

MEMOIRS *of the* *Society for American Archaeology*

Number Twenty-two

THE ARNAPIK AND TYARA SITES

AN ARCHAEOLOGICAL STUDY OF
DORSET CULTURE ORIGINS

WILLIAM E. TAYLOR, JR.

Issued as *AMERICAN ANTIQUITY*, VOLUME 33, NUMBER 4, PART 2, 1968

PUBLISHED BY THE SOCIETY
FOR AMERICAN ARCHAEOLOGY

OFFICERS OF THE SOCIETY FOR AMERICAN ARCHAEOLOGY

President: H. MARIE WORMINGTON, 4600 East 17th Avenue, Denver, Colo. 80220.

President-elect: IGNACIO BERNAL, Instituto Nacional de Antropología e Historia, Cordoba No. 45, Mexico 7, D.F.

Secretary: T. PATRICK CULBERT, Department of Anthropology, University of Arizona, Tucson, Ariz. 85721.

Treasurer: NATHALIE F. S. WOODBURY, U.S. National Museum, Washington, D.C. 20560.

Editor: ROBERT E. BELL, Department of Anthropology, University of Oklahoma, Norman, Okla. 73069.

Executive Committee Members: DONALD W. LATHRAP (to 1969), Department of Anthropology, University of Illinois, Urbana, Ill. 61801; RICHARD G. FORBIS (to 1969), Department of Archeology, University of Calgary, Calgary, Alberta, Canada; KENT V. FLANNERY (to 1970), University Museum, University of Michigan, Ann Arbor, Mich. 48104; CHARLES C. DI PESO (to 1970), Amerind Foundation, Dragoon, Ariz. 85609.

EDITORIAL STAFF OF AMERICAN ANTIQUITY

Editor: ROBERT E. BELL, Department of Anthropology, University of Oklahoma, Norman, Okla. 73069.

Associate Editor for Memoirs: DOUGLAS W. SCHWARTZ, The School of American Research, Box 1554, Santa Fe, N. Mex. 82501.

Associate Editor for Reviews: ARTHUR H. ROHN, Department of Anthropology, University of Illinois, Urbana, Ill. 61801.

Associate Editor for Current Research: FRANCIS A. RIDDELL, Archaeological Services, State Division of Beaches and Parks, Box 2390, Sacramento, Calif. 95811.

Assistant Editors for Current Research: ARCTIC — JOHN M. CAMPBELL, Department of Anthropology, University of New Mexico, Albuquerque, N. Mex. 87106; BOREAL FOREST — J. V. WRIGHT, Archaeology Division, National Museum of Canada, Ottawa 4, Ontario, Canada; CALIFORNIA — WILLIAM H. OLSEN, State Division of Beaches and Parks, Box 2390, Sacramento, Calif. 95811; CARIBBEAN — RIPLEY P. BULLEN, University of Florida, Florida State Museum, Gainesville, Fla. 32601; CENTRAL AMERICA — WOLFGANG HABERLAND, Hamburgisches Museum für Volkerkunde und Vörgeschichte, Binderstrasse 14, Hamburg 13, Germany; EASTERN MESOAMERICA — GARETH W. LOWE, Brigham Young University — New World Archaeological Foundation, 13a Calle Poniente No. 2, Tuxtla Gutierrez, Chiapas, Mexico; GREAT BASIN — WILBUR A. DAVIS, Department of Sociology and Anthropology, Oregon State University, Corvallis, Ore. 97331; HIGHLAND SOUTH AMERICA — THOMAS C. PATTERSON, Department of Anthropology, Harvard University, Cambridge, Mass. 02138; LOWLAND SOUTH AMERICA — BETTY J. MEGGERS, U.S. National Museum, Washington, D.C. 20560; NORTHEAST — JOHN L. COTTER, Region Five, National Park Service, 143 South 3rd Street, Philadelphia, Pa. 19106; NORTHERN MISSISSIPPI VALLEY — ROBERT L. HALL, Department of Sociology and Anthropology, Marquette University, Milwaukee, Wis. 53233; NORTHWEST — ROALD FRYXELL, Department of Sociology and Anthropology, Washington State University, Pullman, Wash. 99163; PLAINS — ROBERT W. NEUMAN, Department of Geography and Anthropology, Louisiana State University, Baton Rouge, La. 70803; SOUTHEAST — HESTER A. DAVIS, University of Arkansas Museum, Fayetteville, Ark. 72701; SOUTHWEST — ALEXANDER J. LINDSAY, JR., Museum of Northern Arizona, Box 1389, Flagstaff, Ariz. 86001; WESTERN MESOAMERICA — JOHN PADDOCK, Museo Fissell de Arte Zapoteca, Mitla, Oaxaca, Mexico.

Editorial Assistant: VIRGINIA BELL, 1120 Berry Circle, Norman, Okla. 73069.

AMERICAN ANTIQUITY publishes original papers on the archaeology of the New World and closely related subjects. Articles and "Facts and Comments" should be submitted to the Editor, memoirs should be submitted to the Associate Editor for Memoirs, publications for review to the Associate Editor for Reviews, and information for "Current Research" to the appropriate Assistant Editor for Current Research. Contributors to AMERICAN ANTIQUITY should consult "Information for Authors," which is published at least once each year. AMERICAN ANTIQUITY is not available for exchange.

