

An Archaeological Site on Karluk Island in Crozier Strait, N.W.T.

DISCOVERY AND LOCATION

During a marine geophysical exploration, in 1973, of the proposed route of a gas pipeline across Crozier Strait (between Bathurst Island and Little Cornwallis Island) in the Canadian Arctic Archipelago, the present author landed on the western side of Karluk Island, which is situated in the narrowest part of the Strait. There, conspicuous on a small point facing south and west, and directly west of a small lake (Fig. 1), he noticed a newly-erected small cairn of a lead-zinc claim which led him inadvertently to the discovery of an archaeological site. Three or four depressions, each not more than 30 cm deep and filled with a thick, spongy, brilliant green moss, stood out in contrast to the surrounding brown rock rubble. The site, which appeared to be not more than seven metres above present sea level and within 50 m of the shoreline, was according to project survey maps made available to the author located at $75^{\circ}31'08''\text{N}$, $97^{\circ}17'10''\text{W}$ —just to the north of the centreline of the proposed gas pipeline. The main features of Karluk Island are discernible from 1: 125,000 geological maps of Thornsteinsson¹ and Kerr.²

EVIDENCE OF HUMAN OCCUPATION

One mossy patch was clearly related to human activity (Fig. 2). Two parallel lines of small angular boulders lying on their edges were closed at one end by more rocks to form a U-shape, approximately two metres in both length and width. The open end of the U pointed seaward and rock rubble had piled up against the closure of the U on the uphill side, presumably through frost action and gravity flow downslope. The moss seemed thickest inside the structure, and the interior was slightly lower than the surrounding rock rubble. None of the other mossy patches had as well-defined boundaries as did this one.

Inside the structure, about 50 cm from the southernmost arm of the U, was found a roughly spherical white object, 3-4 mm in thickness, which resembled a cupped hand. There was no design or pattern on it, and it did not appear to be of clay. It was left in place.

About three metres above the U-shaped structure and upslope from all the mossy patches were some small areas (50 cm in diameter) free of rubble where a number of small (less than 10 cm in length) unidentified bone fragments were lying about. The author retained only one of them, not so much for its archaeological value as for its attractive shape. W. E. Taylor, Jr. and Robert McGhee have since indicated (personal communica-

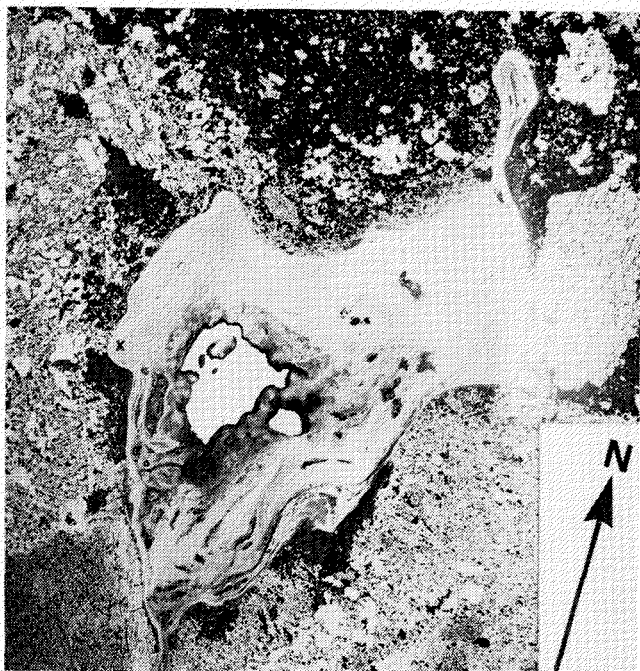


FIG. 1 Portion of National Air Photo Library flight line A16202, frame 64, taken 25 July 1958. Karluk Island is shown still snow-covered with the concentric rings of raised beaches standing out around higher areas. The archaeological site is marked as a small 'x' west of the lake. The horizontal scale bar is 500 m long.

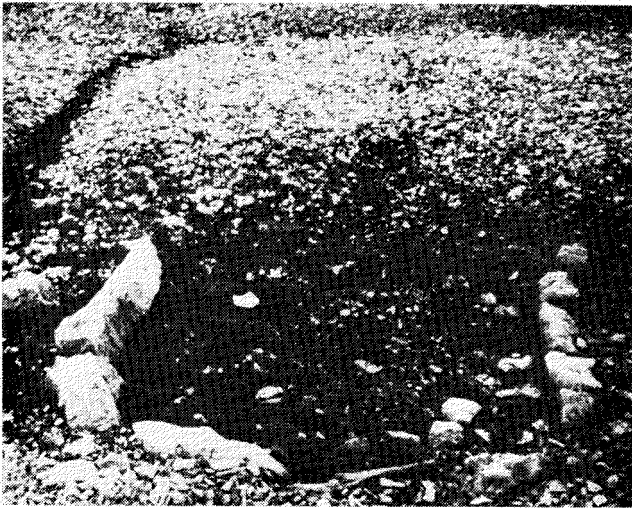


FIG. 2 U-shaped structure in low, moss-filled depression looking toward the sea. The line of a frost-created polygonal crack is partly moss-filled along left edge and top of photo. The U is about 2 m across the opening. The spherical fragment is the larger white object located near the mouth of the U, slightly to the right of the left-hand arm. The rock rubble in foreground has slid down hill against the rocks forming the uphill closure of the U.

tions, 1973) that this bone may have been worked and used as a tool (see Fig. 3). It is now in the possession of Dr. Linda Christiansen-Ruffman at St. Mary's University, Halifax, Nova Scotia.

