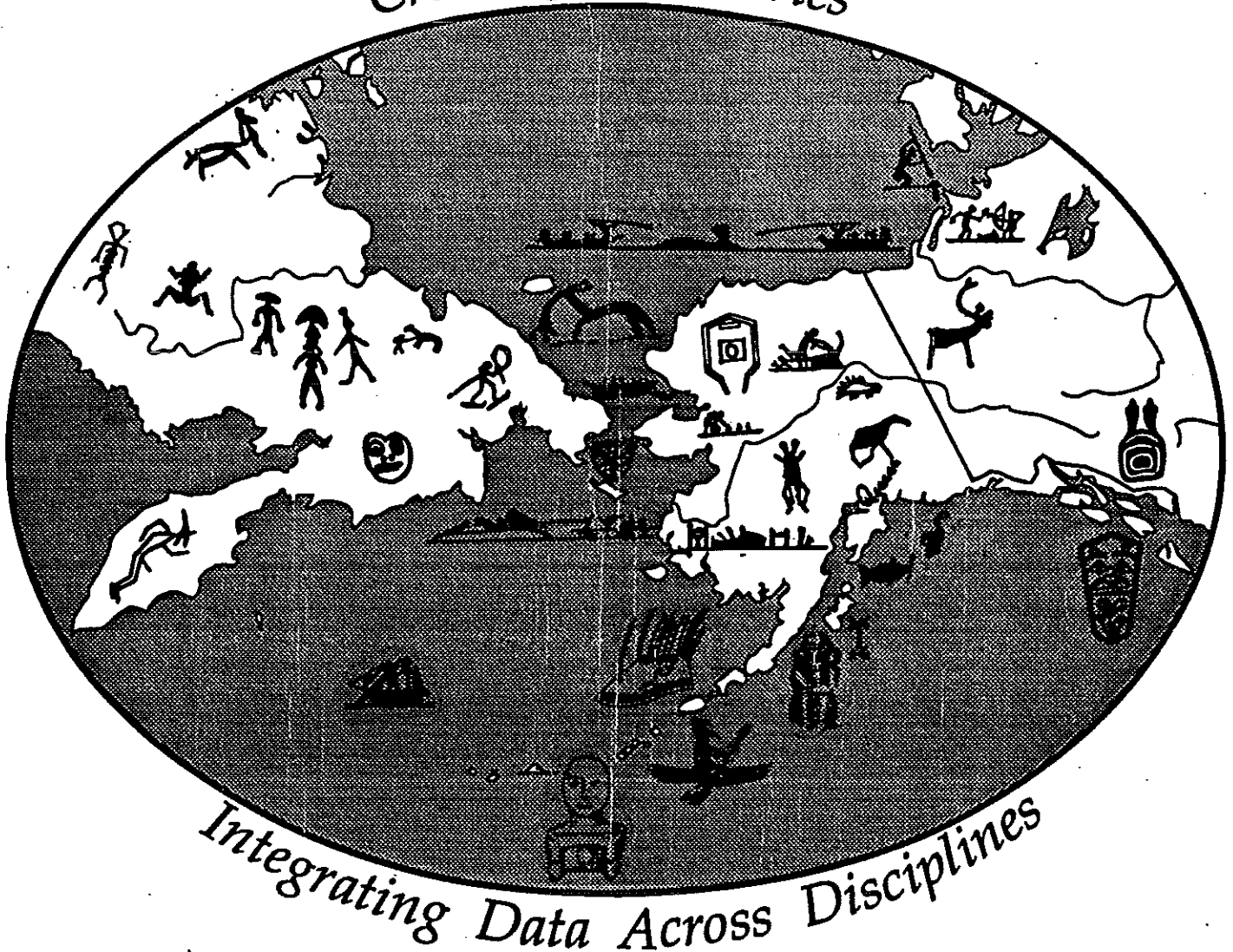


ALASKA ANTHROPOLOGICAL
ASSOCIATION

Reger

Crossing Boundaries



19th Annual Meeting March 27 & 28, 1992
Westmark Hotel, Fairbanks

Distinguished Speakers
Thomas Lynch Johanna Nichols

ANTHROPOLOGY AT THE UNIVERSITY OF ALASKA FAIRBANKS

Anthropology has had an active presence at UAF since the 1930's. Froelich Rainey, Ivar Skarland, Otto Geist, James VanStone, Louis Giddings, and Wendell Oswalt are among the many well-known anthropologists who have been associated with the University as students or teachers.

Today, the Anthropology Department is highly regarded as a center for research and study of the circumpolar north, past and present. The department faculty maintain collaborative ties with Northern European, Russian, and Canadian scholars, contributing to a broad understanding of the prehistory, history, international relations and interrelatedness of all peoples in the north. UAF is the only American university that offers a specialized Ph.D. degree in the anthropology of the north, in addition to offering an M.A. program.

The Anthropology Department is proud to co-sponsor the 19th Annual Alaska Anthropological Association Meeting, in conjunction with the Alaska Quaternary Center.

ALASKA QUATERNARY CENTER

The Alaska Quaternary Center (AQC) is a campus-wide interdisciplinary organization based within the University of Alaska Museum. The AQC promotes and coordinates Quaternary research undertaken in Alaska or by Alaskan scientists in other areas. The AQC also provides a focus for a consortium of scientists, students, individuals, and agencies interested in northern Quaternary studies. The center's overall objective is to enhance interdisciplinary research and instruction in the Quaternary sciences on the University of Alaska Fairbanks campus. This is accomplished by: (1) providing a visiting professor and visiting scientist program, (2) offering interdisciplinary classes and seminars, both team-taught by members of different departments and by single individuals of various departments, (3) promoting opportunities for Quaternary research and facilitating visits of outside researchers, and (4) in serving as a clearing house and information center for events and research findings of interest to Quaternary specialists throughout the world. The AQC accomplishes these objectives within the framework of a "grass-roots" organization funded by the Chancellor, the Dean of the College of Natural Sciences, and the Museum at UAF.

Currently, the AQC is the only Quaternary center within the State of Alaska, and is one of only thirteen within the United States; there are only seven other such centers internationally. Since much of Quaternary-related research is related to the profound effects of episodes of glaciation and global climatic changes, our unique situation as the northern Quaternary center with a cadre of qualified scientists and a world-class polar regions library places us in a strategic position to conduct interdisciplinary research on these topics.

UNIVERSITY OF ALASKA FAIRBANKS

The University of Alaska Fairbanks (UAF) is the land-grant, sea-grant, space-grant institution for the state of Alaska. As the state's primary academic residential institution, and the only doctoral-granting institution in the state, it serves students from all areas of Alaska as well as from many other states and nations. UAF offers master's degree programs in the arts, sciences, and professions and doctoral programs in natural sciences, anthropology, and mathematics.

The University of Alaska Fairbanks is the state's center for basic and applied research, with particular emphasis on high latitude and Alaskan problems. In response to global and state needs, UAF has developed programs in space physics, marine science, atmospheric sciences, geophysics, biology, environmental sciences, and engineering. It is also deeply involved in research and instruction related to managing and developing Alaska's natural resources and protection of the environment. UAF is the state's major center for the study of Alaska Native cultures.

In addition, UAF serves as a cultural center for interior Alaska by offering activities and programs in the creative the performing arts. Its museum and Alaska and Polar Regions library collection provide major cultural and information resources to the state.

UAF is a public co-educational institution with an enrollment of 8,900 students; 6,300 (including 600 graduate) students are on the Fairbanks campus.

**19TH ANNUAL MEETING OF THE
ALASKA ANTHROPOLOGICAL ASSOCIATION
MARCH 27-28, 1992
WESTMARK HOTEL, FAIRBANKS**

THURSDAY, MARCH 26, 1992

**Pre-Conference Reception in the Glacier Suite of the Westmark Hotel
from 7:00 - 9:00 p.m. (no host bar)**

FRIDAY, MARCH 27, 1992

7:30-11:30 a.m. - Registration

<p>PUBLISHERS' DISPLAY</p>

**The Publishers' Display will be in the CHENA ROOM on FRIDAY
and in the GIFT SHOP on SATURDAY.**

Organizer: Peter Schweitzer, University of Alaska Fairbanks

**GLACIER SUITE - Friday Morning
(8:00 - 9:50)**

**The Teaching of Anthropology: Round-Table Discussion
Chair: Wally Olson, University of Alaska Southeast**

**GLACIER SUITE - Friday Morning
(10:00-11:50)**

**Planning for Alaska's Indigenous Languages: Open Discussion
Chair: Charlotte Basham, University of Alaska Fairbanks**

**EAST GOLD ROOM - Friday Morning
(8:20-11:20)**

**Paleolithic Beringia: New Evidence, New Ideas
Chair: Ted Goebel, University of Alaska Fairbanks**

8:20	M. Edwards	Climate and Vegetation Change in Beringia from 14,000 to 8,000 Years Ago	19
8:40	N. Bigelow	Late Pleistocene and Holocene-aged Sediments of Interior Alaska as Proxy Climatic Records	15
9:00	J. Autrey and J. Baichtal	Evidence Suggesting Coastal Refugia in Southern Southeast Alaska During the Height of Wisconsin Glaciation	14
9:20	D. Mann	Northwest Coast Route Feasible by 18,000 Year BP	27
9:40	Discussion	Paleoenvironments and Migrations	
9:50	BREAK		
10:00	T. Goebel	Is There a Pre-microblade Paleolithic in Western Beringia?	21
10:20	S. Slobodin	The Late Paleolithic of the Upper Kolyma Basin, Russia	37
10:40	R. Vasil'evskii	New Developments in the Upper Paleolithic of the Russian Far East	38
11:00	Discussion	The Paleolithic of Western Beringia	
11:20	LUNCH BREAK		

**WEST GOLD ROOM - Friday Morning
(9:00-11:30)**

**Contributed Papers in Cultural Anthropology
Chair: Peter Schweitzer, University of Alaska Fairbanks**

9:00	Introduction		
9:05	M. Blackman	Anaktuvuk Pass, You Copy? Lessons from CB Radio Use in Bush Alaska	16
9:25	M. Larson	'I Saw Jesus and the Whale Fly By': Associations Between Native Whaling and the Church in Northwest Alaska	26

19th Alaska Anthropological Association Meeting

9:45	BREAK		
10:00	P. Schweitzer	Development, Conservation, and What Else? European and Native Concepts of Non- Human Environments in Coastal Chukotka	35
10:20	M. Nuttall	Heritage, Conservation and Way of Life: Conflicting Ideas of Landscape in the Scottish Highlands	30
10:40	Discussion		

**RAMPART ROOM - Friday Morning
(9:00-11:00)**

Round-Table Discussion on Northern Alaska Archaeology
Chairs: Edwin S. Hall, Jr., SUNY, Brockport, NY
and Jack Lobdell, Placitas, NM

**BEAR AND SEAL ROOM - Friday Morning
(9:00-11:30)**

Anthropology and the Arts: Crossing Boundaries
Chair: Lynn Ager Wallen, Alaska Cultural Research Service

9:00	Introduction		
9:10	L. Ager Wallen and R.T. Wallen	Natural Imagery in Yup'ik Masks	39
9:30	L. Black	The Hunter's Dress: Presentation of Self or Metaphoric Means Toward Boundary- Crossing?	16
9:50	B. Herem	The Tlingit Art Treasures of Whale House of Klukwan	23
10:10	BREAK		
10:20	H. Calkins	Changing the Rules	17
10:40	S. Henrikson	The Raven's Tail Robe Project at the Alaska State Museum	22
11:00	B. Herem	Modern Northwest Coast Art	23
11:20	Discussion		

**USIBELLI SUITE - Friday Morning
(9:00-11:30)**

Round-Table Discussion on Repatriation Issues
Organizer: Kathy Mayo, Doyon Foundation
Moderator: Craig Gerlach, University of Alaska Fairbanks

**EAST GOLD ROOM—LUNCHEON
12:00 to 1:45**

Topic: "Linguistic Diversity and the First Settlement of the New World"
Speaker: Dr. Johanna Nichols, University of California at Berkeley

**EAST GOLD ROOM - Friday Afternoon
(2:20-5:20)**

Paleolithic Beringia: New Evidence, New Ideas
Chair: Ted Goebel, University of Alaska Fairbanks

2:20	C. Holmes, D. Yesner and K. Crossen	The Broken Mammoth Archaeological Project: The 1992 Season	24
2:40	K. Crossen and T. Dilley	Late Quaternary Stratigraphy of the Broken Mammoth Archaeological Site, Tanana River Valley, Alaska	17
3:00	D. Yesner and S. Bender	Zooarchaeology of the Broken Mammoth Site and Paleoecology of Late Pleistocene Populations in Eastern Beringia	39
3:20	Discussion	The Archaeology of Broken Mammoth	
3:30	BREAK		
3:40	E. Pontti, W.R. Powers T. Goebel and N. Bigelow	The Denali Complex in Light of New Finds at Panguingue Creek, Central Alaska	33
4:00	J. Hoffecker	Geoarchaeological Reconnaissance for Late Pleistocene Sites in Central Alaska	23
4:20	E.J. Dixon	Late Pleistocene/Early Holocene Prehistory of Eastern Beringia	19
4:40	Discussion	Evaluating the Pre-microblade Complex of Beringia and Its Role in the Peopling of the New World	

**WEST GOLD ROOM - Friday Afternoon
(2:30-5:30)**

**Contributed Papers in Cultural Anthropology
Chair: Peter Schweitzer, University of Alaska Fairbanks**

2:30	L. Ager Wallen and R.T. Wallen	Clan Rank and Rivalry in Contemporary Tlingit Society	39
2:50	T. Thornton	Place Naming Among the Tlingit of Southeast Alaska	38
3:10	R.F. Schroeder	Hunting Territoriality in Southeast Alaska	34
3:30	BREAK		
3:40	M. Betts	Traditional Tlingit Ecology and the Chilkat River Eulachon Fishery	15
4:00	J. Fall	An Update on Subsistence Uses in Alaska Native Villages Following the 'Exxon Valdez's Oil Spill'	20
4:20	M. Nowak	Ecology and Native American Thought, II: Surplus, Rationing, and Planned Consump- tion	30
4:40	Discussion		

**BEAR AND SEAL ROOM - Friday Afternoon
(2:00-5:00)**

**Colonial Russian Settlements in North America and the Kuriles:
Searching for Daily Lifeways**

Chair: Timothy Dilliplane, Brown University

2:00	Introduction, T. Dilliplane		
2:05	R. Pierce	The Russian-American Company Corres- pondence as a Source for the Study of the Colonial Russian Lifeways	32
2:25	L. Black	Russians Brought These Items to Alaska: (Pictorial Sources of Data on Material Culture)	16
2:45	BREAK		
3:05	A. Crowell	Russian Household Archaeology at Three Saints Bay, Kodiak Island	18
3:25	T. Dilliplane	Investigating the 'Russian' in "Russian America": Lifeways at the First New Archangel, 1799-1802	18

3:45	K. Arndt	Marital Strife in the Russian-American Colonies: Three Case Studies from the 1830s	13
4:05	Discussant Comments (James VanStone)		
4:25	Discussion		

**GLACIER SUITE - Friday Afternoon
(2:20 - 4:00)**

Panel Discussion on Ethics in Anthropology

Chairs: Wendy Arundale, University of Alaska Fairbanks
and Polly Wheeler, University of Alberta and Tanana Chiefs Conference
Panelists: R. Drozda, J. Nageak, P. Kwachka and T. McGovern
(see also POSTERS, Saturday p.m.)

