

FREQUENTLY ASKED QUESTIONS RELATED TO THE SCIENCE AND HERITAGE OF ANCIENT HUMAN REMAINS FOUND IN MCGRATH IN INTERIOR ALASKA

For More Information, Contact:

Amber Clayman
MTNT Senior Communication Coordinator

907-644-1241
Alt: 907-632-3457
aclayman@mtnt.net

Q: Where is McGrath?

A: McGrath is a remote community of about 340 residents, located near the headwaters of the Kuskokwim River in central Alaska. McGrath is 220 mile northwest of Anchorage, and has no road connections to outside communities. Travel to and from McGrath is by air, riverboat and snow-machine. The community is about 37 percent Athabascan Indian, as represented by the Native Village of McGrath.

Q: What was discovered in McGrath?

A: On October 3, 2012, a Native worker at a construction project discovered a human skeleton exposed by earth-moving equipment. Initially, the skeleton was believed to be that of an Athabascan elder who disappeared from the village more than thirty years ago. The Alaska State Troopers (AST) was notified, and requested assistance from the Alaska State Office of History and Archaeology (OHA). OHA dispatched a forensic archaeologist who worked with the Troopers to recover the remains. At first, the recovery was treated as a missing person investigation, but evidence soon emerged that the remains could not have belonged to the missing elder. Instead of one skeleton, there were three, representing an adult male, a younger adult male, and a child between two and five years of age. The skeletons were found huddled together. No modern clothing, buttons, or shoes were present. Instead, two small, flaked stone artifacts were found touching one of the skeletons. From this, the forensic archaeologist determined that the remains were prehistoric, and the focus of the investigation shifted from law enforcement to science and cultural resource management.

Q: Where were the remains found?

A: The skeletons were found near the crest of a sand ridge along an abandoned channel of the Kuskokwim River. The ridge seems to be a relict sand bar. The sand bar contains pieces of driftwood, and it is capped by a layer of flood-deposited silt about eight inches thick. The property is located near the center of McGrath, and belongs to MTNT,



Limited, an Alaska Native corporation authorized by Congress in 1971, and organized in 1976. MTNT serves four Native communities in the upper Kuskokwim basin: McGrath, Takotna, Nikolai, and Telida.

Q: How were the remains discovered?

A: Flooding and erosion caused by the Kuskokwim River has threatened real property in McGrath for many years. With assistance from the US Natural Resources Conservation Service (NRCS), the City of McGrath is building a levee along the riverfront to stop the erosion. The MTNT property was being prepared as a staging area for equipment and limestone rock to be used in building the levee. This required a five-acre area be cleared of trees, leveled, and paved with a nine-inch layer of gravel. The skeletons were discovered after the trees had been cut, while the forest soil was being removed using a small bulldozer. The soil and a few inches of the silt were scraped away, exposing a skull and a few other human bones, which were immediately recognized. Fortunately, early winter weather had already begun to freeze the ground, which prevented the dozer blade from dislodging the remains.

Q: Is there a local name for the discovery?

A: Yes, the local Native community has designated the site as the *Tochak McGrath Discovery*. Tochak (pronounced *Ta-check*) is a place-name that refers to the confluence of the Takotna and Kuskokwim rivers near McGrath.

Q: What happened after the human remains were found?

A: Alaska State and Federal law require certain steps be taken when human remains are discovered. The State Troopers are notified first and they control the investigation unless the remains are found to be greater than 100 years old. The Alaska State Office of History and Archaeology has special expertise with skeletal remains and, typically assists the Troopers when human bones are found. The initial recovery effort happened on October 9. It was difficult because heavy rains had saturated the ground, followed by sub-freezing temperatures. As the landowner, MTNT took custody of the skeletons once they were removed from the ground. MTNT built a wooden container to hold the bones and provided safe storage. MTNT cooperated closely with the Village Council to ensure that the remains were cared for with respect and in a culturally appropriate manner.

Since the skeletons were found to be prehistoric, the Troopers' involvement ended, and State and Federal antiquities laws governed subsequent action. As the lead Federal agency, NRCS is responsible for consulting with all of the parties involved to guarantee that agreement is reached on how the discovery will be treated. In this case, the major partners are NRCS, the McGrath Native Village Council, MTNT, OHA, and the City of

McGrath. In compliance with a prior agreement between NRCS and OHA, construction work stopped to protect the site, and a consultation began among the major parties. On October 10, MTNT and the Village Council requested assistance from the Tanana Chiefs Conference (TCC), which employs qualified archaeologists in its Natural and Cultural Resources Department.

On Friday, October 12, two TCC archaeologists travelled to McGrath to assess the discovery site and to advise MTNT and the Village Council on what steps should be taken. Beginning late in the afternoon, the archaeologists worked dawn to dusk, evaluating the discovery location, and determining if any more prehistoric items were exposed in the construction area. By midday on Sunday, October 14, they had made three separate visual inspections of the entire area, and a precise map of the area containing the human remains. The inspections proceeded foot by foot over most of the area, and inch by inch at the discovery site. They showed that prehistoric remains were exposed only in the immediate area of the skeletons. The OHA forensic archaeologist had found a prehistoric campfire a few inches above the skeletons. The TCC archaeologists collected bone, ash, and charcoal from this hearth, and located a second hearth a few feet away.

