

MEMOIRS OF THE
SOCIETY FOR AMERICAN ARCHAEOLOGY

Number Three

DOUGLAS S. BYERS, *Editor*

Supplement to

AMERICAN ANTIQUITY, Volume XII, No. 3, Part 2, 1947

MEMOIRS OF THE
SOCIETY FOR AMERICAN ARCHAEOLOGY

THE PREHISTORY OF NORTHERN
NORTH AMERICA AS SEEN
FROM THE YUKON

By

FREDERICA DE LAGUNA

NUMBER 3 • 1947

PUBLISHED BY THE SOCIETY FOR AMERICAN ARCHAEOLOGY

MENASHA, WISCONSIN, U.S.A.

KRAUS REPRINT CO.

Millwood, New York

1974

Cost of publication was met in part by grants from the University of Pennsylvania Museum and from an anonymous donor.

*Reprinted with the permission of
The Society for American Archaeology*
KRAUS REPRINT CO.

A U.S. Division of Kraus-Thomson Organization Limited

Printed in U.S.A.

ACKNOWLEDGMENT

THE expedition to the Yukon was sponsored by the University of Pennsylvania Museum in Philadelphia. The author wishes to make grateful acknowledgement to the American Philosphical Society and to the National Research Council for financing the expedition. She wishes to thank her companions in the field: Dr. A. J. Eardley, Department of Geology, University of Michigan, Mr. Kenneth Gorton, then a student in that department, and Mr. Norman Reynolds, at that time a student of Anthropology at the University of Washington. We are indebted to Professor L. A. Baier of the University of Michigan for the design of the boats that carried us safely down the Yukon. These were built at Nenana on the Tanana by the members of the party under Dr. Eardley's direction. Drs. Philip Smith, S. R. Capps, J. B. Mertie, Gerald Fitzgerald, and R. H. Sargent of the Alaska Branch of the U. S. Geological Survey and Dr. Hugh S. Bostock of the Canadian Geological Survey gave us help and advice. The list of those who helped us in the field is too long to record, but we should like to express our appreciation of the true Alaskan hospitality accorded by Father MacElmeel and the Sisters at the Nulato Mission and by the Reverend and Mrs. Henry H. Chapman at Anvik.

The research work in libraries and museums was made possible by a Fellowship of the National Research Council, 1936-1937. I wish to thank especially for their assistance in this phase of the work Dr. Diamond Jenness and Mr. Douglas Leechman at the Canadian National Museum; Drs. Donald Scott and Lauriston Ward at the Peabody Museum, Harvard; Mr. T. F. McIlwraith and Mr. James Mellon Menzies at the Royal Ontario Museum of Archaeology; Messrs. Douglas S. Byers and Frederick Johnson at Phillips Academy, Andover; Dr. Arthur C. Parker and William A. Ritchie at the Rochester Museum of Arts and Sciences; Dr. N. C. Nelson, Miss Bella Weitzner, and Dr. Froehlich G. Rainey at the American Museum of Natural History; Mr. George G. Heye of the Museum of the American Indian; Mr. W. A. Newcombe of Victoria; Drs. Erna Gunther, Verne Ray, Viola Garfield and Melville Jacobs of the University of Washington; Dr. M. R. Harrington of the Southwest Museum; Mr. David Rogers of the Santa Barbara Museum; Dr. Emil Haury then at Gila Pueblo; Dr. Harold S. Colton and Miss Katharine Bartlett of the Museum of Northern

Arizona; and Miss H. N. Wardle of the University of Pennsylvania Museum.

Dr. Donald Horton generously contributed an analysis of the pottery wares. (See the Appendix.) Photographs of specimens in the University of Pennsylvania Museum were made by Mr. Reuben Goldberg.

Checking of the references was made possible through a grant-in-aid from the Miller Research Fund of Bryn Mawr College, and Mrs. Charles David of Bryn Mawr undertook a heavy share of this burden.

Mr. Henry B. Collins, Jr., of the Bureau of American Ethnology and Dr. J. Aiden Mason of the University of Pennsylvania Museum read all of the manuscript with great care, correcting many minor mistakes, pointing out major ones, and giving helpful encouragement.