(4:15 - 6:00)

Panel Discussion on Improving Dialog and Collaborative Research
Chairs: Polly Wheeler, University of Alberta and Tanana Chiefs Conference
and Wendy Arundale, University of Alaska Fairbanks
Panelists: G. Pullar, M. Dixon, R. Miraglia and M. Ganley

**RAMPART ROOM - Friday Afternoon
(2:20 - 4:00)**

Video and Slide Presentations

Organizer: Amy Steffian, University of Michigan

2:20	M. Badger	Siberia Through Siberian Eyes	14
2:50	J. Pilon	House Pits of the Lower Mackenzie Valley	No Abstract
3:20	E. Frankenstein	A Matter of Respect	No Abstract

Reception

8:00 - 10:00 p.m.

Signers' Hall Lobby, UAF

honoring Peter Kalifornsky, Author of *A Dena'ina Legacy*,

Concurrently,

Department of Anthropology Open House (3rd floor, Eielson Building)

On display will be artifacts from Walker Road, Panguingue Creek, Little Panguingue Creek, Teklanika West, and Moose Creek. Informal talks/discussions reviewing current research in the Nenana Valley and Siberia will also be presented.

SATURDAY, MARCH 28, 1992

8:00 - 11:00 a.m. - Registration

**BEAR AND SEAL ROOM - Saturday Morning
(9:00-11:30)**

**Colonial Russian Settlements in North America and the Kuriles:
Searching for Daily Lifeways**

Chair: T Dilliplane, Brown University

9:00	Introduction, T. Dilliplane		
9:05	E. B. Parkman	A Fort By Any Other Name: Interpretation and Semantics at Colony Ross, California	32
9:25	D. Murley	Daily Life at the Ross Colony, 1812 to 1841	29
9:45	S. Osborn	Death in the Daily Life of Russian America	31
10:05	BREAK		
10:25	L. Goldstein	The Russian Cemetery at Fort Ross: A Reflection of Social Organization	22
10:45	G. Farris	Life at Fort Ross as the Indians Saw It: Stories from the Kashaya	20
11:05	Questions/Answers		

**EAST GOLD ROOM - Saturday Morning
(8:00-11:30)**

Contributed Papers in Archaeology

Chair: David Yesner, University of Alaska Anchorage

8:00	Introduction		
8:10	R. Miraglia	The Importance of Native Involvement in Decisions Affecting Cultural Resources	28
8:30	J. Baichtal	Management of the Karst Areas Within the Ketchikan Area of the Tongass National Forest, Southeastern Alaska	15
8:50	N.A. Easton	Crossing Disciplinary, Geographical, and Conceptual Boundaries in Archaeology: The Interdisciplinary Imperative of Underwater Archaeology	19

9:10	J. Loring, R.C. Betts and G. Chaney	Recovery of a Pre-Contact Basket Style Fish Trap from Montana Creek in Southeast Alaska (See also POSTERS, Saturday p.m.)	26
9:30	H. Alten	Conservation of Archaeological Sites	13
9:50	BREAK		
10:00	R. Reanier	Spatial Analysis at the Bateman Site: Refinements to K-Means Clustering	33
10:20	J. Cook	Obsidian Characterization	17
10:40	M. Kunz	The Obsidian Hydration Dating Technique and Problem Associated with Its Application in the Arctic	25
11:00	S.C. Gerlach, L.J. Graumlich and O.K. Mason	Long-Term Trends in Temperature from Modern and Archaeological Tree-Ring Samples, Kobuk River, Alaska	21

**GLACIER SUITE - Saturday Morning
(8:15-11:30)**

Folklore, Translation, and Cultural Representation

Chairs: Phyllis Morrow and William Schneider, University of Alaska Fairbanks

8:15	Introduction		
8:20	J. Leer	Audiovisual Encyclopedias of Language and Culture	26
8:40	L. Kaplan	Pleasing All of the People All of the Time: The Job of Translator	24
9:00	J. Ruppert	A Bright Light Ahead of Us: Belle Deacon Telling Tales in English and Deg Hit'an	34
9:20	I. Reed	Typical Problems in the Translation and Analysis of Yup'ik Place and Personal Names	33
9:40	BREAK		
9:50	Introduction		
10:00	C. Ainsworth	Folklore: Shifting Images in the Ivy Halls	13
10:20	M. Odden	Dialog Between Cultures and Friends	31
10:40	C. Mishler	Okiachaq: Inversion and Reversal in An Alutiiq Men's Game	29

11:00	R. King	John Babel (1882-1979) Miner in the Valdez Creek Drainage of Central Alaska, 1920's-1950's	25
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11:20 Discussion

CHENA ROOM - Saturday

Computer Demonstrations (8:00 - 10:05)

Roundtable Discussions (10:00 - 11:30)

Posters: On Display (8:00 - 4:30)

Poster presenters will be at tables from 2:20 - 4:20.

Organizer: Amy Steffian, University of Michigan

8:00	N.A. Easton	Yukon College's Northern Research Institute	No Abstract
8:30	M. Pipkin	The Use of Computer-Aided Stratigraphic Analysis of Two Sites in Bristol Bay	32
9:00	D. Grahek	Project Jukebox	22
9:30	R. Inouye	The Wenger Eskimo Database: Full Text with Images	No Abstract

**CHENA ROOM - Saturday Morning
10:00 - 11:30**

Russian/American International Cooperation: Round-Table Discussion
Organizer: Ken Schoenberg, National Park Service

**Participants: Russian Vasil'evsky, Inna Laricheva, Alvina
Voropayeva, Ken Schoenberg, Alexander Dolitsky,
and Robert Ackerman**

**WEST GOLD ROOM - Saturday Morning
9:00 - 11:30**

**Recording Techniques, Interpretation, Preservation and Management of Rock Art
Sites by Kenneth Hedges, San Diego Museum of Man (9:00-11:30)**
Organizer: Martin Gutoski, University of Alaska Fairbanks

**EAST GOLD ROOM -- LUNCHEON
12:00 to 1:45**

**Topic: "The Peopling of South America:
Historical Context and Global Perspective"**
Speaker: Dr. Thomas Lynch, Cornell University

**EAST GOLD ROOM - Saturday Afternoon
(2:20 - 5:00)**

**Contributed Papers in Archaeology
Chair: David Yesner, University of Alaska Anchorage**

2:20	J. Pilon	Paleo-Eskimo Remains from the Lower Mackenzie Valley, District of Mackenzie, Northwest Territories, Canada	32
2:40	R.K. Harritt	Continuity and Change in Prehistoric Eskimo Socio-Territorial Patterns in Bering Strait	22
3:00	D. Morrison	An Archaeological Perspective on the Mackenzie Inuit Economy	29
3:20	G. Reinhardt	A Typology of Protohistoric Eskimo Dwellings	34
3:40	A. Steffian	Sourcing Archaeological Coal: An Example from the Gulf of Alaska	37
4:00	J.J.K. Simon and A. Steffian	Late Kachemak Mortuary Patterns within the Kodiak Archipelago: An Evaluation of Additional Data from the Uyak Site	36
4:20	R. Bland	<i>Umqan</i> : Their Development and Function	17
4:40	S. Street and D. Hawkey	Prehistoric Human Remains from the Aleutian Islands and Their Behavioral Implications	38

**GLACIER SUITE - Saturday Afternoon
(2:20-5:30)**

**Symposium on History, Ethnohistory, and Historical Archaeology
Chairs: Robert King, Bureau of Land Management and Wally Olson,
University of Alaska Southeast**

2:20	R. King	Introductory Remarks	
2:30	B. Saleeby	Culture Change During the Gold Rush Era: A Closer Look at Alaska Native Cultures in a Transitional Period	34
2:50	W. Simeone	From 'The People' to 'Aleut': The Construction of an Identity	36

3:10	W. Olson	Through the Eyes of Outsiders: The Tlingit as Reported by the Explorers and Traders of the Late 18th Century	31
3:30	R. Shepard	Archaeology Complements Oral History and Reveals a Unique Ventilation System	35
3:50	BREAK		
4:00	P. McCoy and R. King	Rediscovering the Past: The Story of BLM's Ongoing Efforts to Interpret the Sourdough Campground	28
4:20	P. Schulte and J. Autrey	UAS Ketchikan Community Ethnoarchaeological Field Study of Traditional Native Subsistence Practices in Southern Southeast Alaska	35
4:40	R. King	Alaska Through the Stereoscope, 1860's-1930's: Early Photographs and the Mystique of the Last Frontier	25
5:00	Discussion		

**CHENA ROOM - Saturday Afternoon
(2:20-4:20)**

POSTER PRESENTATIONS

**Presenters will be available at their display tables.
Organizer: Amy Steffian, University of Michigan**

J. Loring, R.C. Betts and G. Chaney	Recovery of a Pre-Contact Basket Style Fish Trap from Montana Creek in Southeast Alaska (see also paper, 9:10 a.m. Saturday)	26
J.K. Simon, S.C. Gerlach, M. Sweeney, C. Williams and A. Higgs	The Ethnoarchaeology of Reindeer Herding in Northwest Alaska	36
A. Higgs	Lithic Refit Analysis of the Walker Road Site	23
K. Crossen, D. Yesner C. Holmes, and T. Dilley	Stratigraphy and Fossil Assemblages from Broken Mammoth: An 11,500 BP Archaeological Site in Interior Alaska	18
P. McCoy	National Register Testing Archaeological Site GUL-225, Sourdough Campground, Alaska	27
W. Arundale and P. Wheeler	Ethical Codes and Other Materials to Accompany Panel Discussion on Ethical Issues (see Friday p.m.)	13

**BEAR AND SEAL ROOM - Saturday Afternoon
(2:20-5:00)**

**Colonial Russian Settlements in North American and the Kuriles:
Searching for Lifeways**

Chair: Ty Dilliplane, Brown University

2:20	K. Solovjova	Every Day Activity on the Construction Site in New Archangel or How the Tlingit Church Was Built	37
2:40	V. Shubin & R. Knecht	Historic Koniag Eskimo Settlements on Urup Island, Kurile Island Chain: Results of the 1991 U.S.-Russian Excavations	35
3:00	L. Jackson	Ceramics in Russian America: Insights from the Kurile Islands	24
3:20	BREAK		
3:40	M. Oleksa	Preaching the Word: A Priest's Pastoral Journey in Russian America	31
4:00	O. Bychkov	Lifeways of Promyshlenniki in Siberia and Russian America: 1750 - 1825	No Abstract
4:20	Discussant Comments (James VanStone)		
4:40	Questions/Answers		

**WEST GOLD ROOM - Saturday Afternoon
(2:20 - 5:30)**

Response Panel Discussion

Moderator: James Kari, University of Alaska Fairbanks

**Panelists: Robert Austerlitz, W. Roger Powers, Michael Krauss, Jeff Leer,
Donald Dumond, William Workman, E. James Dixon,
David Hopkins, Richard Scott and Gerald Shields**

**BUSINESS MEETING (East Gold Room)
5:45**

BELZONI PARTY

7:00 p.m. - 1:00 a.m.

at the

Sunset Inn

(maps will be provided)

ABSTRACTS

19th Annual Alaska Anthropological Association Meeting

AINSWORTH, Cynthea (Prince William Sound Community College)
Folklore: Shifting Images in the Ivy Halls

The paper reviews representative efforts of the five most active disciplines currently working with Alaska Native Traditional Stories: Linguistics, Anthropology, Oral History, Comparative Literature, and Folkloristics. Through much of this century, academics have not been encouraged to seek theory and methodology outside their discipline of training. This study examines the primary goals and assumptions of each discipline through sample studies conducted in academic isolation. The author hopes to encourage dialog across disciplinary boundaries to discover pathways toward more thorough, multi-disciplinary projects.

ALTEN, Helen I. (State Conservator, Alaska State Museum)
Conservation on Archaeological Sites

Material excavated from northern sites often require special preservation techniques. Significant work has been done by conservators in Canada, England, and Scandinavia on preservation of wet and frozen site material. Techniques for removing fragile material from the ground, transporting and storing artifacts, and final treatment options will be discussed. This paper will provide an overview of current practices in conservation of northern site material, provide material sources and a bibliography, and discuss what the conservator can do for the archaeologist.

ARNDT, Katherine L. (Fairbanks, AK)
Marital Strife in the Russian-American Colonies: Three Case Studies from the 1830s

Though primarily a body of business correspondence, the records of the Russian-American Company reveal much about the rhythm of community life in the colonies. Occasionally, even so private a matter as domestic discord became sufficiently disruptive to community life to warrant official attention. This paper discusses three cases of marital discord, all apparently alcohol-related, that figured prominently in the company correspondence of the 1830s, and examines the role of family, Church, the company administration, and the legal system in aiding the aggrieved party.