On October 15, the interested parties held a teleconference to decide on a course of action. The TCC archaeologists recommended that earth moving could resume, provided the discovery site was well protected, and that the work was monitored on a continuing basis by a qualified professional. They also recommended that the human bones receive scientific study if this could be done in a culturally appropriate way, and that the discovery site be investigated archaeologically to help understand how the skeletons came to be there, and how the prehistoric remains related to the environment and history of the Athabascan people. TCC offered to organize resources to carry out this work. The participants adopted these suggestions. Subsequently, the TCC archaeologists produced a preliminary written report summarizing their work, and a draft Memorandum of Understanding incorporating their suggestions. This was adopted by all parties, and earth moving resumed, closely monitored by a TCC archaeologist. Nothing new was exposed until October 29, the next to last day of leveling in the construction zone.

On the morning of October 29, heavy equipment uncovered a third hearth about 100 feet north of the original discovery. Earth moving in this area was stopped immediately, and the protection zone was expanded to enclose the new discovery. The new hearth is more deeply buried than the skeletons and the hearths previously found. It rests on a very thin layer of silt and soil organics within the sand bar deposits. The deep hearth contained burned fish and mammal bones, charred wood, charcoal, and reddened earth. Large pieces of decayed driftwood were found in all levels of the sand exposed by the heavy equipment. The TCC archaeologist documented the new discovery, and collected samples for later analysis. Earth moving and site monitoring finished on October 31, and by the morning of November 1, the contractor had begun to

lay down gravel. The gravel will cover the entire five acres, except the approximately 150 by 90 feet surrounding the archaeological site.

Q: How old are the remains?

A: The bits of worked stone found with the skeletons indicated that they were prehistoric, and probably older than the earliest contact between Athabascans and people from Europe, Canada, or the United States. TCC collected a charcoal sample from the hearth found above the skeletons and submitted it for radiocarbon dating by a laboratory located in Florida. This gave a date range of 1470 to 1650 A.D., also indicating that the human remains antedate the historic era. Under the working agreement adopted by the interested parties, TCC will carefully remove a small sample of bone from a femur belonging to the adult skeleton for radiocarbon dating. When analyzed, this sample should give a very close approximation of the actual age of the remains.

Q: Who are these individuals?

A: As of today, we do not know. If the skeletons date to the last few thousand years then they are most probably Native Athabascans, possibly even the ancestors of Native people now living along the Upper Kuskokwim. Since the bones are very well preserved, they may still contain DNA that can be replicated and analyzed. Analysis of mitochondrial DNA and Y-chromosome DNA can provide information on an individual's maternal and paternal lineages respectively. This genetic analysis could confirm their ethnic affiliation and even family relationships among the three individuals. DNA recovered from a late prehistoric frozen body found a few years ago in Yukon Territory led to the identification of many living First Nations descendants. DNA analysis could also relate the remains to the history of human migration to the New World out of Asia, and discover many details about genetic illnesses and specific adaptations made by Athabascans to the Sub-Arctic forest environment.

Q. Have other ancient remains been found in this area?

A: Discoveries of prehistoric human bones in Interior Alaska are extremely rare. Remains were usually cremated rather than buried, and the acidic forest soils in the region cause bones to decay rapidly in the earth. No similar discoveries are known from the Upper Kuskokwim River culture area. Elsewhere in the Interior, only a few cremated individuals have been recovered, and up to now, none of these is reported to have produced usable DNA. The fragmentary remains of two individuals were found in the 1970s at an ancient occupation site around the shore of Lake Minchumina, Alaska. Radiocarbon ages on associated material suggest the cremations date within a range of time bracketed between 250 and 1,200 years ago. The oldest known human remains in

Interior Alaska are of a cremated child dating to approximately 10,000 years ago at an ancient campsite in the Upper Tanana River region. These examples indicate that the practice of cremation goes back in deep antiquity, and emphasize the unique value of the intact skeletal remains from Tochak Discovery site.

Q: What do we know about the worked stone and the hearths?

A: The two pieces of worked stone are fragments produced as waste flakes from the manufacture of tools from two different types of rock. One of them is composed of volcanic glass (obsidian), and can be traced geochemically to a source in the Koyukuk River basin. Its presence may indicate social interaction between prehistoric Athabascan groups living hundreds of miles apart. The ancient campfires preserve information about subsistence practices in the form of wood, stones used for cooking, as well as fish, and animal species harvested for food. The relative positions of the cultural items encode information about how camps were organized and tasks were performed. Although the site has been disturbed by the construction activity, enough geologic context remains to reconstruct the prehistoric environment in which the people lived and perished.

Q: How long did these people occupy the site?

A: Preliminary observations suggest that the site was occupied for short durations at two different times. The volume of fire hearth material suggests that this was a seasonal camp and not a long-term village. It is plausible that the camp was occupied for days, weeks or months, but probably not years or decades. Prehistoric Alaskans were highly nomadic, effectively living off a wide variety of subsistence resources throughout the changing seasons. The immediate discovery site certainly is not a permanent village, as we know them today.

Q: What will happen to the remains?

A: Consultations are continuing between the McGrath Native Village Council, the leadership of MTNT, Federal, and State agency officials to plan for scientific research. The remains are currently in the custody of MTNT. With the approval of the McGrath Native community, the remains are being temporarily transferred to a new laboratory at the TCC campus in Fairbanks. The TCC archaeologists will organize research performed by specialists from several anthropological, biological, and medical disciplines over the next five years. Once the research is complete, the individuals will be returned to McGrath for a traditional reburial ceremony.