My two good friends, Harlan Ingersol Smith and William John Wintemberg, have died since this study was begun so that it is impossible to tell them again how much I owe them. Dr. Therkel Mathiassen and Dr. Kaj Birket-Smith, my former expedition companions who have taught me so much, I cannot thank until Denmark is free again.

The above was written in 1942 when the manuscript was completed and I had hopes of early publication. These hopes could not be fulfilled and the manuscript languished for many months, apparently a war casualty. It was rescued from oblivion by Henry Collins, who had never lost interest in it, and was given by him to Douglas S. Byers, Editor, and Frederick Johnson, Treasurer of the Society for American Archaeology. They were convinced that the manuscript should be published. To these friends I owe more than I can express. They have been more than generous with their time and patience, and fortunate is the author who has had such assistance and the counsel of so wise an editorial pencil.

The Society for American Archaeology has met a portion of the costs of publication and the remainder was contributed by an anonymous friend of the Society and by the University of Pennsylvania Museum. A further grant from the Miller Research Fund of Bryn Mawr College has made possible the final preparation of the illustrations.

Bryn Mawr College and University of Pennsylvania Museum, 1945.

TABLE OF CONTENTS

ACKNOWLEDGMENT	v	Stone Chisels	122
LIST OF FIGURES	ix	Stone Hammers and Club Heads	122
LIST OF PLATES	ix	Stone Club	123
INTRODUCTION	1	Whetstones	123
CHAPTER I: INTRODUCTORY CONCLUSIONS		Stone Saws	123
The Tena and Their Neighbors	3	Notched Stones	123
Eskimo Archaeology	5	Chipped Stone Implements	124
Northeastern Indian Archaeology	14	Ulo Blades	125
Japanese Archaeology	19	Double-edged Slate Blades	125
CHAPTER II: THE TENA INDIANS AND THEIR COUNTRY		Single-edged Knife Blades	125
Introduction	24	Bone and Antler Knife Handles	126
Tena Territory	24	Drills	126
Tribal Divisions	27	Bone Bag Handle or Drill Bow	127
Intertribal Contacts	31	Awls	127
Notes on the Annual Economic Cycle of the Koyukuk	33	Boot Sole Creasers	127
CHAPTER III: ARCHAEOLOGICAL SITES		Scrapers for Working Skins	127
Classification of Sites Based on the Collections	37	Wooden Scraper Handle	128
Notes on the Lower Tanana Valley	38	Stone Scrapers	128
Notes on the Yukon Between Rampart and Tanana	38	Bone Scrapers	128
The Yukon Between the Tanana and the Nowitna	39	Bone Dagger	129
The Yukon from the Nowitna to the Koyukuk	42	Harpoon Head	129
The Koyukuk and the Yukon to just above Nulato	46	Foreshaft (?)	129
THE LOWER KOYUKUK	46	Socket Piece (?)	129
KATEEL VILLAGE	48	Unbarbed Bone Arrowheads	130
THE YUKON BELOW THE MOUTH OF THE KOYUKUK TO JUST ABOVE NULATO	51	Barbed Bone Arrowheads and Points	130
The Yukon from Nulato to Blackburn, including the Khotol River	52	Blunt Arrowheads	131
THE YUKON FROM NULATO TO BLACKBURN	52	Bone Barbs for Fishhooks and Fish Spears	131
THE KHOTOL RIVER AND KAIYUH SLOUGH	57	Nets	131
OLD FISH CAMP	61	Bone and Antler Wedges	132
The Yukon from Blackburn to Bonasila, including the Innoko River	64	Wooden Shovel	132
THE YUKON FROM BLACKBURN TO BONASILA	64	Bow and Trap	132
THE INNOKO RIVER	74	Miscellaneous Wooden Objects	133
The Yukon near Holy Cross	76	Miscellaneous Worked Bone and Antler	133
CHAPTER IV: DISPOSAL OF THE DEAD		Wooden Spoon and Dipper	133
Tena Indian Burials	79	Stone Inset for a Wooden Bowl	134
Comparisons with Other Peoples	86	Combs	134
CHAPTER V: HOUSES, KASHIMS, AND CACHES		Bird Bone Tubes	134
Tena Houses	95	Ornaments	134
Archaeological Tena Houses	99	Red Paint	134
Tena Kashims	100	Birch Bark	135
Comparisons of Tena House Types with Those of Their Neighbors	103	Grass Mats	136
Caches	112	Stone Vessels	136
CHAPTER VI: ARCHAEOLOGICAL COLLECTIONS FROM TENA SITES		Decorative Elements	137
Summary of Types in the Collection	114	Traded Objects	138
Comparison of Types Found with Those Listed by Osgood from the Ingalik (Lower Tena)	116	CHAPTER VII: POTTERY FROM INDIAN AND "ESKIMO" SITES	
Splitting Adzes	121	Introduction	140
Planing Adz Blades	121	Pottery Smoothers	142
CHAPTER VII: POTTERY FROM INDIAN AND "ESKIMO" SITES		Cooking Pots	142
Introduction	140	Pottery Lamps	148
Splitting Adzes	140	CHAPTER VIII: ARCHAEOLOGICAL SPECIMENS FROM "ESKIMO" SITES	
Planing Adz Blades	140	Introduction	150
Antler Adz Haft	140	Splitting Adzes	150
Whetstones	140	Planing Adz Blades	150
Stone Saw	140	Antler Adz Haft	150
Chipped Stone	140	Whetstones	150
Ulo Blades	140	Stone Saw	150
		Chipped Stone	150
		Ulo Blades	151