ARUNDALE, Wendy (Co-Chair, Institute of Arctic Biology, University of Alaska Fairbanks), **WHEELER, Polly** (Co-Chair, Tanana Chiefs Conference), **DROZDA, Robert** (Bureau of Indian Affairs), **NAGEAK, James** (Alaska Native Language Center, University of Alaska Fairbanks), **KWACHKA, Patricia** (Cross-Cultural Communications, University of Alaska Fairbanks), and **McGOVERN, Thomas** (Department of Anthropology, Hunter College of the City University of New York), Panelists
Panel Discussion on Ethical Issues

All of us make ethical decisions in our work on almost a daily basis, even though we don't always see our choices in this light. An ongoing dialog within our profession concerning ethical matters can help heighten our awareness of important and sensitive issues. Because there are no pat solutions to many ethical dilemmas, learning how others have thought about and acted upon

ethical questions in particular instances can often be helpful and informative. In this workshop-discussion, four panelists will briefly address a range of ethical issues potentially including local involvement, obligations to colleagues, ethical concerns in teaching, the linguist's obligations to the integrity of the language community, potential conflicts between agency or client mandates and the ethical standards of our disciplines, and others. Some of the panelists will take a case study approach in their presentations, working through the thought and decision-making processes they used in a challenging situation. Following the presentations there will time for group discussion. Our goal is to avoid "finger-pointing" and "Thou shalt" prescriptions and instead to engage in a thoughtful dialog that will enhance our sensitivity to these issues and our repertoire of potential productive responses

**AUTREY, John T. and BAICHTAL, James F. (U.S. Forest Service, Tongass National Forest)
Evidence Suggesting Coastal Refugia in Southern Southeast Alaska During the
Height of Late Wisconsin Glaciation**

Recent work on Prince of Wales and surround islands on the extensive cave resources, botanical surveys of alpine areas, and on chum salmon populations strengthen the argument for a well developed coastal refugia along the western coast of southern southeast Alaska. The evidence sheds new light on problems of glacial chronology, climatic change, biogeography, and archaeology along the western margin of North America

Hundreds of caves are being discovered and described from Prince of Wales and surrounding islands. The caves are emerging from the glacial sediments that filled much of the systems as the result of the last glacial advance. Recently, two black bears, *Ursus americanus*, one of which dates to 10,745±75 B.P. and what has tentatively been identified as the remains of the giant short-faced bear, *Arctodus nimus*, dating to 9,760±75 B.P. have been discovered. What is believed to be the stomach contents of the dated black bear lie on the floor of the cave. These consist mainly of fish bones but the jaws of small rodents have been described. From botanical studies on Dall and Prince of Wales Island plant populations have been documented which suggest ancestry from local remnant populations that escaped glaciation. Recent research concerned with chum salmon populations from the Queen Charlotte Islands and southeastern Alaska have shown that the greatest genetic variation exists in the fish along the western coast lines of Queen Charlotte and Prince of Wales Islands. These significant genetic variations suggest longer habitation of streams in these areas, therefore the possibility of coastal refugia. This new information, combined with limited data on raised marine beaches in the area, strengthen the argument for coastal refugia, a refugia which Pleistocene mammals and man may have utilized.

**BADGER, Mark (KUAC-TV, University of Alaska Fairbanks) and BALIKCI, Asen
(Department of Anthropology, University of Montreal)
Siberia Through Siberian Eyes: Project Overview**

A project designed to empower native Siberians with more control of their cultural portrayal took place in the summer of 1991 in the village of Kazim, western Siberia. A field school was established in Kazim to teach a small number of native Siberians the concepts of visual ethnography. The ten Khanty, Nenets and Yakut cultural activists/students, received training in: ethnographic research methods, visual ethnography, direct cinema and video production.

The seminar placed in the hands of this group the means to produce their own cultural record, for their use, and for use by Western scholars. The project addresses the issue of cultural representation and methods of incorporating the "voice of the other" into cultural portrayals. Three video cameras and an editing ensemble (supplied by the project) are continuing to operate today in Siberia. Participants in the field school produced their own view of subsistence and material cultural aspects. Portions of these visual ethnographies will be shown, as well as a project overview.

BAICHTAL, James F. (Forest Geologist, Tongass National Forest)
Management of the Karst Areas within the Ketchikan Area of the Tongass National Forest, Southeastern Alaska

The Ketchikan Area of the Tongass National Forest is located in the southern extreme of the panhandle of Alaska. Over 950 square miles of the Area are underlain by carbonate rocks, mainly Silurian, massive limestones and minor marble. Karst topography is known to have developed on approximately 700 square miles of the Area, the majority being on Prince of Wales and Dall Islands. Thirty square miles of alpine and sub-alpine karst is known to exist.

The Forest is in the beginning stages of understanding the significance of the resource, developing standards and guidelines for resource management, and understanding the scope of the inventorying process. The dense vegetation of the region makes exploring for caves both difficult and dangerous. Preliminary inventories suggest that hundreds of caves exist in the Area. The surveyed areas on north Prince of Wales Island have already yielded several record features. "El Cap Pit" is the deepest known natural pit in the United States, an initial drop of 598.3 feet, "Snowhole" ranks third in the U.S. at 448.8 feet. The seven deepest known caves in Alaska and the five longest have been recorded. Biological studies of the caves have begun. Large numbers of mammal bones are present in the caves. Salmon swim through some of the caves to spawn upstream, some may actually spawn in caves. Historically, timber harvest has been highest on these well drained areas, where the nutrient rich soil grows the largest timber. These areas still are targeted for timber removal. It is no small task to insure that surface management activities are designed to protect the cave resources. Only recently has protection of the cave resources on the Area been a concern. The challenge is to educate the land managers and public as to the significance of this unseen resource.

BASHAM, Charlotte (Cross-Cultural Communications, University of Alaska Fairbanks)
Planning for Alaska's Indigenous Languages: Update and Discussion

An open discussion of current legislation regarding the preservation and teaching of Alaska Native languages. Information on the status of planning issues in Canada will be available for comparison.

BETTS, Marty (Division of Subsistence, Alaska Department of Fish and Game, Douglas, AK)
Traditional Tlingit Ecology and the Chilkat River Eulachon Fishery

This paper describes a traditional, contemporary Tlingit eulachon fishery in southeast Alaska and discusses its cultural background and management. Research on which this paper is based included analysis of participants' cultural knowledge, both mythical and empirical. Contemporary Chilkat River Eulachon fishing, processing, and trade has a long history and remains a highly traditional endeavor. Eulachon harvest and processing of oil were closely linked to Tlingit world view; attention to cultural values and taboos were believed to influence the health of the stocks and the continued presence of eulachon. The fishery garners a minimum of management effort by the Alaska Department of Fish and Game, resulting in a high degree of choice of harvest patterns by Tlingit participants. However, this loose form of co-management leaves future protection of the stocks and subsistence fishery uncertain.

BIGELOW, Nancy (Department of Anthropology, University of Alaska Fairbanks)
Late Pleistocene and Holocene-aged Sediments of Interior Alaska as Proxy Climatic Records

Sedimentary deposits are well-known for containing evidence of past climates. In interior Alaska, eolian and alluvial sediments spanning the Late Pleistocene through the Holocene mantle much of the underlying bedrock. Research conducted along the Tanana River and some of its northward-flowing tributaries provide a substantial data base to assess past climates from the close of the last glaciation to the middle Holocene. Sand sheet and sand wedge development found

below Holocene-aged loess near Tok, Alaska indicates dry, windy, and presumably cold conditions at the end of the last glaciation. Sediments of this age have not been recovered from the Nenana valley to the west, although their absence could indicate excessive windiness which prevented their preservation. Subsequent loess deposition in the Nenana valley provides evidence of the Younger Dryas, the Holocene Climatic Optimum, the Neoglacial, and the Little Ice Age. Recent archaeological excavations at the Panguingue Creek site also in the Nenana valley confirm the pattern already established at other archaeological sites. However, the presence of 10 cm of silt and nearly one m of bedded sand (which is then capped by about 60 cm of Holocene-aged sediment) is unique. The silt may be eolian in origin, although the bedded sand is more likely the result of very low energy colluvial events or sheet wash. Finally, recent investigations of the Tanana River alluvial history near Fairbanks and of eolian deposits near Delta, may also indicate climatic control on sediment deposition, although in some instances the climatic inferences from these sediments are different from what has been recognized in the Nenana River valley.

BLACK, Lydia T. (Department of Anthropology, University of Alaska Fairbanks)
Russians Brought These Items to Alaska: (Pictorial sources of data on material culture)

Little known pictorial sources on the material culture of the Russian promyshlenniki and of the 18th century naval expeditions to Alaska are examined. Among these are drawings on margins of charts and occasional illustrations by participants in events, such as paintings produced for the record by Japanese survivors returned by the Russians to Japan. Household utensils, dress, weapons, water craft, and shelters are illustrated often in minute detail and great accuracy. It is suggested that these sources can be of considerable value to historical archaeologists in Alaska.

BLACK, Lydia T. (Department of Anthropology, University of Alaska Fairbanks)
The Hunter's Dress: Presentation of Self or Metaphoric Means Toward Boundary-Crossing?

Once again, the question of how Natives, particularly hunters and gatherers, conceptualize their relationship to the animals is debated by anthropologists. In this paper I examine critically the notion that Alaskans conceptualized animals as people and suggest that perhaps, in common with the vast majority of humankind, they recognized essential difference as well as a dimension of similarity. Humans and animals inhabited two essentially different domains, but they could communicate and cross the boundaries in both directions. I also suggest that the hunter's dress was an essential element which permitted the hunter to cross the domain boundary and maintain an orderly relationship with his prey.

BLACKMAN, Margaret B. (Department of Anthropology, SUNY College, Brockport, NY)
Anaktuvuk Pass, You Copy? Lessons from CB Radio Use in Bush Alaska

In the mid 1970s, Citizens Band radios took the United States by storm; long distance truckers used them to communicate with one another and avoid the new 55 mph speed limit; motorists listened in to break the monotony of highway driving and to learn road conditions. CB broadcasters conversed in a colorful slang while remaining anonymous through the use of "handles." At about the same time, CBs came to village Alaska, where they proved as invaluable in emergencies as they had in the lower 48 states. Otherwise, however, they served very different functions. In Anaktuvuk Pass, where virtually every home and eight wheeled ATV (Argo) has a CB set, CB talk, minus slang and handles, goes on daily among kin and friends, nurturing the sense of communitas, defining networks and extending, through radio communication between base and mobile units, the people's contact with their land and its resources. Throughout most of the United States the CB craze was a phenomenon of the 1970s, but in villages like Anaktuvuk Pass, the CB continues to play an integral role in village life. This presentation draws upon

interviews with Anaktuvuk Pass villagers about CBs, as well as three months of summertime CB monitoring by the ever curious ethnographer.

BLAND, Richard L. (Anthropology Department, University of Oregon)
Umqan: Their Development and Function

A hypothesis is presented on the development and evolution of *Umqan* (Aleut burial mounds) and their function or position as status markers. The results of archaeological survey and a search of the historical and archaeological literature are combined in an effort to determine the origin of *Umqan* and their purpose within Aleut society. *Umqan* appear to have developed from a simpler type of burial into a larger, more ostentatious creation unique to the Aleuts of the central and eastern Aleutian Islands. *Umqan* may also be seen as status markers representing the highest class of Aleut society.

CALKINS, Harry (Native Arts, University of Alaska Fairbanks)
Changing the Rules

It is often assumed that in preliterate cultures the artist is limited to the conventions of the society, with little or no opportunity for self expression. Among the Northern Northwest Coast Indians, such presumptions are easy; few cultures have a more rigorously structured system of 2-D design than the Tlingit, Haida and Tsimshian. There exists exceptional works from these cultures which demonstrate that while in most instances the rules were followed, there were exceptions. I will show the works of four highly skilled artists who were able to creatively break with convention and produce works of great artistic merit which were accepted by the culture.

COOK, John P. (Bureau of Land Management, Fairbanks)
Obsidian Characterization

This is another progress report concerning the long-standing research on obsidian characterization in Alaska. The Bureau of Land Management has approved and partially funded some continued research, aimed at combining the characterization analyses and hydration rind dating research. A summary of Instrumental Neutron Activation Analysis (INAA), done on some 600 samples will be presented, with a geographic distribution throughout Alaska and in Siberia and Canada. More than 20 discrete kinds of obsidian have been identified. Large numbers of obsidian cobbles from a major source (BatzaTena) in the Koyukuk River drainage, offer the opportunity to test the relationship between INAA and XRF (X-ray fluorescence) analysis. Some pilot studies utilizing micron-probe analysis will be incorporated into the report.

CROSSEN, Kristine J. (Geology Department, University of Alaska Anchorage) and DILLEY, Thomas (Geosciences Department, University of Arizona)
Late Quaternary Stratigraphy of the Broken Mammoth Archaeological Site, Tanana River Valley, Alaska

Stratigraphy at the Broken mammoth archaeological site consists of over 2 m of late Quaternary aeolian sands, loess, and paleosols resting on a weathered bedrock bluff overlooking the Tanana River near Shaw Creek. The basal gray aeolian sand is overlain by two loess units, the lower of which contains 3 paleosol horizons. The paleosol complexes consist of buried organic-rich A horizons with abundant pedogenic carbonate features, bone remains, and Paleoindian artifacts. Dates from 11,500 BP to 9,300 BP define this lower unit. A thin, but continuous, sand layer (showing no deformation from frost involutions or gelifluction) separates the lower loess from the upper unit. The upper loess is over 1 m thick, contains little pedogenic carbonate, and two archaeological components. The uppermost section supports a modern subarctic brown forest soil. Deposition of this upper loess began prior to 7,600 BP and continues today. Future work focuses on reconstructing past paleoenvironments using regional aeolian stratigraphy.

CROSSEN, Kristine J. (Geology Department, University of Alaska Anchorage) **YESNER, David R.** (Anthropology Department, University of Alaska Anchorage), **HOLMES, Charles E.** (Office of History and Archaeology, Alaska Department of Natural History, and **DILLEY, Thomas** (Geological Sciences Department, University of Arizona)
Stratigraphy and Fossil Assemblages from Broken Mammoth: An 11,500 BP Archaeological Site in Interior Alaska

The basal stratigraphy at the newly discovered Broken Mammoth site consists of 0.5 m of fine sand containing quartz ventifacts above frost shattered bedrock of the Yukon-Tanana terrane. Above this lies a 2.5 m loess cap containing the archaeological materials. The oldest components are found within 3 paleosol complexes in the lowest meter of the loess. A thin continuous sand within the loess cap seals the archaeological remains and shows no deformation due to frost involutions or gelifluction. The inception of paleosol formation appears to date the time when regional sand dune deposition ceased and allowed initial habitation of the area. Excellent bone preservation at this location offers an opportunity to reconstruct subsistence and environments in Interior Alaska 11,500-10,000 years ago. A classic assemblage of late Pleistocene large game (mammoth, bison, and elk) are found here. In addition, calcareous root casts act to preserve a set of small game and avifauna that includes swans, geese, and cranes previously unknown in early Alaskan sites.

