People and Wildlife in Northern North America

Essays in honor of R. Dale Guthrie

Edited by
S. Craig Gerlach and Maribeth S. Murray

Editorial Assistants
Meg L. Thornton, Tom Flanigan, Joshua Reuther and Mark C. Diab

with contributions from

P.M. Anderson, P.M. Bowers, J.W. Brink, L.B. Brubaker, A. Cannon,
R. DeAngelo, A. Demma, M.C. Diab, J.C. Driver, A.S. Dyke, J. Fee,
D. Hanson, G. Hare, C.R. Harington, J.L. Hofman, B. Kooymen,
K.D. Kusmer, A.P. McCartney, A. Magoun, P. Matheus, R.O. Mills,
M.L. Moss, M. Nagy, W.W. Oswalt, B. Saleeby, D.L. Sandgathe, R. Sattler,
J.M. Savelle, A.V. Sher, R.O. Stephenson, M.L. Thornton, L.C. Todd,
P. Valkenberg, D.M. Vinson and D.R. Yesner

BAR International Series 944
2001
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Contributors</th>
<th>Table of Contents</th>
<th>Acknowledgements</th>
<th>Preface</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>S. Craig Gerlach</td>
</tr>
</tbody>
</table>

**Studying Northern Bones: Perspectives on Paleobiology and Zooarchaeology in High Latitude Environments** ........................................... 1

**David R. Yesner**

**PALEOECOLOGY**

Paleoecological and Archaeological Implications of the Charlie Lake Cave Fauna, British Columbia, 10,500-9,500 BP. ................................................................. 13

**Jonathon C. Driver**

The Small Mammals of Lime Hills Cave I, Alaska. ........................................ 23

**Dianna M. Georgina**

Paleobehavior in Alaskan Pleistocene Horses: Social Structure, Maturation Dates, Uses of the Landscape, and Mortality Patterns. ........................................ 32

**R. Dale Guthrie**

New Radiocarbon Dates on Saiga Antelopes (*Saiga tatarica*) from Alaska, Canada, and Siberia: their Paleoecological Significance. ........................................ 50

**R. Dale Guthrie, Andrei V. Sher, and C. Richard Harrington**

Sea Otter (*Enhydra lutris*) Scarcity in the Strait of Georgia, British Columbia. ........................................ 58

**Diane Hanson and Karla D. Kusmer**

Sexually Dimorphic Size Variation in Holocene *Bison* as Revealed by Carpals and Tarsals. ........................................ 67

**Brian Kooyman and Dennis Sandgathe**


**Paul Matheus**

Late Holocene Environmental and Cultural Changes at Tukuto Lake, Northwestern Alaska. ........................................ 102

**W. Wyatt Oswald, Linda B. Brubaker, Patricia M. Anderson, and S. Craig Gerlach**

Calibrated Radiocarbon Ages and Taphonomic Factors in Beringian Cave Faunas at the End of the Pleistocene. ........................................ 112

**Robert Sattler, Dale M. Vinson, and Thomas E. Gillispie**

Wood Bison in Late Holocene Alaska and Adjacent Canada: Paleontological, Archaeological and Historical Records. ........................................ 124

**Robert O. Stephenson, S. Craig Gerlach, R. Dale Guthrie, C. Richard Harington, Robin O. Mills, and Gregory Hare**

**ARCHAEOLOGY**

The North Point Wet Site and the Subsistence Importance of Pacific Cod on the Northern Northwest Coast. ........................................ 159

**Peter M. Bowers and Madonna L. Moss**

Was Salmon Important in Northwest Coast Prehistory? ........................................ 178

**Aubrey Cannon**

Animal Procurement and Seasonality: A Study of Faunal Remains from a Prehistoric Sod House Ruin in Northwest Alaska. ........................................ 188

**Rebekah DeAngelo**
Tyranny in the Archaeological Record of Specialized Hunters ................................. 200
Jack L. Hofman and Lawrence C. Todd

Seal Pups and Their Moms: A Preferred Paleoeskimo Hunting Strategy in Ivujivik, (Nunavik, Eastern Arctic) ............. 216
Murielle Nagy

Protohistoric Fauna from the Kitlik River Site on the Seward Peninsula, Alaska .................................................. 229
Becky Saleeby and Angela Demma

Human Predators and Migratory Megafauna: The Case of Thule Eskimo Bowhead Whaling .............................................. 242
James M. Savelle, Allen P. McCartney, and Arthur S. Dyke

METHODS

Carcass Utility Indices and Bison Bones from the Wardell Kill and Butchering Sites .................................................. 255
Jack W. Brink

A Consideration of the Inter-Specific Application of Food Utility Indices, with Reference to Five Species in the Order Pinnipedia ................................................................. 275
T. Max Friesen, James M. Savelle and Mark C. Diab

The Roles of Bone Density and Cultural Behavior in Head-Smashed-In Bone Bed Taphonomy ........................................ 285
Brian Kooyman

Caribou Remains at Kill Sites and the Role of Scavengers in Producing Patterned Distributions in Bone Assemblages ........................................................... 294
Audrey Magoun and Pat Valkenberg

Rodent Gnawing as a Taphonomic Agent: Implications for Archaeology ................................................................. 300
Meg L. Thornton and Jennifer Fee