Double-edged Slate Blades.....	151	Birch Bark Containers, Mats, and Baskets.....	216
Awls.....	151	Bag Handle.....	219
Bone Scrapers.....	151	Spoons, Dippers, and Wooden Vessels.....	219
Harpoon Head.....	151	Bird Bone Tubes.....	220
Ice Picks.....	151	Stone Mortars.....	221
Detachable Barbed Heads.....	151	Top.....	221
Antler Arrowheads with Blade Slit.....	152	Articles of Personal Adornment.....	222
Barbed Bone and Antler Arrowheads.....	152	Paint.....	225
Barbed Prongs for Leister.....	152	Pottery.....	226
Nets.....	153	Lamps.....	249
Miscellaneous Worked Wood, Antler, etc.....	153	Art.....	258
Ornamental Bone Strips and Edging.....	153		
Ornaments.....	153		
CHAPTER IX: ANALYSIS OF ARCHAEOLOGICAL TYPES			
Introduction.....	154	CHAPTER X: FINAL CONCLUSIONS	
Adzes.....	154	The Building of Tena Culture.....	268
Hunting Picks.....	162	ICE-HUNTING TRAITS.....	271
Clubs.....	164	LATER ICE-HUNTING TRAITS.....	273
Whetstones and Stone Saws.....	166	ANCIENT ESKIMO TRAITS.....	276
Chisels and Wedges.....	168	SNOWSHOE CULTURE TRAITS.....	277
Drills.....	169	TRAITS OF THE CIRCUM-PACIFIC CULTURE DRIFT..	278
Chipped Stone.....	171	NORTHWEST COAST TRAITS.....	279
Double-edged Slate Blades.....	173	MODERN ALASKAN ESKIMO TRAITS.....	280
Knives and Ulos.....	179	LOCAL TRAITS.....	281
Scrapers.....	186	TRAITS OF HISTORIC ORIGIN.....	282
Boot Sole Creasers and Stretchers.....	192	Additional Traits at "Eskimo" Sites on the Yukon.	282
Harpoon Heads.....	194	LATER ICE-HUNTING TRAITS.....	282
Detachable Barbed Heads with Tang.....	199	ANCIENT ESKIMO TRAITS.....	283
Socket Piece and Ice Pick.....	201	THULE ESKIMO TRAITS.....	283
Bone Arrowheads.....	201	TRAITS OF THE CIRCUM-PACIFIC CULTURE DRIFT..	283
Bows and Traps.....	210	MODERN ALASKAN ESKIMO TRAITS.....	283
Fish Spears, Fishhooks, and Nets.....	211	The Building of Eskimo Culture.....	284
Shovels and Bone Edgings.....	215		
Birch Bark Canoes.....	216	APPENDIX: Analysis of Yukon Potsherds, by	
		DONALD HORTON.....	286
		BIBLIOGRAPHY.....	291
		INDEX.....	33