POSSIBLE ORIGINS

A first reaction is to suspect that the site is one of graves, possibly of early European explorers. In that case, the low, moss-filled areas could be the sites of three or four graves, and the U-shaped structure around one of them a form of headstone. Although this possibility cannot be ruled out, there are suggestions that the site may be of Dorset origin.

Pre-Dorset winter houses were subrectangular,³ but in the view of Robert McGhee (personal communication, 1973), the U-shaped structure (Fig. 2) "is rather a puzzle

— in shape it does not resemble any living structure, tent ring, cache, or burial commonly used by pre-historic Eskimos." The method of construction, that of standing flattish slabs or boulders on their sides, reminded him of Late Dorset structures known from the Grinnel Peninsula (Devon Island). The site does not in any way compare to the elaborate whalebone structures pictured by Taylor.³ The lack of large amounts of whalebone may also be another indication of its being of Dorset rather than Thule origin.

McGhee has further suggested (personal communication, 1973) that the elevation of about five to seven metres above present sea level may indicate Late Dorset age (about 800-1000 A.D.). The Late Dorset group used soapstone bowls which may be represented by the fragment found. Clearly, further dating must await a more detailed examination

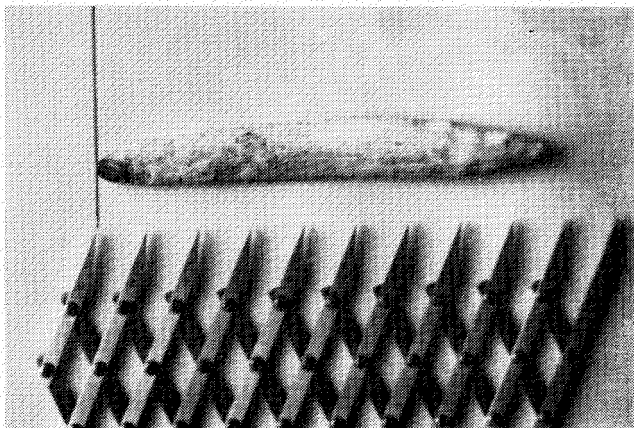


FIG. 3 Fragment of bone — probably whale. Leather thongs may have been tied around the right end where a number of undulations can be seen. The darkening of the left end is due to lichen growth; otherwise the bone is weathered and bleached quite white.

which one hopes will occur in the near future.

PRESERVATION OF SITES

The discovery of this site was reported to the National Museum of Man, Ottawa, in 1973. Since then steps have been taken to have it declared an archaeological site (as Qjld-1) for the Canadian National Inventory and afforded the necessary protection should a pipeline cross Karluk Island.

Perhaps one could end this note with a restrained plea. The Arctic environment is very fragile and Arctic archaeological sites of early humans, and the more modern historic sites of the first European explorers, even more so. When one considers that the Karluk Island site is at the corner-post of a lead-zinc claim, and virtually on the centreline of the proposed Polar Gas pipeline, one realizes the general problem. No southern or even Inuit bulldozer operator is ever going to notice a U-shaped structure of stones in a low mossy hollow. Thus, this or any other potentially valuable archaeological site would be lost once construction began. Surely mining and oil companies and the relevant government departments should be required to take into account the effect of development projects on possible archaeological sites?

ACKNOWLEDGEMENTS

The author would like to thank Dr. W. E.

Taylor, Jr. of the National Museum of Man, Ottawa for his comments on the site, and Bryan C. Gordon of the Archaeological Survey of Canada, Ottawa for according the site protected status. Robert McGhee of the Department of Anthropology of Memorial University, St. John's, Newfoundland was most helpful in his comments on origin. S. Davis of St. Mary's University, Department of Anthropology, Halifax and B. Preston of the Nova Scotia Museum, Halifax were helpful in identifying the artefact discussed. Geomarine Associates contributed greatly in seeing this note through to publication.

Alan Ruffman
Geomarine Associates Limited
P.O. Box 41
Halifax, Nova Scotia, Canada

REFERENCES

- ¹Thornsteinsson, R. 1973. McDougall Sound (68H) map area. (Unpublished open-file report no. 139 of the Geological Survey of Canada, Ottawa).
- ²Kerr, J. W. 1974. Geology of Bathurst Island group and Byam Martin Island, Arctic Canada. *Canada, Geological Survey, Memoir* no. 378. pp. 74-81.
- ³Taylor, W. E. Jr. 1965. The fragments of Eskimo prehistory. *Beaver*, 295: 4-17.