CROWELL, Aron (University of California - Berkeley)
Russian Household Archeology at Three Saints Bay, Kodiak Island

Two late 18th century Russian dwellings -- the foundation of a large log house and a rectangular semisubterranean structure -- were excavated in 1990-91 at the Three Saints Bay site, Kodiak Island, by a joint U.S.-Soviet team representing the University of California, the Sakhalin Regional Museum, and the Kodiak Area Native Association. The excavations provided data on economic and status divisions among the Russian settlers, and evidence of dependency on Native Alaskan technology and diet. The artifact assemblage from the semisubterranean house included English pearlware, gun flints and lead shot, as well as abundant iron. Koniag artifacts from the same house include gravel-tempered ceramics, slate ulus, and decorative items, but no hunting implements or other "male" tools, suggesting the possibility of a Russian male/Koniag female household.

DILLIPLANE, Timothy (Ty) L. (Anthropology Department, Brown University)
Investigating the 'Russian' in "Russian America": Lifeways at the First New Archangel, 1799-1802

Russian colonies in North America were separated from the motherland by considerable distances, sporadic communications and supply, and differences in environmental and cultural surroundings. Research is underway to gain preliminary insights into how and why traditional Russian culture changed or remained the same in such circumstances. Elements for analysis include customary work and recreational activities, as well as the material things associated with them. Documentary, oral history, and archaeological materials are considered equally important to the study.

The settlement chosen for initial attention is the first New Archangel, an obscure colony in southeastern Alaska. Known activities and items used at the briefly existing outpost are examined. Concluding remarks consider possible causal factors for the retention or change of traditional behaviors.

DIXON, E. James, (University of Alaska Museum)

Late Pleistocene/Early Holocene Prehistory of Eastern Beringia

Three prehistoric cultural traditions have been documented in eastern Beringia, which are important to understanding the human colonization of the New World. These traditions are the Nenana complex, the American Paleoarctic tradition, and the Northern Paleoindian tradition. The sequence and age of these traditions in eastern Beringia strengthen Fladmark's (1979, 1983, 1986) hypothesis that early human groups may have moved from eastern Beringia south along the northwest coast of North America during the late Pleistocene. This model is supported by the contemporaneous age and typological similarities between the Nenana and Clovis complexes. Early human groups may have spread southward along the western coasts of the Americas, resulting in a comparatively rapid colonization of the Americas at the close of the Pleistocene.

EASTON, N. Alexander (Department of Anthropology and Director of Research, Yukon College)
**Crossing Disciplinary, Geographical, and Conceptual Boundaries in Archaeology:
The Interdisciplinary Imperative of Underwater Archaeology**

The Montague Harbour Archaeology Project is driven by the hypothesis that significant archaeological remains related to maritime cultural adaptations have been inundated due to rising sea levels during the post-glacial period on the Pacific coast. Operationalization of this hypothesis demands an interdisciplinary research methodology, involving both terrestrial and marine archaeologists, quaternary geologists and botanists, biologists and oceanographers, as well as the incorporation of a large number of public volunteers and contributors. Methods of research have included geological coring, in order to gather data on the extent and rate of Holocene sea level rise, intertidal excavation of beaches fronting shoreline middens, and controlled excavation of submarine sediments. The initial data documents fairly rapid transgression within the harbour during the late Holocene, apparently stratified intertidal midden and cultural deposits overlying mineral soils containing artefacts and the presence of a variety of artefacts and coherent stratigraphic distinction including a rich organic strata dating to c. 6,800 BP, within the submarine sediments. Important questions regarding site formation processes and the effects of benthic bioturbation confound these data. A variety of analytic and field methods, drawn from a range of disciplines are necessary to address this uncertainty. Their resolution will lead to a significant re-orientation and assessment of the nature and temporal depth of the coastal archaeological record.

EDWARDS, Mary (Department of Geology and Geophysics, University of Alaska Fairbanks)
Past Climate and Vegetation in Beringia 14,000-8,000 yr BP: A Review

Considerably more information is available on late-Quaternary environments of Alaska and northwest Canada (eastern Beringia) than on eastern Siberia and Chukotka (western Beringia). I discuss eastern Beringia in some detail and western Beringia briefly.

General Circulation Model simulations for the period 18 Ka-present complement proxy data from pollen analyses and other sources for eastern Beringia (Barnosky, *et al.* 1987; Lamb and Edwards 1988; COHMAP members 1988; Bartlein, *et al.* 1992). As GCMs work in "real" time, I have included in my discussion approximate calibrations of the radiocarbon record, based in Bard *et al.* (1990).

At 15 Ka, the Laurentide ice sheet, which lay directly to the east, exerted a strong effect on global circulation. A cold, high-pressure air mass over the ice sheet diverted the jet stream, and westerly storm tracks, to the south; climates were cold and dry. Eolian activity was widespread and pollen records indicate sparse, treeless vegetation cover, dominated by herbs and lacking mesic tundra elements such as heaths.

Between 15 Ka and 12 Ka, as the influence of the ice sheet lessened and circulation patterns became more similar to those of today, moisture levels probably increased. Temperatures ameliorated, while remaining cooler than present. Birch (probably shrub birch) expanded during this period, earlier in the west and later in the east. At about 11,000 radiocarbon yr BP cottonwood

(possibly aspen also) became locally abundant at sites widely scattered across the region (calibration pushes back the start of this episode to ca 12.5 Ka). It is hard to assess the overall abundance of poplar on the landscape; it seems probable that the vegetation was a mosaic of herbaceous communities on the driest sites, birch scrub in more mesic sites, and poplar and willow around lakes, along watercourses, and in other mesic, disturbed sites.

The period 12 Ka to 8 Ka saw summer insolation values peak (at 10 Ka) and winter insolation at a low. Seasonality was heightened, with summers ca 2° C warmer than present and winters colder than present. The presence of Juniper in greater abundance than present ca 10 Ka to 8 Ka (calibrated ca 11 Ka to 9 Ka), suggests particularly warm, dry conditions. Between 9.5 Ka and 9 Ka (calibrated 11 Ka - 10.5 ka), white spruce appeared in NW Canada, where it grew well past modern treeline, the Yukon Flats, and the Tanana basin. Pollen records in Alaska suggest populations may have expanded then contracted again. The GCM simulation for 9 Ka shows a strongly developed Pacific High, which may have kept summer precipitation lower than present as well as enhancing summer warmth. Between 10 and 8 Ka was probably the driest, as well as warmest, period of the Holocene. Spruce may at first have occupied only more mesic sites; but the nature of communities that may have occupied drier habitats is unclear. Today in interior Alaska, aspen, juniper, or grass-sagebrush vegetation occupy the warmest, driest sites. Further research is needed on the early Holocene period, which is such a critical phase for human activity in Alaska.

Paleoecologic and paleopedologic data from the lowlands of northeast Siberia suggest cold, xeric conditions at ca 15,000 radiocarbon yr BP. Dated wood from Arctic coastal regions as old as 9000-10,000 radiocarbon yr BP, shows that forest or woodland (predominantly tree birch) extended several hundred km north of the current treeline during the early Holocene. The climatic transition was accompanied by extensive thermokarst activity and the development of thaw lakes or *alassy*. A more detailed study of vegetation change during this period is currently underway in the Magadan region to the south.

FALL, James (Division of Subsistence, Alaska Department of Fish and Game, Anchorage, AK)
An Update on Subsistence Uses in Alaska Native Villages Following the EXXON VALDEZ Oil Spill

This is the third in a series of papers that have summarized the finding of research by the Division of Subsistence concerning changes to subsistence uses of fish and wildlife resources in communities affected by the *Exxon Valdez* oil spill. Previous research documented stark declines in harvest levels in 10 Alaska Native villages following the spill. In 1991, the division undertook additional research in seven of these villages (Tatitlek, Chenega Bay, English Bay, Port Graham, Ouzinkie, Karluk, and Larsen Bay) in order to understand subsistence patterns in the second year after the spill. In total, 221 households (84 percent) were interviewed. Preliminary findings suggest that levels of subsistence uses rebounded in the Cook Inlet and Kodiak Island villages, but in some cases remained below pre-spill averages. On the other hand, overall levels of subsistence use in the Prince William Sound villages showed no signs of recovering to pre-spill measurements. Reasons for these differences in post-spill subsistence patterns will be discussed.

FARRIS, Glenn J. (California Department of Parks and Recreation)
Life at Fort Ross as the Indians Saw It: Stories from the Kashaya

History is generally seen through the eyes of the dominant class in a society. Rarely is the viewpoint of the underclass, stated in their own words, expressed. In his compilation of the oral history and folktales of the Kashaya Pomo, linguist Robert Oswalt has provided some fascinating accounts of life with the Russians and Alaskan Native peoples experienced by these natives of the vicinity of Fort Ross. Such things as new foods, marital experiences including domestic violence, suicide of a spouse, at least one industrial accident, the marvel of a passing Hudson's Bay party and more are woven into these tales. Some are in the form of folk history, others cautionary tales. Together they form a remarkable body of history for a people typified as being ahistorical. This

paper will sift through a number of the relevant Kashaya texts and try to place into perspective the observations of everyday life contained in them.

GERLACH, S. Craig (Department of Anthropology and Alaska Quaternary Center, University of Alaska Fairbanks), **GRAUMLICH, Lisa J.** (Laboratory of Tree-Ring Research, University of Arizona), and **MASON, Owen K.** (Alaska Quaternary Center, University of Alaska Fairbanks)
Long-Term Trends in Temperature from Modern and Archaeological Tree-Ring Samples, Kobuk River, Alaska

Variation in tree-ring indices from sites at or near latitudinal tree-line in northwestern Alaska have been shown by others to be related to variation in summer temperature and published reconstructions of temperature extend back to AD 1524. We report here on efforts to infer variation in temperature back to A.D. 1000 on the basis of the extensive archaeological tree-ring collections made by J.L. Giddings, Jr. during expeditions along the Kobuk River during the 1940s and archived at the University of Arizona and the University of Alaska Fairbanks. Two obstacles exist in inferring temperature variation from the white spruce (*Picea glauca*) tree-ring chronology published by Giddings as a tool for dating archaeological artifacts. First, although sample size was adequate for the purpose of establishing reliable cross-dating, the sample size is too small to be reliable for climatic reconstructions. Second, quantitative modeling of the tree-growth-climate relationship is hindered by the fact that Giddings' tree-ring chronologies end in 1948 and observational climatic records in the region did not begin until the early 20th century. We are currently expanding the sample size of the archaeological chronology by cross-dating and measuring tree-ring samples from Giddings' collections. In addition, during the summer of 1991 we sampled white spruce at six sites along the Kobuk River in the vicinity of the sites where the archaeological material was obtained. The new collections represent a wide variety of microsite conditions. Preliminary results indicate that a strong summer temperature signal is present in the modern collections and that they have similar statistical properties as compared to the archaeological materials. Implications for long-term variation in temperature will be discussed.

GOEBEL, Ted (Department of Anthropology, University of Alaska Fairbanks)
Is There a Pre-Microblade Paleolithic in Western Beringia?

With the recent excavations at Walker Road and Shaw Creek in central Alaska, it has become increasingly clear that a Late Paleolithic, "pre-microblade" population occupied eastern Beringia prior to 11,000 years ago. However, by 10,600 years ago, as evidenced by radiocarbon dates from Dry Creek and Mt. Hayes 111, such industries apparently disappeared, giving way to more wide-spread Paleoarctic industries characterized by wedge-shaped cores, microblades, and transverse burins.

Outside central Alaska, the archaeological record for the period spanning the late Pleistocene/early Holocene is less clear. This is especially the case in Chukotka and Kamchatka, where well-stratified and well-dated sites are extremely rare. Although at least 10 sites with microblades have been discovered and excavated in western Beringia, only one, Ushki 1 (Level VI), has been firmly dated to the Pleistocene ($10,760 \pm 110$). Like in Alaska, therefore, microblade industries do not predate 11,000 years ago.

Putative pre-microblade industries have been found at Ushki 1 (Level VII), Berelekh, El'gakhchan, Kymyneikei, Orlovka II, Lopatka, and Kussyuveem IV & VI. Although much has been written about two of these (Ushki & Berelekh), controversies continue to surround their dating and artifact contexts. At Kymyneikei, Drozdov and Laukhin have presented a small set of lithics collected within a 30,000 year old morainal deposit. These artifacts, however, appear to be no more than geofacts. The remaining sites are undated, and assigned tentatively to the Paleolithic based on typological grounds. Barring these problems, however, it is becoming increasingly clear that in Beringia from about 14,000 to 11,000 years ago there was a pre-microblade, bifacial pointbearing population that was replaced rather abruptly by the incursion of microblade-bearing populations 10,500 years ago.

**GOLDSTEIN, Lynne (Department of Anthropology, University of Wisconsin-Milwaukee)
The Russian Cemetery at Fort Ross: A Reflection of Social Organization**

This paper will describe our excavations of the cemetery of the Russian-American Company at Fort Ross (1812-1841), as well as a preliminary analysis of the materials recovered. Slightly over one-half of the cemetery has been excavated to date, and several questions can be examined: 1) What is the relationship between the cultural prescriptions for mortuary behavior and what people actually do? 2) How the cemetery is organized—who is buried there, what is buried with them, and where are they buried? 3) How was space used—in terms of placement of individuals within the cemetery, and placement of groups in relation to each other. Traditionally, the spatial organization of cemeteries has been interpreted in terms of family and kin groupings, but such an organization is less likely in a frontier settlement where family groups were incomplete or absent. The analysis should provide insight into the organization of colonial Russian and frontier settlements in specific, as well as the spatial organization of cemeteries in general.

