Even three decades after the disaster, gruesome accounts continued to be collected from the Inuit of the region. Lieutenant Frederick Schwatka’s 1879 search recorded “almost unmistakable

evidences of their being compelled to resort to cannibalism." An Inuk named Ogzeuckjeuwock reported seeing "bones from legs and arms that appeared to have been sawed off . . . The appearance of the bones led the Inuits to the opinion that the white men had been eating each other." Schwatka's account was compelling and, according to one British newspaper, had finally "cleared the reputation of a harmless people from an undeserved reproach."

It is difficult for those sated in their daily demands for food and drink to believe that any civilized person would intentionally and knowingly eat human brains, consume strings of arteries or split open bones so that the marrow could be picked out and eaten. That fact is no different today than it was during Queen Victoria's reign. Yet under certain dire, life-threatening circumstances, many people would come to the realization that seems to have faced the last tattered remnants of Franklin's expedition, that cannibalism is all that stands in the way of sure death.

Modern disasters, such as the 1972 crash of a chartered plane in the Andes Mountains of South America, provide insights into the rationale for consuming other humans. One of those to survive the Andes crash explained later in an interview:

Real hunger is when you have to eat human flesh. But when you see yourself growing thinner and thinner and weaker every day and see the bones standing out and feel your eyesight dimming—you make the decision to live by whatever means possible.

Prehistoric occurrences of cannibalism associated with starvation provide striking similarities to the Booth Point skeleton findings. An archaeological investigation of an Anasazi settlement in the American Southwest revealed 11 skeletons that had been dismembered and processed for eating: "The overall picture of skeletal destruction is that of dismemberment, crushing of long bone shafts, facial mutilation, scattering and loss of elements of the trunk (ribs, vertebrae, and pelvis), and the loss of hands and feet."

So cannibalism follows a pattern: once the decision is made, the initial sections removed from the body are the meatier areas like the buttocks, thighs, lower legs and arms. Recognizably human parts, such as hands and feet, are not eaten at first. As time passes and hunger continues to tear at the survivors, the options of where the flesh comes from are reduced, and bone marrow, organs, arteries and skin are consumed. Removal of muscle tissue is usually done with a knife or other sharp object, and this can leave butchering marks on the bone. Removal of bone marrow requires the bone to be smashed open. The brain is either pulled through the base of the skull or eaten after the face is cut off. The need by members of Franklin's dying crew for a portable food supply was the reason for the only exceptions to this pattern.

A small group of the last survivors of the doomed expedition trudged eastward along the south coast of King William Island in July or perhaps August 1848. The exhausted men probably continued to hold out hope that they would reach the mouth of the Back River, from where they would attempt to travel nearly 1,000 miles (1,500 km) upstream to the safety of a Hudson's Bay Company fort located on the eastern edge of Great Slave Lake. Slowing significantly as a result of increased exhaustion aggravated by scurvy, their food supply at an end, the sailors must have desperately looked for alternative food sources. But there were too few birds' eggs to feed the group and hunting on the sparse northern island would have been unrewarding.

When their food finally ran out and they were too ravaged by hunger and disease to continue, the men sat down and prepared to die. But with the first death came new hope. The survivors must have found themselves contemplating a stark fact: starvation need not be a factor any longer.

Cannibalizing the trunk of the body would have given them enough strength to push on. The head, arms and legs, easily portable, were carried along as a food supply. Finally they came to

a part of the island that turned sharply to the northeast—away from their goal. Camping on a small spit of land near Booth Point, the same spit of land later visited by the University of Alberta researchers, they ate their last meal. Disease and physical deterioration continued to drain them of energy as they turned southward across ice-covered Simpson Strait, avoiding the many long, thin slivers of black seawater slicing through the ice and the turquoise and azure pools of meltwater, making their way towards Starvation Cove. For them, the adventure and the suffering would soon be over.