

Ancient Cache of Whale Meat Unearthed

By GERALD E. BOWKETT
Manager, University News Service
FAIRBANKS — An ancient cache of whale meat has been found on St. Lawrence Island near where the well-preserved body of an Eskimo woman estimated to be some 1,600 years old was earlier discovered, and scientists are now attempting to determine the age of the meat utilizing two different techniques.

The meat cache was uncovered by Nathan Numwuk of the St. Lawrence Island village of Savoonga while digging for fossil ivory in the permafrost of Kialegak Point near Southeast Cape.

The discovery, made in August, was brought to the attention of a party of National Park Service-University of Alaska anthropologists mapping former dwelling sites nearby.

"In addition to the whale meat, the cache also contained a walrus hide rope, sealskin poke containing carved ivory birds, and a fox carcass," said George Smith, a National Park Service employee who is doing graduate work in anthropology at the University of Alaska.

Other members of the party were Zorro Bradley, a National Park Service research anthropologist and adjunct professor at the university, and Ron Kreher and Terry Dickey, also doing graduate work in anthropology at the university.

Samples of the whale meat have been sent to the Smithsonian Institution for radio-carbon dating and to Dr. Aidan Cockburn, president of the Paleopathology Association, of Detroit, for dating by the new amino acid dating technique.

All living tissues absorb radio-carbon and since this element dissipates at a known rate, it is possible to determine the approximate age of an organism by its radiocarbon content.

This was the technique employed by the Smithsonian Institution and Physics Department of the University of Pennsylvania to determine the age of the body found at the Kialegak site on St. Lawrence Island. Working independently, the two institutions developed overlapping age range estimates.

"It was a beautiful correlation," said Bradley.

Residual amino acids undergo change as fossil protein degenerates. The new dating technique consequently is based on the condition of the residual acids in the material and rate of its degeneration. The current tests of the whale meat will enable scientists to cross-check this new dating method against the older radiocarbon method.

A portion of the meat was also provided William A. Galster, associate zoochemist at the University of Alaska's Institute of Arctic Biology, who intends to compare the amount of heavy metals in the tissue with that in the tissue of freshly-taken marine mammals.

The naturally mummified woman's body was found in 1972 by Eskimo hunters as it was washing out of a low cliff on the Kialegak Point beach. The hunters removed the body

from the cliff, reburied it in permafrost on the tundra above, and informed Bradley of their discovery.

With their help, he disinterred the body and arranged for its shipment to the Fairbanks campus where it is being preserved in freezer facilities. Ultimately it will be returned to St. Lawrence Island for final burial.

Smith and Dr. Michael Zimmerman, of the University of Pennsylvania made a study of the tatoos on the arms and

hands of the mummy. In a report on their research, they noted the absence of any tattooing on the face.

"This is unusual," they wrote, "in that on St. Lawrence Island it was customary for Eskimo women to have chin and cheek tattooing."

It was the finding of the body that led to this year's archaeological work and the new discoveries at Kialegak Point. In addition to examining the cache of whale meat and other items, the National Park Service-University of Alaska field party also interviewed a number of residents of Savoonga to try to learn more about the former residents of Kialegak Point.

"A few interesting stories were told about the Kialegak people, but for the most part the people of Savoonga know little about this area or the preliminary report on their work."

A literature search also turned up little, and the researchers concluded from their findings: "Even from this precious little, we can most definitely say that the material culture stands apart

from the rest of Alaska, being derived from Siberia especially in recent times. Even in older periods, the artifacts recovered from Kialegak and other sites show a more highly developed culture than found elsewhere in Northern Alaska."