**GRAHEK, Daniel (Oral History Collection, Rasmuson Library, University of Alaska Fairbanks)
Project Jukebox**

Project Jukebox is a multi-media computer system designed to preserve oral histories and associated photographs, maps, and text. Audio tapes are digitized into a Macintosh computer for long term preservation. This new on-line multi-media computer program will allow users to search for oral histories, and access the audio directly through the computer. The new interface allows the user to listen to the audio and access support information such as release agreements, photos, maps, and transcripts on-line, thus improving access and usefulness; and unlike analog recordings, digital recordings can be copied with no loss in sound quality. In the future we will be able to transmit the recordings to rural sites along with the associated text and photographic material.

**HARRITT, Roger K. (National Park Service, Anchorage, AK)
Continuity and Change in Prehistoric Eskimo Socio-Territorial Patterns in Bering Strait**

Eskimo culture, both prehistoric and historic, is often portrayed with an emphasis on whaling as an integral part of subsistence, and having profound influence on social organization and settlement locations. Here, a different aspect of the development of historic Native culture is examined, that is the importance of caribou, seals and salmon, over the course of 5,000 years of Eskimo prehistory. Exploitation of these three types of game represents a theme common to each of the ancestors of the historic Eskimo, those collectively designated as the *Seward Strand tradition* (Harritt 1992). Corresponding land use patterns reflect a persistent game exploitation pattern that is analogous to those historic Alaskan Eskimo forms of small settlements within a tribal territory. The general pattern reflects a trend of development in Alaskan Eskimo areas that has proceeded over the course of 5,000 years. It is suggested the small sea mammal, caribou and salmon subsistence pattern provides a baseline configuration of some cultural elements against which prehistoric and historic Alaskan and Asian Eskimo social organization and subsistence patterns can be more precisely compared and evaluated.

**HENRIKSON, Steve (Alaska State Museum, Juneau, AK)
The Raven's Tail Robe Project at the Alaska State Museum**

In 1990, the Alaska State Museum sponsored a project to weave a "Raven's Tail" robe, an early style ceremonial robe used by northern Northwest Coast tribes. These early geometric-patterned robes were replaced by the crest-figured Chilkat robes during the first decades of the nineteenth century. Only a few old robes, and a handful of fragments and explorers' drawings, have survived to the present day as evidence of this tradition. Cheryl Samuel, an expert weaver

residing in British Columbia, reconstructed the Raven's Tail techniques by examining old robes and fragments, and a group of her students volunteered to weave a new robe at the museum. Unlike most museum objects, the new robe was to be used by dance groups and orators at traditional functions.

The reemergence of Raven's Tail weaving in Alaska came about through a combination of weaving expertise, ethnohistorical research, Northwest Coast Indian art history, and the knowledge of Tlingit and Haida elders. Both native and non-native weavers and scholars have participated. The reintroduction of this technique to its place of origin, and the creation of a new robe for traditional use, had generated a number of interesting questions. Who should have the knowledge necessary to weave a robe? Should new robes be used in traditional ways, or should they simply serve as art pieces? If they are used for dancing and the giving of speeches, what protocol should apply? Are these robes in the public domain, or are they owned as crests by specific clans? Should museums, as ultimate protectors and preservers of material culture, allow pieces from the collection to be "used"? This paper focuses on the Alaska State Museum robe project, the theory and philosophy of contemporary Raven's Tail weaving, and how this variety of people and disciplines has helped return this traditional art to Alaska.

HEREM, Barry (Independent Artist)

The Tlingit Art Treasures of Whale House of Klukwan

Four magnificently carved, ten-foot high houseposts, an enormous carved Rainwall Screen and a twelve-foot long "Woodworm Dish" have been held off limits to public and private viewing in a Seattle storage facility for nearly a decade. Well described as "the great treasures of the Northwest Coast," these works from the village of Klukwan in Alaska are the subject of a bitter court feud between townspeople and the family which claims hereditary ownership of them. This battle and its current status, in addition to the origins and meanings of the works themselves, will be the subject of a presentation which will feature rare full-color photographs of the art works.

HEREM, Barry (Independent Artist)

"Modern" Northwest Coast Art

For twenty years and more the traditional art of the Northwest Coast has directly inspired both native and white artists to new forms and ways of manipulating the old in medium as diverse as serigraph prints, rolled aluminum plate, cast paper and monumental bronze sculpture, as well as wood. This will be a brief, close view of a few of the contemporary artists—Duane Pasco, Jim Schoppert, Barry Herem, Bill Reid, Harry Calkins, Susan Point, and others—who have "pushed the form" so to speak in many often large and unusual works of public and private art which owe some measure of allegiance to the artistic conventions of the Northwest Coast.

HIGGS, Andrew S. (Department of Anthropology, University of Alaska Fairbanks)

Lithic Refit Analysis of the Walker Road Site

Lithic artifacts from the terminal Pleistocene Walker Road archaeological site (HEA-130) in central Alaska were examined for possible refits in an attempt to study their archaeological and systematic context. Refitting was successful in reconstructing two partial cobbles, one nearly complete cobble and several smaller reduction episodes. The refits demonstrate where initial tool production was taking place and infer contemporaneity of spatially discrete archaeological features.

HOFFECKER, John F. (Argonne National Laboratory, Argonne, IL)

Geoarchaeological Reconnaissance for Late Pleistocene Sites in Central Alaska

Geoarchaeological reconnaissance surveys for Late Pleistocene sites have been conducted in the north-central foothills of the Alaska Range, and in the Upper Kuskokwim and Lower Holitna lowlands. The survey strategy reflected an "applied geomorphology" approach. Last Glacial

deposits of primary loess, loessic colluvium, side-valley fan alluvium, and glaciofluvial outwash were sampled in the north-central Alaska Range. In the Upper Kuskokwim/Lower Holitna lowlands, most sampling was concentrated on Last Glacial loess and loessic colluvium. The oldest archaeological remains presently known in central Alaska are buried in deposits of loess that are younger than 12,000 years B.P. Older loess deposits are rare in the north-central Alaska Range, but appear to be widespread in the Upper Kuskokwim/Lower Holitna lowlands, which represent a promising geomorphic context for pre-12,000-year-old sites.

HOLMES, Charles (Office of History and Archaeology, Alaska Department of Natural Resources), **YESNER, David** (Anthropology Department, University of Alaska Anchorage), and **CROSSEN, Kristine** (Geology Department, University of Alaska Anchorage)
The Broken Mammoth Archaeological Project: The 1991 Season

Excavations continued at XBD-131, a multicomponent site in the central Tanana Valley dating to four broad time periods (c. 3000 B.C., c. 5200 B.C., 8500 B.C., and 9500 B.C.). Specific goals included: (a) identification and finer separation of the several distinct habitation episodes found in the deepest strata; (b) more precise dating of the various components; (c) collection of data for reconstructing the past environments; and (d) increasing sample size in all data categories. Additional testing was done at the Mead Site to better understand the complexity and extent of the deposits. Regional survey was conducted to test the hypothesis that landscapes with specific CaCo₃ rich deposits would preserve ancient fauna in archaeological context.

JACKSON, Louise M. (Department of Anthropology and Sociology, University of British Columbia)
Ceramics in Russian America: Insights from the Kurile Islands

This paper examines ceramic assemblages excavated from the Kurile Islands under the direction of Valery Shubin and currently in the collection of the Sakhalin Regional Museum in Yuzhna-Sakhalinsk. Data is drawn from the 1991 summer expedition to Aleut Bay, Urup Island, as well as previous seasons' excavations. My goal here will be to combine a preliminary review of historical information concerning supply to the Kuriles with information gleaned from the ceramic evidence. As well as discussing vessel types, I will present both Russian and British factory and pattern identifications. Together these sets of information clarify and add to our knowledge of ceramic supply and distribution in the Northern Pacific during the 19th century. I will conclude by discussing the implications of the Kurile data for material culture studies elsewhere in Russian America.

KAPLAN, Lawrence D. (Alaska Native Language Center, University of Alaska Fairbanks)
Pleasing All of the People All of the Time: The Job of Translator

In translating from a Native language to English, one should be able to assure Native language speakers that the translation accurately represents the original text and conveys its integrity along with basic meaning. Native speakers may find transcriptions and translations of oral narrative dry and lacking the original "mood" or "feeling," elements often conveyed by intonation and hard to render on paper. The translator must also consider the audience for the translation and supply information which may be essential to understanding the text but may be unknown to those unfamiliar with the Native culture. Yet any commentary should not be of such quantity as to outweigh the original text. Questions of producing a translation acceptable to Native speakers while appropriate to others adds a complex dimension to the task of Native language translation.

KING, Robert E. (State Archaeologist, Bureau of Land Management, Anchorage, AK)
Alaska Through the Stereoscope, 1860's-1930's: Early Photographs and the Mystique of the "Last Frontier"

Beginning in the late 1860's, Americans began buying the first commercially-produced stereo photographs (called "stereographs" or "stereo views") of Alaska. While earlier paintings, books, and other printed media had visually portrayed Alaska, their availability and scope were relatively limited and their depictions were frequently distorted. By contrast, stereo views, including many of Alaska, became a national fad and were in most American homes by the early 1900's. As the first widely-available pictures of Alaska, stereo photographs provided many people with their first "real" look at the "exotic north." Yet what indeed did they see? And how "real" was it? In retrospect, some of today's popular ideas and misconceptions of Alaska can be traced to these highly popular, 3-D photographs of the later 19th and early 20th centuries.

Using slides, this paper will tell the little-known story of the importance of stereo photographs for helping shape, accurately or not, some of America's earliest ideas about Alaska.

KING, Robert E. (State Archaeologist, Bureau of Land Management, Anchorage, AK)
John Babel (1882-1979): Miner in the Valdez Creek Drainage of Central Alaska, 1920's-1950's

Today, the remains of a small rock cabin in Lucky Gulch off Valdez Creek on the south flank of the Alaska Range mountains in central Alaska stand as a silent monument to John Babel and to other Alaskan pioneer miners of the early 1900's. Babel, an Estonian immigrant to America, first came to Alaska in 1904 and worked at Nome, Fairbanks, and various other locations before arriving in the Lucky Gulch area by the 1920's. There, variously with partners or alone, he mined seasonally until retiring to California in the 1950's where he died in 1979. The rock cabin was his home while in the Valdez Creek area.

His history is one part of the larger story of the mining frontier of central Alaska. It parallels the lives and careers of other "sour dough" miners and provides new information on what was happening in the Valdez Creek Drainage in the decades following the initial gold strike of 1903.

Using slides, this paper will present a history of John Babel and his career as a miner in the Valdez Creek drainage after World War I.

KUNZ, Michael L. (Bureau of Land Management, Alaska)
The Obsidian Hydration Dating Technique and Problems Associated With Its Application in the Arctic

In northern and interior Alaska, dating prehistoric archaeological sites is extremely difficult. Due to the harsh climate, soil development and deposition is extremely slow and only rarely do dateable organic materials survive the burial episode. In fact many sites, especially those north of 68° latitude, never become truly buried. Additionally, the soil chemistry at most archaeological sites, especially in the forested interior, is not conducive to long term organic preservation. Finally, the occurrence of large, deeply buried sites, which could be expected to contain the organic material necessary for radiocarbon dating, is extremely rare. Therefore, in interior and northern Alaska the vast majority of archaeological sites can only be dated by methods other than radiocarbon analysis. Although reasonably accurate estimates of site age can sometimes be made through typological comparisons with other dated assemblages, most sites recorded at the survey level don't produce diagnostic materials. Site survey data indicates that the occurrence of obsidian in interior and northern Alaskan archaeological sites makes it feasible to use obsidian hydration dating to gain chronologic control over a meaningful percentage of these sites. For example, of 626 archaeological sites located by one survey in interior and northern Alaska, 187 or 29.9% contained culturally altered obsidian. On the other hand, only 5, less than 1%, of these 626 sites, yielded radiocarbon-dateable organics (Kunz 1991). However, additional data regarding regional obsidian sources and the geo-chemical composition of local obsidians must be obtained. Previous

research (Kunz, Cook, and Reanier, 1990) also indicates there are some Arctic-specific problems associated with the use of this dating technique. This paper provides an overview of a BLM research project aimed at collecting additional sourcing and geo-chemical data, elucidating the Arctic-specific problems and rendering the technique reliable for broad application in the Arctic.

LARSON, Mary Ann (Anthropology Department, Brown University)

"I Saw Jesus and the Whale Fly By": Associations Between Native Whaling and the Church in Northwest Alaska

Associations between the Christian Church and various aspects of the Inupiat whale hunt have had significant impacts on Native communities. Beginning with the arrival of the earliest missionaries, parallels and connections have been drawn between facets of Christian traditions and the rituals, symbols, and events surrounding the whale hunt. This paper investigates those associations and their possible roots as well as noting some archaeological implications, particularly in the areas of Cape Prince of Wales, Point Hope, and Barrow.

LEER, Jeffrey (Alaska Native Language Center, University of Alaska Fairbanks)

Audiovisual Encyclopedias of Language and Culture

We presently have the scientific and technological means to amass abundant and many-faceted documentation of aboriginal languages and cultures. Yet such documentation is largely being accomplished in small chunks, typically limited to one aspect of the language-culture network. This results from the fact that the documentary projects are designed by specialists who are not always concerned with other specialties, largely under the auspices of limited grants or endowments requiring a finished product as output. Where the language-culture is in immanent peril of extinction, this approach seems guaranteed to result in a hopelessly incomplete and uncoordinated patchwork of documentary efforts.

What I wish to discuss here is the possibility of undertaking what I call an audiovisual encyclopedia of language and culture, a vast database of videotaped utterances and texts on all areas of the language-culture network, recorded from native tradition-bearers in the native language. Once this database is amassed, it will be possible to use the expertise and technology at our disposal to create any number of educational products. But if the traditional knowledge is not gathered and stored before the death of its bearers, the fund of knowledge passed on to future generations will be incomparably the poorer.

LORING, Jon, BETTS, Robert, and CHANEY, Greg (Vanguard Research, Cultural Resource Consultants, Douglas, AK)

Recovery of a Pre-Contact Basket Style Fish Trap from Montana Creek in Southeast Alaska

A largely intact wooden basket style fish trap, discovered in 1989 eroding from fluvial gravel bar deposits at the confluence of Montana Creek and the Mendenhall River near Juneau, was excavated using wet site techniques in November 1991. The excavation, funded by Sealaska Native Corporation, was conducted under contract with the City and Borough of Juneau with major support from the Alaska State Museum. Two radiocarbon dates on elements of the trap collected in 1990 average 640 ± 50 B.P. or approximately A.D. 1310 making the Montana Creek fish trap the oldest basket style trap known from S.E. Alaska.