LIST OF FIGURES

1. Map of Alaska.....	x
2. The Lower Tanana and the Yukon from Ray River to Kokrines.....	36
3. The Lower Koyukuk and the Yukon from Nowitna to Nulato.....	42
4. Kateel Village Site, Koyukuk River (3)*.....	49
5. House 4, Kateel (3).....	50
6. Reconstruction of House 4, Kateel (3).....	50
7. The Yukon from Koyukuk to Blackburn.....	53
8. House, Blackburn Slough (7).....	56
9. The Khotol River and Kaiyuh Slough.....	57
10. Yukon Willow Creek, Khotol River (9).....	59
11. Kashim, Yukon Willow Creek (9).....	59
12. Old Fish Camp, Khotol River (9).....	60
13. Plans of Houses at Old Fish Camp.....	61
14. The Yukon from Blackburn Slough to Fox Creek.....	64
15. New Grayling (14).....	66
16. Anvik Point Village, Yukon River (14).....	68
17. Site Eleven Miles up Anvik River (14).....	69
18. Old Bonasila, Yukon River (14).....	70
19. Site Opposite Hologochaket, Innoko River (14).....	75
20. House 7, Site Opposite Hologochaket (14).....	75
21. Tena Winter House, after Jetté.....	96
22. Roof Timbers of Modern Kashim, Hologochaket (14).....	101
23. Sandstone Boulder with Human Face, Beach South of Blackburn River Mouth (14).....	135
24. Realistic Engravings.....	137
25. Geometric Engravings.....	138
26. Profiles of Undecorated Cooking Pots.....	144
27. Cooking Pots Decorated by Lines Only.....	145
28. Cooking Pots Decorated with Vertical and Oblique Lines and with One Line and Dots at the Rim.....	146
29. Cooking Pots Decorated with Two Lines and Dots at the Rim.....	146
30. Cooking Pots Decorated with Three Lines and Dots at the Rim.....	147
31. Cooking Pots Decorated with Four or More Lines and Dots at the Rim, and Unusual Sherds.....	147

* The numbers in parentheses refer to figure numbers of maps on which the sites are located.

32. Pottery Lamps.....	148
33. Pottery Lamps.....	149

LIST OF PLATES

I. Typical Scenery of the Yukon Valley.....	302
..... <i>facing page</i>	302
II. Yukon Indians and Their Houses.....	303
III. Indian Weapons and Graves.....	304
IV. Tena Indian Material Culture.....	305
V. Sites on the Tanana and on the Yukon above Melozi (2 and 3).....	306
VI. Views of the Yukon between Bishop Mountain and Simon Creek (3, 7, 9, 14).....	307
VII. Ancient Indian Burial and House Pits (9 and 14).....	308
VIII. New Grayling and Anvik (14).....	309
IX. Old Bonasila and Holy Cross (14).....	310
X. Splitting Adzes.....	311
XI. Planing Adzes and Picks.....	312
XII. Stone Clubs, Grinding Slabs, etc.....	313
XIII. Stone Saws, Whetstones, Ulo Blades, Stone Scrapers.....	314
XIV. Chipped Stone, Slate Blades, Awls, Knife Handles, etc.....	315
XV. Bone Arrowheads, Barbed Points, Scrapers, etc.....	316
XVI. Wooden Artifacts, Net Equipment, Wedges, etc.....	317
XVII. Modern Tena Scrapers and Fleshers.....	318
XVIII. Modern Tena Net Equipment, etc.....	319
XIX. Grass Matting from Grave in House 12, Old Fish Camp (9).....	320
XX. Grass Matting from Grave in House 12, Old Fish Camp (9).....	321
XXI. Grass Bag and Stone Vessels.....	322
XXII. Pottery and Wooden Vessels.....	323
XXIII. Cooking Pots.....	324
XXIV. Potsherds.....	325
XXV. Specimens from "Eskimo" Sites (14).....	326
XXVI. Specimens from "Eskimo" Sites (14).....	327
XXVII. Photographs of Potsherds to show Texture.....	328
XXVIII. Feather Tempered Sherd from Kateel.....	329
XXIX. Photomicrographs of Sherds.....	330
XXX. Photomicrographs of Sherds.....	331