AMERICAN ANTIQUITY is published quarterly in January, April, July, and October by the Society for American Archaeology at the University of Utah Printing Service, Salt Lake City, Utah 84112. Entered as second-class matter June 1, 1951, at the Post Office, Salt Lake City, Utah, under the Act of March 3, 1879. Subscription is by membership in the Society for American Archaeology. Annual dues for individual members are \$10.00; for institutional members, \$12.00. Both types of members receive AMERICAN ANTIQUITY and other regular publications of the Society as issued. Address requests for individual membership or other information to the Secretary. Send requests for institutional membership and instructions for change of address or complaints about subscription fulfillment to Society for American Archaeology, Suite 112, 3700 Massachusetts Ave., N.W., Washington, D.C. 20016. See inside back cover for information on ordering back issues of AMERICAN ANTIQUITY and other publications of the Society that are still in print.

MEMOIRS OF
THE SOCIETY FOR AMERICAN ARCHAEOLOGY

Number Twenty-two

DOUGLAS W. SCHWARTZ, *Memoirs Editor*

AMERICAN ANTIQUITY

VOLUME 33, NUMBER 4, PART 2

October, 1968

THE ARNAPIK AND TYARA SITES

AN ARCHAEOLOGICAL STUDY OF
DORSET CULTURE ORIGINS

WILLIAM E. TAYLOR, JR.

NUMBER 22

MEMOIRS OF
THE SOCIETY FOR AMERICAN ARCHAEOLOGY

PUBLISHED IN CO-OPERATION WITH THE NATIONAL MUSEUMS OF CANADA, OTTAWA

SALT LAKE CITY
1968

UNIVERSITY OF UTAH PRINTING SERVICE
SALT LAKE CITY, UTAH

To
DIAMOND JENNESS

Contents

	<i>Page</i>
PREFACE	ix
1. HISTORY OF THE DORSET PROBLEM	1
2. BACKGROUND OF THE WORK	9
The Nature of the Field Work	9
The Itinerary of the Survey, 1957–58–59	10
3. THE ARNAPIK SITE	12
Description of the Site	12
The Arnapik Site Sample	15
Arnapik Site Artifactual Material	24
Interpretation of the Arnapik Site	38
4. THE TYARA SITE	44
Description of the Site	44
The Tyara Site Sample	46
Tyara Site Artifactual Material	50
The Tyara Site: Chronology	71
5. COMPARISONS, CONTRASTS, AND CONCLUSIONS	80
Arnapik-Tyara Comparisons	80
Pre-Dorset–Dorset Comparisons	83
Other Arctic Areas	89
The Boreal Archaic Question	94
Summary and Final Conclusion	102
REFERENCES CITED	124
POSTSCRIPT BIBLIOGRAPHY	128

TABLES

Number	Page
1. Site occurrence of Arnapik biface end blades	18
2. Site occurrence of Arnapik biface side blades	19
3. Site occurrence of Arnapik miscellaneous artifact classes	19
4. Site occurrence of Arnapik cores	19
5. Site occurrence of Arnapik blades, microblades, and edge spalls	20
6. Site occurrence of Arnapik retouched flakes	20
7. Site occurrence of Arnapik end scrapers	21
8. Site occurrence of Arnapik side scrapers	21
9. Site occurrence of Arnapik used flakes and fragments and refuse	21
10. Site occurrence of Arnapik biface burin types	22
11. Site occurrence of Arnapik uniface burin types	22
12. Site occurrence of other Arnapik burin types and blanks	23
13. Site occurrence of Arnapik burin spalls	23
14. Site occurrence of Tyara non-lithic weapon parts	49
15. Site occurrence of Tyara utensils, tools, and art objects	49
16. Site occurrence of other Tyara bone, antler, and ivory objects and non-stone refuse	49
17. Site occurrence of Tyara slate and biface chert end and side blades	49
18. Site occurrence of Tyara scrapers, cores, and random flake tools	49
19. Site occurrence of Tyara blades, microblades, and edge spalls	50
20. Site occurrence of Tyara soapstone fragments and miscellaneous stone artifacts	50
21. Material in Tyara stone refuse samples	71
22. Identified faunal remains from the Tyara site	77
23. Possible seriation of some early sites in the Disko Bay region	92

ILLUSTRATIONS

<i>Figure</i>		<i>Page</i>
1.	Some early site locations in northern North America	4
2.	Sites about Amulet Creek, Mansel Island	13
3.	Sketch of the Arnapik site, JlGu-9	14
4.	JlGu-9, Find Spot No. 1	16
5.	JlGu-9, Find Spot No. 37	17
6.	Sketch of the Tyara site, Sugluk Island	45
7.	Tyara site, Trench No. 1, south wall profile	46
8.	Tyara site, Trench No. 2, south-east wall profile	47
9.	Tyara site, Trench No. 3, north-east wall profile	47
10.	Tyara site, Trench No. 4, west wall profile	48
11.	Tyara site, Trench No. 6, south wall profile	48

AT THE END OF TEXT

<i>Figure</i>		<i>Page</i>
12.	Typical Arnapik site find spots	108
13.	Views of the Tyara site	109
14.	Views of the Tyara site	110
15.	Profile walls and floor of square 4, Trench No. 2, of the Tyara site	111
16.	Arnapik site end blades	112
17.	Arnapik site stone artifacts	113
18.	Arnapik site stone artifacts	114
19.	Arnapik site cores	115
20.	Arnapik site burins	116
21.	Arnapik site burins, spalls, and blanks	117
22.	Tyara site harpoon heads	118
23.	Tyara site lance heads and other non-stone artifacts	119
24.	Tyara site art objects	120
25.	Tyara site non-stone, slate, and soapstone artifacts	121
26.	Tyara site stone artifacts	122
27.	Tyara site stone artifacts	123