The cylindrical trap, constructed of spruce hoops and hemlock staves lashed with spruce root, measures approximately 3 m long and contains a funnel shaped collar attached to the trap entrance. Several pieces of cord and rope were associated with the trap. Two-strand twisted cord was tied to the staves at what appeared to be the location of a small door for removal of fish. Two loose

fragments of larger diameter rope were also recovered. No evidence of an associated weir or fishcamp was encountered and no clear indication that the trap was used at the location where it was found was obtained. Conservation of the fish trap will require several months of treatment in a solution of polyethylene glycol (PEG) at the Alaska State Museum before the trap can be placed on display.

LYNCH, Thomas F. (Cornell University)

The Peopling of South America: Historical Context and Global Perspective

Prolegomena: Europeans, more than Americans, have long been inclined to assume or accept a Paleolithic (Pleistocene) human presence in the Americas. For more than a century, there have been insistent claims of human occupation long before the sudden and obvious appearance, some 12,000 years ago, of Paleoindian hunters. The hypothetical earlier adaptations have been seen as more generalized, oriented towards broad spectrum gathering and collecting, and not reliant on cooperative hunting of large and/or gregarious mammals. Rather than resembling the late Upper Paleolithic hunters who first colonized the North Eurasian plains, beginning about 16,000 years ago, these "first South Americans" have been portrayed as having an Archaic-like adaptation, well known from Recent times, but also resembling reconstructions of Lower and Middle Paleolithic lifeways. Thus, the original South Americans have sometimes been seen, not as descendants of Paleoindians who adapted to tropical latitudes and crossed the Panamanian land bridge at the end of the Pleistocene Epoch, but as much earlier maritime or forest-adapted peoples who evolved *in situ*, or somehow traversed the oceans, or who followed the oceanic coastlines all the way from the Old World to the southern continent. In my presentation, several of these "pre-projectile point" hypotheses will be reviewed historically and evaluated against what is known today about the archaeological and paleoenvironmental contexts.

"The middle of the road is where the white line is—and that's the worst place to drive."
Robert Frost

MANN, Daniel H. (Alaska Quaternary Center, University of Alaska Fairbanks)

Northwest Coast Route Feasible by 18,000 yr BP

Ice sheet reconstructions have persisted in showing the entire northwest coast of North America buried by glaciers during the last glacial maximum, 18 to 14 ka BP. If correct, these reconstructions greatly restrict the feasibility of the northwest coast as a migration route for the first humans entering lower-latitude North America. New data on glacial history in southern Alaska indicate a different reconstruction of ice sheet extent and timing. I present evidence here for glacier extent on the continental shelf near Kodiak Island in the western Gulf of Alaska and near Lituya Bay in the eastern Gulf. Ice did not completely cover the continental shelf in either of these areas during the maximum extent of glaciers around 19 ka BP. The last glacial maximum consisted of two distinct glacial advances: the earliest and largest culminating between 20 and 18 ka BP and the second between 14 and 13.4 ka BP. The intervening, unnamed interstade was accompanied by a major glacier retreat in many areas. This interstade comprised a 2,000 - 3,000 year window when the northwest coast was partially deglaciated and eustatic sea level was approximately 100 m lower than present. Paleobotanical evidence indicates a tree-less coastal tundra along the northwest coast throughout the interval 23 to 11 ka BP. However, the critical habitat for early human migrants may have been the highly-productive and latitudinally-uniform, intertidal and nearshore environments accessible by small boats.

McCOY, Patricia (Bureau of Land Management, Glennallen, AK)

National Register Testing Archaeological Site GUL-225, Sourdough Campground, Alaska

Sourdough Creek Campground is a Bureau of Land Management (BLM) facility located within South Central Alaska, adjacent and immediately west of the Richardson Highway at mile 147. The

Sourdough Lodge, a roadhouse dating to 1906 and listed on the National Register of Historic Places is located north of the BLM managed property. The facility began as a 5 unit wayside in 1955. In 1959 the State of Alaska acquired management authority, transferring that authority to the BLM in 1967 and subsequently giving full ownership back to BLM in 1985. The Sourdough Campground has grown from the 5 unit wayside of 1955 to a facility with 20 camping units, 20 parking spaces for both day use and long term parking, and a capacity for approximately 100 people. Annual visitor use indicates approximately 30,000 visits per year; for the past six years the facility has provided parking for over 150 vehicles and more than 550 individuals on peak weekends. Due to this tremendous demand and popularity, the BLM has developed plans for upgrading and expanding this approximately 40 year old facility. Historic property surveys were conducted of the existing facility and the area proposed for reconstruction and expansion in 1987 and 1989. Sourdough Campground evidences Historic Native use, early fur-farming industry, mineral extraction for highway development and potential prehistoric utilization.

Consultation with the Alaska State Historic Preservation Officer in early 1991 resulted in a need to conduct National Register testing for site GUL-225, a possible pithouse. Given the current government cutbacks in budget, personnel and the ever increasing workload in resource management for the BLM, the Glennallen District Archaeologist proposed an opportunity to provide a more positive image of federal management practices, continue community education concerning historic properties, further community relations within the Copper River Basin and accomplish the necessary cultural resource work in order to achieve the BLM management goals. The Glennallen District Archaeologist contacted the local Gakona Troop Number 553 of the Boy Scouts of America. The scouts were invited to participate in the archaeological work which would be conducted for the National Register testing for this site within the Sourdough Campground. Response to the invitation was positive, with work scheduled for July/August 1991. The scouts will be involved in site mapping and excavation.

All work will be supervised by the Glennallen District Archaeologist and may involve the participation of other Bureau specialists such as the Outdoor Recreation Planner and Geologist, and even the Glennallen District Manager. Analysis is proposed for late 1991. With the emphasis on utilization of volunteers and the BLM Adventures in the Past program, the Glennallen District hopes to provide a positive encounter for the scouts and to generate a more culturally aware community. The BLM further intends to develop interpretative displays utilizing this project and the other historic sites located within this facility.

McCOY, Patricia (Bureau of Land Management, Glennallen, AK) and **KING, Robert E.** (Bureau of Land Management, Anchorage, AK)

Rediscovering the Past: The Story of BLM's Ongoing Efforts to Interpret the Sourdough Campground

What began as a routine investigation by the Bureau of Land Management of scant archaeological remains in the Sourdough Campground to precede the development of new facilities has brought unexpected results. Community help, including support by a Glennallen Boy Scout troop, along with the aid of Ahtna elders and the Ahtna Native Corporation have provided rich new information on Alaska's early 20th century history in this part of the upper Copper River Basin. These discoveries will be used in future public interpretation projects, including new signing at the campground and a video telling about the project and what life was like at Sourdough over the years.

Using slides, the authors of this paper will present information on this ongoing archaeological, ethnohistorical, and oral history project.

MIRAGLIA, Rita A. (Anchorage, AK)

The Importance of Native Involvement in Decisions Affecting Cultural Resources

Recent federal legislation concerning the disposition of Native American burials and funerary objects, coupled with similar pending state legislation, is forcing changes in the way archaeology is

done. The new legislation puts an increased emphasis on Native involvement in decisions affecting cultural resources. There has been considerable resistance to these changes in the community of archaeologists. It has become increasingly apparent that these changes will occur with us or without us. There is a need for re-evaluation of the goals of archaeological research in the light of the new legislation. This paper explores the controversy. Frequently used arguments against native involvement are examined, and recent instances of interaction between archaeologists and native groups, both positive and negative, are discussed.

MISHLER, Craig (Alaska Department of Fish and Game, Division of Subsistence)
Okiachaq: Inversion and Reversal in An Alutiiq Men's Game

In the villages of Old Harbor and Akhiok on Kodiak Island, men all ages continue to play an ancient subsistence-focused dart game called Okiachaq. This game is played only in late winter during Lent at a time when the Russian Orthodox Church forbids its members (virtually the entire population of both communities) from hunting animals. Nevertheless, Okiachaq allows men to pretend to hunt sea mammals while they wager bets based on their own and each other's perceived skill. Since the Church also discourages bingo during Lent, Okiachaq provides a playful restoration of the norms which prevail during the other 46 weeks of the year. Analysis of the rules and action underlying this game will be accompanied by a short video.

MORRISON, David (Archaeological Survey of Canada, Canadian Museum of Civilization)
An Archaeological Perspective on the Mackenzie Inuit Economy

The excavation of a number of late pre-contact and early contact Mackenzie Inuit sites in the western Canadian Arctic has revealed an interior occupational focus during the summer-autumn period which would not have been suspected from the ethnographic literature. It appears that while some Inuit were whaling on the main Arctic coast, other groups or social segments spent this same crucial time of the year exploiting fish and caribou in the near-interior of the Eskimo Lakes. This type of dual exploitative pattern is comparable to the Nunamiut-Taremiut situation in northern Alaska and may be typical of the western Eskimo in general. It has implications when considering the spread of Thule culture from the richer environments of Alaska and the Mackenzie Delta (which allow different economic strategies during the same season) to the much poorer environments of the Central Arctic.

MURLEY, Daniel F., (State Park Ranger, Ft. Ross State Historical Park, CA)
Daily Life at the Ross Colony, 1812 to 1841

In this paper, I discuss the daily lifeways of the inhabitants of the Ross Colony, and its supportive settlements. These include the Khlebnikov Ranch, the Kostromitinov Ranch, the Chernynkh Ranch, the Port Rumiantsev settlement and the Farralon Islands Artel. The paper addresses the contribution of all classes connected with this colony: the promyshlenniki, the Native Alaskans, the Native Californians and the creoles. Among the daily activities discussed are shipbuilding, brickmaking, farming, sea otter hunting, subsistence hunting and other necessary crafts. Although the majority of the paper will deal with work of the "common people," ongoing trade negotiations of the Russian American company officials are also considered.

NICHOLS, Johanna (University of California - Berkeley)
The Settlement of the New World: Linguistic Evidence

The four essential questions about the settlement of the New World are the age of the first colonization, the frequency of entries, their geographical source, and their migratory path within the New World. The evidence from grammatical typology and linguistic geography gives unambiguous answers to all four questions: the linguistic settlement of the New World is ancient (going back to 30,000 BP or earlier), the source lies at the eastern edge of the world's language

continuum and becomes increasingly westernized over time, there were several to many colonizations, and the route of migration once in the New World was along or near the Pacific coast down to about northern Peru (where the coast becomes arid), then inland to the upper Amazon.

This presentation will summarize the linguistic arguments for the age of first colonization from Nichols, *Language* 1990, and then survey the worldwide distribution of structural features in order to answer the questions about frequency and source of entries and migratory route within the New World. The features surveyed are all fairly stable in genetic groupings and somewhat prone to geographical spread, and they can therefore serve as markers of linguistic populations. Their distribution is surveyed in a sample of nearly 200 languages representing the world's language families. All of these features have one of two distributions: (1) Common in the easternmost languages (those of Australia, New Guinea, and sometimes Southeast Asia) and the New World; (2) common in northern and coastal Australia and New Guinea, sometimes Southeast Asia, and the central New World (Mesoamerica, the eastern U.S.). Sometimes the complementary or opposed feature is common in northern Eurasia, and then it is also relatively well attested in western North America but rare elsewhere in the New World. Features that have a global clinal distribution (such as presence of inclusive/exclusive oppositions, which are rare in Africa and western Europe and increase gradually to the east to reach almost 100% of the languages of Australia) have a similar clinal distribution within the New World, increasing in frequency from western North America to Mesoamerica to eastern North America to South America. Within the New World, several of the features have a markedly Pacific coastal distribution, pointing to a coastal route of linguistic diffusion.

The obvious interpretation would seem to be that the New World languages have their closest affinities to the languages of the southern Pacific rim, with Siberian affinities increasing to the northwest in the New World. The same stratification of features that obtains between coastal/northern and interior/southern Australia and New Guinea holds between South America and Mesoamerica plus eastern North America. Several features of Pacific Rim languages are coastal in the New World as in Asia. These facts suggest that linguistic colonization of the New World emanated ultimately from the same linguistic population that produced the colonizers of Australia-New Guinea, that colonizations were multiple and from an increasingly western source population, and that the route of spread once in the New World was chiefly coastal.

NOWAK, Michael (Department of Anthropology, Colorado College)

Ecology and Native American Thought, II: Surplus, Rationing, and Planned Consumption

The idea of consumption or use of a resource at a fixed rate is common in the Western tradition which frequently desires to project or plan for the future. In precontact Native America, the accumulation of resources beyond immediate needs usually occurs in response to specific, time limited goals. Such efforts most often tend to have less to do with long-term physical survival than with social standing and social activities. It is argued here that the planned accumulation of surpluses and "rationing" are concepts that, when present, are apt to be found among settled, horticultural, cultures of precontact America. These groups will exhibit some element of centralized planning or management.

NUTTALL, Mark (Department of Social Anthropology, University of Edinburgh, Scotland)

Heritage, Conservation, and Way of Life: Conflicting Ideas of Landscape in the Scottish Highlands

In April 1992, the Countryside Commission for Scotland and the Nature Conservancy Council for Scotland, two of the British Government's main environmental agencies, will merge to form Scottish Natural Heritage. This will have a profound impact on future conservation policy throughout rural Scotland, but is part of a wider process of changing ideas and images of 'natural' landscapes in the British Isles. Drawing on material from the Scottish Highlands, this paper

focuses on conflicting ideas of landscape and conservation, and argues that the emphasis on the scientific and natural value of the land ignores the cultural and historical aspects that have shaped those areas now regarded as part of the nation's heritage. In a sense, the Scottish Highlands are viewed as a sentimental landscape by outsiders, but for those who live and work there, the land is a memoryscape that carries the past through to the present.

ODDEN, Mary

Seizing the Day—Dialog between Cultures and Friends

When we write about the oral, we tend to turn the movement and life of orality into objects and still life. We do this because of a desire to be scientific, sometimes because of a romantic identification with our subject, and always because of the very nature of our language.

Contemporary folklorists and anthropologists struggle with a writer's tool kit to transmit the dynamic nature of orality, its context, and their own participation in the dialog.