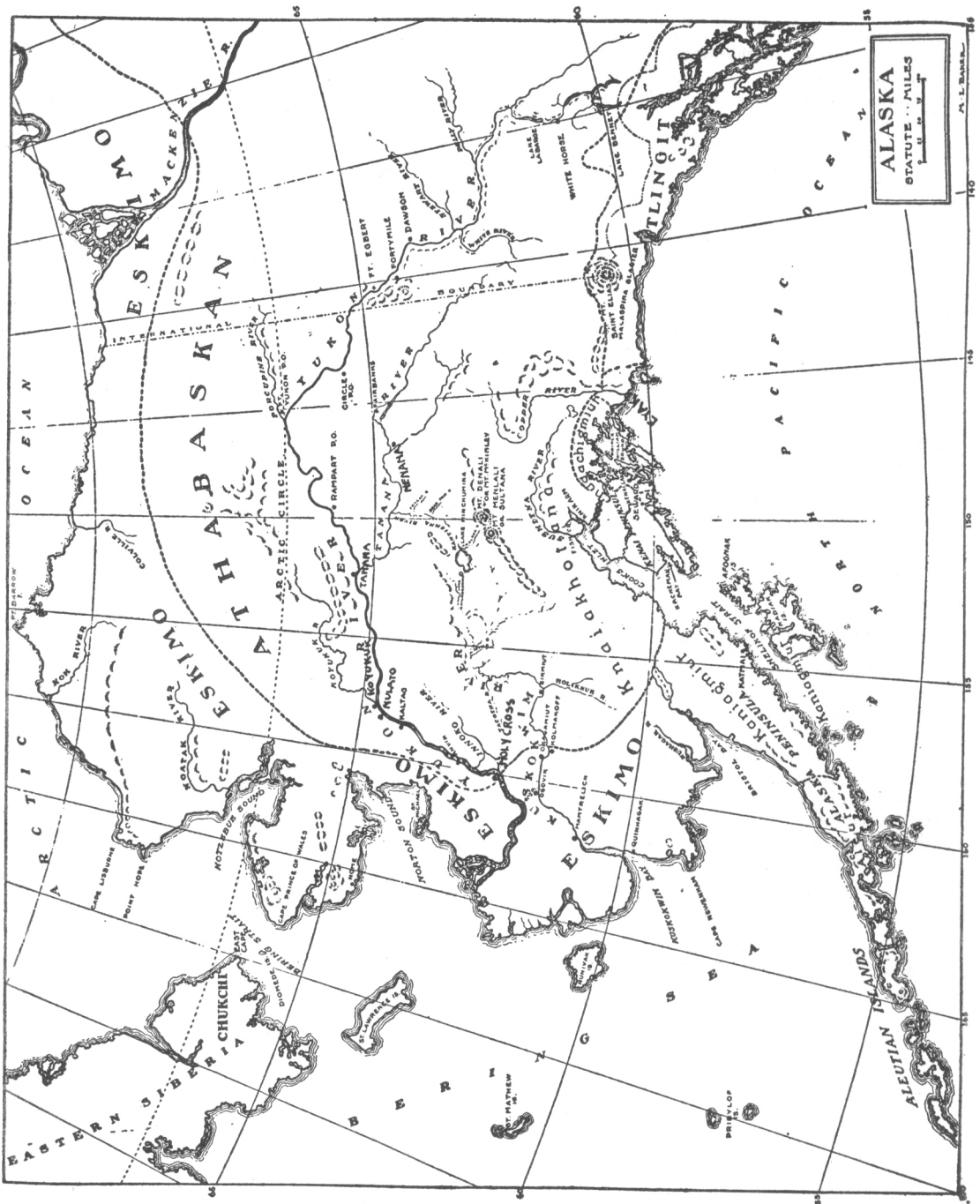


FIG. 1.—Map of Alaska.