OLEKSA, Michael J. (Reverend, St. Nicholas Russian American Church, Juneau, AK)

Preaching the Word: A Priest's Pastoral Journey in Russian America

Contrary to popular stereotype, Orthodox missionaries in Russian America did not impose their religious beliefs or value systems on indigenous Americans, but visited homes and villages at the invitation of the Native Alaskans, many of whom had already been baptized by contact with promyshlenniki. A composite pastoral journey on the Yukon provides the setting for a day in the life of an Aleut priest circa 1855, detailing the conditions of his life and his relations with company personnel, neighboring clerics and ecclesiastical superiors, as well as his Eskimo and Indian flocks.

OLSON, Wallace M. (Department of Anthropology, University of Alaska Southeast)

Through the Eyes of Outsiders: The Tlingit as Reported by the Explorers and Traders of the Late 18th Century

Historical accounts of encounters with the Tlingit oftentimes provide detailed information on settlements, material culture, trade, social relationship and other features of Tlingit life. The differences between the Spanish, French, Russian and American reports reflect both the cultural differences of the observers as well as the Tlingit responses to the various visitors. This paper presents a few examples of detailed descriptions showing how the historical record can enhance the understanding of culture history.

OSBORN, Sannie Kenton (University of Wisconsin - Milwaukee)

Death in the Daily Life of Russian America

Investigations into mortuary practices of the 19th century Russian-American frontier mercantile colonies offer a fascinating mechanism through which it is possible to understand the dynamics of hierarchical social organization, acculturation processes and the effects of colonial policies on culturally diverse populations coexisting in historic multi-ethnic frontier locations. Death was very much a part of the daily lives of the Russian colonists, Creoles and Native populations; and the treatment accorded these individuals in death provides an opportunity to more fully understand them in life. The influence of the Orthodox Church, largely inseparable from the Russian government during this period, is also examined through an analysis of the historic burial customs.

Testing of research questions focuses primarily on the Russian colony in California, using data derived from historical archives and archaeological excavations at the Fort Ross cemetery. However, comparisons between the Russian settlements in Alaska and California are offered in order to understand wider ranging social patterns. Extant archival materials for the Russian-American occupation of California and Alaska are voluminous but tantalizingly incomplete—especially noteworthy is the absence of death records for the Ross colony in the church metrical

books. It is only through this combination of archival and archaeological research that one can understand the mortuary behavior within the Russian-American Company's sphere of influence. This research resolves a series of unanswered questions about the extent of stability and change in societal values in such peripheral outposts.

PARKMAN, E. Breck (Department of Parks and Recreation, CA)
A Fort by Any Other Name: Interpretation and Semantics at Colony Ross, California

From 1812-1841, the coast of northern California was the scene of an active Russian-American Company outpost, Colony Ross. Throughout the American Period, Colony Ross has been better known as Fort Ross, and is in fact today preserved as Fort Ross State Historic park, a unit of the California State Park System. This paper is a discussion of current interpretive perspectives at Fort Ross SHP, and how the conceptual models of fort and colony have led to remarkably different perspectives on interpreting day-to-day life at Colony Ross.

PIERCE, Richard A. (Department of History, University of Alaska Fairbanks)
The Russian American Company Correspondence as a Source for the Study of Colonial Russian Lifeways

This paper has several objectives. The first part examines the extent of prior research concerning the symposium theme, and emphasizes the critical need for an ever-increasing focus on that topic. The following section then examines the correspondence of the governors of Russian America as a potentially rich source of information regarding colonial daily life. An update is given concerning the compilation of a calendar and index for the correspondence.

PILON, Jean-Luc (Archaeological Survey of Canada, Canadian Museum of Civilization)
Palaeo-Eskimo Remains from the Lower Mackenzie Valley, District of Mackenzie, Northwest Territories, Canada

To date, evidence of Arctic Small Tool tradition (ASTt) use of the southwest Anderson Plain, east of Inuvik, have been found at four distinct localities. East of this region, a southern shift of Pre-Dorset range into the barrenlands of the District of Keewatin and perhaps as far west as Great Slave and Great Bear Lakes is generally thought to have begun about 3500 B.P. This inland movement was made possible by a marked dependence on the seasonal movements of caribou from their tundra calving grounds to their winter ranges in the northern boreal forest. Available radiocarbon dates for two of the Anderson Plain sites are roughly contemporaneous with this movement; 3390±255 (S-3000) and 3470±430 (S-3377) B.P., respectively. However, a distinctive lithic raw material, vesicular clinker, links three of these sites to the coastal region in the vicinity of Cape Bathurst, more than 300 km north of the northernmost of the four Anderson Plain ASTt sites. The maintenance of a coastal link is in contrast to the specialized economic pattern of the Keewatin Pre-Dorset. Moreover, an assessment of the artifacts found at the Anderson Plain ASTt sites suggest closer links with the contemporaneous ASTt manifestation to the west (Denbigh Flint Complex). Indeed, these few sites may attest to the western extent of the Denbigh Flint Complex range at this time period.

PIPKIN, Mark E. (University of Oregon and Office of History and Archeology, State of Alaska)
The Use of Computer Aided Stratigraphic Analysis of Two Sites in Bristol Bay

This combination paper/poster session will discuss the use of computer graphics to aid in the stratigraphic interpretations of two archaeological sites located on Summit Island in Bristol Bay. This technique allows for isolation of specific strata and specific subsets of the artifact assemblage that may be found within it. This three dimensional display is interactive, allowing the user to rotate the view in any direction, or zoom in on to any specific area of the display. These "real time"

visual transformations, along with the ability to more easily link widely separated stratigraphic profiles, are well suited to the analysis of stratigraphically complex, multi-component sites. While the utilization of this graphical technique can be accomplished through readily available hardware and software, it can sometimes be technically complex, and currently has some limitations in the types of data that can be visually displayed.

PONTTI, Elizabeth, POWERS, Roger, GOEBEL, Ted, and BIGELOW, Nancy (Department of Anthropology, University of Alaska Fairbanks)
The Denali Complex in Light of New Finds at Panguingue Creek, Central Alaska

During the summer of 1991 intensive excavations were conducted at the Panguingue (pronounced pan-ghin'-ee) creek site (HEA-137) in the Nenana Valley. A crew of 20 excavated 66 m², further revealing three stratigraphically separate living surfaces ranging in age from about 10,000 to 5,000 years ago. Component I, with an average radiocarbon date of 9,951±56, is represented by a small lithic assemblage that consists of one subprismatic blade/flake core, six tools, and 60 flakes and debitage pieces. Tools include transverse scrapers, a chi-tho, and lanceolate projectile points. Although microblades are absent, the tool inventory of this component suggests Denali Complex affinities. Component II, with an average date of 7,711±97, is characterized by a lithic assemblage of over 5,000 flakes, over 150 microblades, nine cores, and 60 tools. Although this component is also attributed to the Denali Complex, many technological/typological differences can be seen between it and earlier, ca. 10,000 yr BP Denali Complex industries. Component III, finally, has an average date of 5,260±54. It is represented by only 20 lithic waste flakes, two end scrapers and one double side scraper. Although diagnostic material is absent, its age suggests affinities with the Northern Archaic phase of central Alaskan prehistory.

REANIER, Richard E. (Department of Anthropology, University of Washington)
Spatial Analysis at the Bateman Site; Refinements to K-means Clustering

Spatial analysis using *k*-means clustering was introduced in the early 1980's by Kintigh and Ammerman as an alternative to other methods such as nearest neighbor and various kinds of quadrat analysis. Briefly stated, the method subjects artifact *x* and *y* coordinates to nonhierarchical, divisive cluster analysis. The resulting clusters are then evaluated for content. A critical review of the method has revealed serious shortcomings in the identification of the optimal cluster configuration and in identification of single clusters. The randomization method used to identify optimal cluster configuration is entirely dependent upon excavation grid orientation, and cannot identify small, single clusters. The method provides no means of assessing the statistical significance of the various cluster configurations. Here, I propose a means of identifying optimal cluster configurations that utilizes Monte Carlo methods. This modification simultaneously overcomes both the grid orientation dependence, and the single cluster identification problems, and also permits identification of statistically significant cluster configurations. The revised method is demonstrated on materials recovered from an inland Ipiutak house floor at the Bateman Site.

REED, Irene (Alaska Native Language Center, University of Alaska Fairbanks)
Typical Problems in the Translation and Analysis of Yup'ik Place and Personal Names

A discussion of some results from my perspective as reviewer and proofreader of documents from various projects, including the BIA ANCSA-ANLC Project, for which Yup'ik speaking transcribers and translators have done the most important part of the work. Included will be typical problems encountered in the analysis of place and personal names, and some samples of analysis and interpretation.

REINHARDT, Gregory A. (Department of Behavioral Sciences, University of Indianapolis)
A Typology of Protohistoric Eskimo Dwellings

The popular misconception of snowhouses, or "igloos," as the Eskimo dwelling obscures the reality that many dwelling types characterized this culture area. Every Eskimo society in the contact era seemingly had more than two dwelling types at its annual disposal, although this study focuses on one primary type each for the winter and nonwinter periods. Responses to local subsistence and settlement pattern options, these seasonal housing forms illustrate much design diversity. Nevertheless, once we look past their unique features, primary dwellings within the Eskimo realm appear to sort out into a few basic types.

RUPPERT, James (English Department & Alaska Native Studies, University of Alaska Fairbanks)

A Bright Light Ahead of Us: Belle Deacon Telling Tales in English and Deg Hit'an

Well-known artist and storyteller Belle Deacon recorded versions of traditional stories in both Deg Hit'an and English. While most elements of narrative structure are retained in translated and English versions, some significant elements appear to be different. This presentation will attempt to identify the areas of dissonance to establish her aesthetic of storytelling in English and its influence on narrative structure and presentation.

SALEEBY, Becky (National Park Service, Anchorage, AK)

Culture Change During the Gold Rush Era: A Closer Look at Alaska Native Cultures in a Transitional Period

With the coming of the first Russian, English, and Spanish explorers and traders to Alaska during the 18th century, the traditional cultures of Alaska's native people gradually began to change. In some areas, however, it was not until near the turn of the 20th century—when gold rushes brought thousands of prospectors and adventurers into the state—that the most drastic, irrevocable culture changes occurred. Despite the passage of over 250 years since first European contact and the rapid acculturation as a result of the goldrush population boom, many Alaska natives have still managed to hold fast to some aspects of their traditional ways of life. This paper examines the impacts that the flurry of gold or copper mining during the first decades of the 20th century brought to native cultures in areas of the state, such as the Kantishna drainage, Wrangell-St. Elias region, and the Koyukuk district, and compares how and why culture change varied from region to region.

SCHROEDER, Robert F. (Division of Subsistence, Alaska Department of Fish and Game, Douglas, AK)

Hunting Territoriality in Southeast Alaska

Early ethnographic literature describes territories owned and defended by localized Tlingit clans and kwans. Clan and kwan boundaries appear to have been well known, and rights to harvest anadromous fish and other wildlife resources within owned territories were managed by the owning group. Contemporary community subsistence research conducted in Angoon and Hoonah shows that traditional kwan boundaries continue to be respected with most of the fish and game harvested by each community taken from within the Kootznoowoo and Huna territories, respectively. Focusing on Sitka black-tail deer, this paper documents the continuity of hunting and fishing territories and contrasts the spatial organization of Tlingit harvesting with more dispersed, opportunistic hunting patterns of other, non-Native Southeast Alaska communities.

SCHULTE, Priscilla (Department of Anthropology and Sociology, University of Alaska Southeast), and **AUTREY, John T.** (Forest Service, Tongass National Forest)
UAS Ketchikan Community Ethnoarchaeological Field Study of Traditional Native Subsistence Practices in Southern Southeast Alaska

A slide presentation documenting an ongoing ethnoarchaeological project involving the USDA Forest Service and State of Alaska archaeologists, University of Southeast (UAS) anthropologists, and Native Elders from southeast Alaska. The focus of the project has been to explore the continuity and change in the Native Cultures of Southeast Alaska through the analysis of subsistence practices of the past and present. UAS students have participated in the replication of traditional subsistence activities and a variety of archaeological fieldwork exercises. Native Elders have provided their interpretation of the traditional practices at the sites involving natural resources and have instructed participants in current subsistence practices.

SCHWEITZER, Peter P. (Department of Anthropology, University of Alaska Fairbanks)
Walrus for the Fox Farm? Conflicting Concepts of the Non-Human Environment in Coastal Chukotka

Coastal communities in Chukotka provide the regional focus. Topical sea-mammal hunting is the occupation in question, while reindeer herding is of secondary importance for the scope of this talk. The first step is to reveal "traditional" (19th century) native concepts of human-animal/nature-society relationships from the body of existing ethnographic literature. The notion that non-industrial societies are "natural" environmentalists has to be examined as critically as the image of native hunters as ruthless animal killers. It is argued that the level of technological possibilities has to be interpreted within the constraints of a religious/ritual matrix.

A second step is to analyze the contemporary situation which has to be understood largely in terms of the Soviet state economy. The "white" attitude towards the environment that governs this system is conceptualized, while the question of how far native concepts have changed thereby is addressed.

The growing native activities to revitalize their cultures, the rising "white" environmental movement in Chukotka, and the plans for an international park, set the background for the concluding part. Largely based on fieldwork, this section tries to configure the present and future constellation of interests in relation to environmental issues. The danger of a new "white" dictate on how to relate to resources and other parts of the environment evolves thereby as a basic issue.

SHEPARD, Rita S. (Department of Anthropology, University of California-Los Angeles)
Archaeology Complements Oral History and Reveals a Unique Ventilation System

In an important example of archaeology complementing oral history, anthropologists on the Unalakleet River discovered a unique architectural design. A local elder described traditional semisubterranean houses that he had visited in his youth which included an unusual hearth/flue arrangement. Constructed from a hollowed out log, a "flue" ran horizontally along the floor, from the hearth, through the tunnel, to the house entrance, thereby drawing air to the fire. At UKT-022, we excavated two indigenous dwellings and found archaeological evidence suggesting this device.

SHUBIN, Valery O. (Sakhalin Regional Museum, Russia) and **KNECHT, Richard** (Kodiak Area Native Association)
Historic Koniag Eskimo Settlements on Urup Island, Kurile Island Chain: Results of the 1991 U.S.-Russian Excavations

From 1828 to 1877, Aleutka Bay on Urup Island in the Kurile Chain served as headquarters for the Russian American Company's Asian fur-hunting activities. During this period, Aleutka Bay was inhabited by Aleuts and Koniag Eskimos who had been relocated from the Company's Alaskan settlements. In the summer of 1991, the Sakhalin Regional Museum and the Kodiak Area

Native Association conducted a joint archaeological excavation at Aleutka Bay. Results of the excavation indicate cultural continuity of many Koniag lifeways. Assemblages from Aleutka Bay appear to compare quite favorably with contemporaneous Russian American assemblages from Alaska and Northern California.

SIMEONE, William E. (Stephen R. Braund & Associates, Anchorage, AK)
From "The People" to "Aleut": The Construction of an Identity

The term Aleut, as currently used by the Alaska Native people of Prince William, lower Cook Inlet and Kodiak Island, was a designation introduced by the Russians. The process by which this appellation was developed into a cultural identity involved at least three factors: the loss of identity through demographic collapse; the Russian creation of a generic Aleut identity based on a specific type of Native who remained Native in character but "enlightened" in their acceptance of colonial authority and Russian Orthodoxy; and the development of multi-ethnic society of non-Native, Native, and Creole.

SIMON, James J.K. (Department of Anthropology, University of Alaska) and STEFFIAN, Amy F. (Museum of Anthropology, University of Michigan)
Late Kachemak Mortuary Patterns within the Kodiak Archipelago: An Evaluation of Additional Data from the Uyak Site

Previous studies of Kachemak Tradition mortuary practices focused on generalized discussions of treatment of the dead within the Pacific Eskimo area. Recently, Simon (n.d.) proposed a model which discussed the patterned variability in mortuary data between Kachemak sites in lower Cook Inlet and the Kodiak archipelago. New data from the Uyak site support this model of interregional variability. When compared to data from previous excavations, the new Uyak data also suggest that intra-regional variability exists within the Kodiak archipelago. Temporal variability is demonstrated by comparisons of new and old Uyak mortuary data. Intra-regional spatial variability may also exist in Kachemak mortuary patterns; but until these assemblages are better controlled chronologically, discussions of spatial variability will remain speculative.

SIMON, James J.K. (Department of Anthropology, University of Alaska Fairbanks), GERLACH, S. Craig (Department of Anthropology and Alaska Quaternary Center, University of Alaska Fairbanks), SWEENEY, Mary Ann, WILLIAMS, Catherine, and HIGGS, Andrew (Department of Anthropology, University of Alaska Fairbanks)
The Ethnoarchaeology of Reindeer Herding in Northwest Alaska

The effects and the role of reindeer herding in the human ecology of Seward Peninsula remain largely unexplored areas of investigation. Recent ethnohistorical investigations conducted by the Department of Anthropology, University of Alaska Fairbanks, in cooperation with the National Park Service, Alaska Region, suggest that the acquisition of reindeer by Alaskan Natives had various effects on human ecology. The integration of ethnohistoric data with the general history of the introduction of reindeer into Alaska suggests that the unit of analysis should be at the "family" level, as responses, effects, and adjustments to historical and ecological factors (i.e., involvement in missions, schools, and reindeer stations, availability of grazing ranges) had various effects on different "family" groups. During the 1992 field season, site structure from a sample of reindeer herding sites will be investigated on northwestern Seward Peninsula (Bering Land Bridge National Preserve). These sites represent one family's involvement in reindeer herding during the early 20th century and participation in a form of economic organization that incorporates aspects of both hunting and gathering and pastoralism. Integration of ethnohistorical, ecological, and archaeological data will provide an opportunity to better understand the role of reindeer herding in the human ecology of a single reindeer herding family.

SLOBODIN, Sergey (Archaeological Preservation Officer, Russian Academy of Sciences, Magadan)

The Late Paleolithic of the Upper Kolyma Basin, Russia

Recent archaeological field survey of the Upper Kolyma area of western Beringia has brought to light three new archaeological sites apparently dating to the Late Pleistocene/Early Holocene period. These sites, namely Uptar I, Kheta I, and Serdyak I, occur in shallow stratigraphic contexts where dating is problematic. No radiocarbon dates have been obtained that immediately date the cultural remains at these sites; however, the cultural levels at each site are sealed stratigraphically by a distinct band of volcanic ash. Tephrochronologic analysis by J. Beget is currently underway to test the hypothesis that these ash bands can be assigned to the Elikchan tephra, radiocarbon dated at numerous localities in the Upper Kolyma basin to ca. 8,500 yr BP. If this is the case, then each of these sites dates to >8,000 yr BP and is assignable to the Paleolithic of western Beringia. Artifact assemblages affirm such a designation; wedge-shaped cores, micro-blades, lanceolate bifacial points, burins, and end scrapers characterize these assemblages.

SOLOVJOVA, Katerina Grigorievna, (National Park Service, Alaska Region, Anchorage, AK)
Every Day Activity on the Construction Site in New Archangel or How the Tlingit Church was Built

This research, based on the original documents of Alaska Orthodox Church Archives in the Library of Congress Archives and Russian American Company Records in National Archives, is an attempt to reconstruct the process of building construction day-by-day in Russian America, on the example of the Tlingit (Koloshi) church. Studying of Russian wooden architecture and Russian architectural heritage in Alaska is difficult, because not many structures have survived to the present. Only four buildings in the Western Hemisphere are dated from the Russian Colonial Era. Thus, the main sources used for this study are reports, letters, edicts, regulations, and rare drawings that are often in poor condition. To my mind it seems to be very interesting to observe all stages in building construction from ground works through foundation and timber works, plastering and painting works, to roofing.

We know the main dates, and what buildings were built. But let's stop for a second and think about hard work on construction sites in difficult climatic conditions, with a lack of construction material, a shortage of food supply, and all other difficulties. These were the everyday reality for Dmitriyevs, Nekrasovs, Ivanovs, Malahovs, and many others, whose names are lost with time. They came to distant and snow-covered Alaska from different places, such as Archangel'sk, Olonetsk, St. Petersburg, Finland, West Siberia, Ruil'sk, Tot'ma and so on. They brought with them their own architectural traditions, and construction experience. Settlements of Russian America were built thousands of miles from the central districts of the country. A lot of effort and hard work went into these. Even so far from their homeland, Russians continued to keep their architectural traditions and ways alive.

STEFFIAN, Amy F. (Museum of Anthropology, University of Michigan)
Sourcing Archaeological Coal: An Example from the Gulf of Alaska

Coal is commonly found in northern archaeological sites. From Barrow to British Columbia, prehistoric people used coal as raw material for artifact production. Despite the widespread occurrence of coal in archaeological contexts, few researchers have examined the production and distribution of coal artifacts, or investigated the source of archaeologically occurring coals. The rank, structure, and composition of coal deposits vary greatly between source locales. As such, coal artifacts can be tested, classified, and the origins of the material broadly identified. This paper provides an introduction to vitrinite reflectance testing, discussing how this simple procedure can be used to classify coal artifacts and specify possible source locales. It also summarizes the results of reflectance tests conducted on coal artifacts from two Kachemak tradition sites on Kodiak Island. These tests suggest that coal artifacts from Kodiak were not manufactured from the locally

available lignite, but from a higher ranked coal obtained from the Alaskan mainland. In conjunction with patterns observed in the production and distribution of coal artifacts, data on the sources of raw coal expands our understanding of inter-regional interaction during the Kachemak tradition.

STREET, Steven R. and HAWKEY, Diane E. (Department of Anthropology, Arizona State University)

Prehistoric Human Remains from the Aleutian Islands and Their Behavioral Implications

Three complete skeletons and the incomplete remains of at least five other individuals from Akun and Akutan Islands were examined for activity-induced stress markers (enthesopathies) at muscle, ligament, and tendon attachment sites. Results were then compared with Hawkey's earlier analysis of stress patterns in the prehistoric Thule Eskimo of Northwest Hudson Bay. The Aleut sample showed a clear dichotomy for labor between the sexes. An adult female (Chulka site, AD 780) exhibited considerable stress at the right hand/wrist muscle attachments, particularly those involved in intricate movements of the hand. All Aleut males revealed bilateral, musculo-skeletal evidence of kayaking with a double-bladed paddle. Extreme stress was also placed on the leg and knee extensors, consistent with kayaking while the legs were extended. Several noticeable differences between the Aleut and Thule samples are evident. Thule females, for instance, lacked the left arm/right hand pattern apparent in the Chulka female. Aleut males exhibit differences in the stresses placed on the upper arms, costoclavicular ligaments, leg/knee extensors, and lateral rotators of the hip. All of these findings in the Aleut males are consistent with the demanding technology of the Aleut baidarka.

THORNTON, Tom (Subsistence Division, Alaska Department of Fish and Game, Douglas, AK)
Place Naming Among the Tlingit of Southeast Alaska

Recently there has been a resurgence of interest in the concept of place in the social sciences and elsewhere, including a renewed focus among anthropologists on place names and their linguistic, cognitive, and symbolic dimensions. After briefly examining the concept of place in human thought, this paper outlines some patterns of place naming among the Tlingit of Southeast Alaska using data gathered from interviews and written sources. Semantic and cognitive patterns of Tlingit place names are analyzed as is the role of place and environmental knowledge in the wider context of Tlingit culture.

VASIL'EVSKII, Ruslan (Institute of Archaeology, Siberian Division, Russian Academy of Sciences, Novosibirsk)

Archaeological Research of the Site Suvorovo IV in the Primor'ye, Russia

Of particular interest in understanding the formation of cultures across the Late Pleistocene-Holocene boundary are sites with assemblages which contain a combination of Paleolithic as well as later artifact forms. One such site is Suvorovo IV, located on a 12-14 m terrace in the valley of the Zerkal'naya River, Primor'ya. Artifacts are contained within a level of yellowish-brown alluvial loams at depths of 0.12-0.40 m. The artifact assemblage is characterized by single- and double-platformed, monofrontal and bifrontal subprismatic cores, wedge-shaped cores, knife-bifaces, bifacial points, end scrapers, large skreblos, and transverse and lateral burins.

Use-wear analyses have established the functions of 45 artifacts: knives for butchering carcasses--8; end scrapers for working hides--13; scraper-knives--2; skreblos for working hides--2; spoke-shaves--3; burins--2; saws--2; planing knives for working bone and wood--13.

According to the spore-pollen spectrum, the vegetation at the time of occupation of the site included a birch forest with shrubs of birch and alder. The climate was cool. This spore-pollen complex of the Suvorovo IV stratigraphic profile corresponds to the Pleistocene-Holocene boundary and climatically to the Late Wurm cold-snap. The radiocarbon age of the site equals $10,780 \pm 50$ yr B.P. (SOAN-628).

WALLEN, Lynn Ager and WALLEN, R.T. (Alaska Cultural Research Service)
Clan Rank and Rivalry in Contemporary Tlingit Society

In 1986, an elderly man from Hoonah began directing the making of the first spruce canoe in living memory. The project, funded by the National Park Service, became the focus of complex social and political rivalries between individuals and clans within the community of Hoonah, as well as between Hoonah residents and the National Park Service at Glacier Bay National Monument, traditional territory of the Hoonah people and site of the canoe-carving project. The project stimulated both the continuation and the revival of many Tlingit cultural traditions. Embodied in the canoe were rights and prerogatives, some of which were recognized and accepted by all parties, some of which were in dispute, and some of which surfaced only during the making of the canoe. This paper examines the specific points of contention from the beginning of the project until its culmination at a dedication ceremony to launch the canoe, and explores the relationship of this canoe project to great ceremonial events in Tlingit tradition.

WALLEN, Lynn Ager and WALLEN, R.T. (Alaska Cultural Research Service)
Natural Imagery in Yup'ik Masks

A continuation of work published in The Face of Dance by Lynn Wallen, this paper further explores the relationship of art to the physical environment of Yup'ik culture. The use of natural materials (driftwood, natural pigments, feathers, etc.) rather than manufactured materials, is the most obvious example of this relationship. Also obvious is the common use of animals and birds as subjects. Less obvious, however, are certain design motifs which can be interpreted as the artists' translations of features of animals, birds, plants, and natural phenomena. Using dance masks as examples, artistic translations of natural images are examined.

WHEELER, Polly (Co-Chair, Tanana Chiefs Conference) and ARUNDALE, Wendy (Co-Chair, Institute of Arctic Biology, University of Alaska Fairbanks)
Panel Discussion on Improving Dialog and Collaborative Research

The intent of this session is to look at how we can improve the dialog between different state and federal agencies, private and academic researchers, and Native organizations. As Native organizations play an increasingly greater role in directing their own research, and as state and federal funding opportunities for social science research decrease, the need to work together in all areas (from identifying research priorities to consolidating training efforts, and so on) is more important today than ever before. As well, the present system's failure to address adequately critical social science research areas demands a new collaborative approach. How can Native organizations use social science research effectively? What roles and attitudes do they want to take on, and what are culturally acceptable means of gathering and protecting sensitive information? These issues will also be addressed. Four or five panelists will each give a brief presentation followed by open discussion with the goal of stimulating insights and ideas for future collaborative efforts.

YESNER, David and BENDER, Susan (Department of Anthropology, University of Alaska Anchorage)
Zooarchaeology of the Broken Mammoth Site and Paleoecology of Late Pleistocene Populations in Eastern Beringia

The record of well-preserved faunal remains from the Broken Mammoth site in the central Tanana valley allows for initial reconstruction of paleoenvironmental conditions, subsistence practices, and settlement patterns of late Pleistocene (ca. 11,500-9,500 BP) populations in interior Alaska. Large game populations were dominated by *Bison* (cf. *priscus*) and elk (*Cervus* cf. *elaphus*), although caribou and Dall sheep also contributed to the assemblages. A diverse

assemblage is present, however, including small game (e.g., hare and Arctic ground squirrel) and birds, particularly waterfowl and cranes. The assemblage is characteristic of an open forest environment associated with the "Birch Period." Bird remains suggest that modern flyways had been reestablished by late Pleistocene times. The diversity of the assemblage offers a challenge to "big game hunter" models of early Alaskan populations. Scanty mammoth tusk remains suggest previous extinction or off-site butchering. Some tentative explanations are offered for distribution of bone remains, and for seasonality of site occupation based on bison and elk tooth sectioning.