



20th

**ALASKA
ANTHROPOLOGICAL
ASSOCIATION
Conference**

Dr. Jane E. Buikstra
Center for American Archaeology
University of Chicago

Dr. W. Fredrick Limp
Center for Advanced Spatial Technologies
University of Arkansas

Hosted by the National Park Service

	DILLINGHAM	KATMAI	KING SALMON	ILIAMNA
Wednesday Evening	DILLINGHAM ROOM — Registration / Reception 6:30-9:30 pm No-host Bar			
Thursday Morning	Poster / Vendor Set-up 8:00 - 12:00	Nutrition and Health 8:30 - Lunch	Federal Research Cooperation 8:50 - Lunch	Southeast Archaeology 9:10 - Lunch
Thursday Afternoon	Posters / Vendors / Books	Nutrition and Health 2:10 - 2:50 Contributions to Archaeology 3:10 - 6:05	Where Do We Go From Here? 2:10 - 3:50 The Wenger Database 4:05 - 5:05	Southeast Archaeology 2:10 - 5:05
Friday Morning	Posters / Vendors / Books	Archaeology and the Mining Frontier 8:30 - Lunch	Native Whaling 8:50 - Lunch	Contributions to Cultural Anthropology 9:10 - Lunch
Friday Afternoon	Posters / Vendors / Books	Historical Anthropology/ 2:10 - 5:25	Native Whaling 2:10 - 3:50	The Anthropology of Cook Inlet 2:00 - 5:45
Friday Evening	ALEUTIAN ROOM — Social Hour 6:30-7:30 pm No-host Bar Conference Banquet/Awards Ceremony 6:30-9:30 pm KEYNOTE ADDRESS: "The Future of the Past" by Dr. W. Fredrick Limp			
Saturday Morning	Posters / Vendors / Books	Current Aleutian Research & Scholarship 8:30 - Lunch	Alaska Eskimo Whaling Commission 8:30 - Lunch	The Anthropology of Cook Inlet 8:30 - Lunch
Saturday Noon	ALEUTIAN ROOM — Lunch 12:05-2:00 pm KEYNOTE LUNCHEON ADDRESS: "Diet, Disease, and DNA" by Dr. Jane Bulkstra			
Saturday Afternoon	Poster / Vendor Take-down 12:00 4:00	Current Aleutian Research & Scholarship 2:10 - 5:05	The Anthropology of Cook Inlet 2:10 - 4:25 Business Meeting 5:30	Technology in Anthropology 2:10 - 4:45

ACKNOWLEDGEMENTS

CONFERENCE CHAIR Theresa Thibault

Conference Committees

PROGRAM	Thomas F. Eidel, Chair Amy Craver Theresa Thibault David Yesner	VENDOR DISPLAYS	Theresa Thibault Neil Campbell
REGISTRATION	Neil Campbell, Chair Amy Craver Jennifer Sacco	LOGISTICS	Martha Olympic
PUBLICATIONS	David Yesner	POSTER ART	Wyndeth Davis
		PUBLICITY	Vanya Scott Theresa Thibault
		PROGRAM LAYOUT	Neil Campbell

The conference organizers would like to acknowledge all those who have volunteered their time to make the conference a success — Thanks to all of you!

The Conference Organizing Committee would like to recognize the work and contributions of the following:

Hosts	National Park Service — Ted Birkedal and staff	
Association President	John Cook	
Board of Directors	Wendy Arundale Edward Hall Robert Shaw	Ann Feinup-Riordan Phyllis Morrow
Student Scholarship Committee	Craig Gerlach William Workman	James VanStone
Student Paper Competition Committee	Phyllis Morrow James VanStone	Christine Hanson
Award Committee	Ty Dilliplane Jim Payne William Workman	Linda Ellanna Douglas Reger
Newsletter Editor	Curt Wilson	

The Conference Chair would like to give special thanks to Ty Dilliplane for his inspiration, support and his usual boundless enthusiasm.

A special acknowledgement goes to the student paper competition winners:
Patricia H. Partnow and Jennifer Linkous Congratulations!

NOTES

CONFERENCE SCHEDULE

DILLINGHAM ROOM Thursday through Saturday, April 8, 9 and 10, 1993

POSTER SESSIONS

Archeologistics in Arctic Alaska and the Mesa Site (VHS Video - 28 Min Long)

KUNZ, Michael L. and Daniel Gullickson

Middle Tanana Valley Archaeology: The Broken Mammoth Project

HOLMES, Charles E., David R. Yesner and Kristine J. Crossen

The Northern Research Institute at Yukon College

EASTON, N. Alexander

What's in NADB? A Fresh Look at the National Archaeological Database for Alaska

DAVIS, Wyndeth V.

The Alaska Heritage Stewardship Program

CORBETT, Debra and Douglas Reger

Rheumatoid Arthritis in an Inupiat Eskimo Population

TEMPLIN, David

Vertebral Anomalies in a Medieval Sample

HANSON, Christine L. and R. Joan Dale

KATMAI ROOM

Thursday Morning, April 8, 1993

NUTRITION AND HEALTH: PAST AND PRESENT

Organized by David Yesner

Chaired by David Yesner and Jennifer Sacco

8:30 Nutritional Stress Among Prehistoric Foragers of the Central Alaskan Gulf

STEFFIAN, Amy F., and James J.K. Simon

8:50 Alcohol Metabolism Enzymes as Biological Deterrents for Alcohol Abuse Among Ethnic Asians and Native Americans, with Implications for Indigenous Circumpolar Peoples

MOORE, Mary Jane and Janet Clarke

9:10 Patterns of Diabetes Among Alaska Natives

SCHRAER, Cynthia

9:30 Traditional Methods of Food Processing, Cultural Change and Implications for Health and Disease: An Exploratory Paper

MACK, Robert

9:50 Botulism Among Alaska Natives

LANCASTER, Miriam J.

10:10 *Coffee Break*

KATMAI ROOM

Thursday Morning, April 8, 1993

NUTRITION AND HEALTH: PAST AND PRESENT

Organized by David Yesner

Chaired by David Yesner and Jennifer Sacco

- 10:25 Viral Hepatitis in Alaska Natives
McMAHON, Brian
- 10:45 Cervical Cancer and the Alaska Native Women's Health Project
STILLWATER, Barbara
- 11:05 Native Reactions to Nuclear Contamination: The Social Aspect
TURNER, Edith
- 11:25 Epistemology, Epidemiology, Anthropology, and AIDS Prevention
CORDES, Penelope M.
- 11:45 Native Suicide in Southwest Alaska: 1979-1990
MARSH, David
-

KING SALMON ROOM

Thursday Morning, April 8, 1993

PROBLEMS AND POTENTIALS OF FEDERAL RESEARCH COOPERATION IN ALASKA

Organized and Chaired by Noel Broadbent

- 8:50 The National Science Foundation and Social Science Research in
Alaska
BROADBENT, Noel
- 9:10 Collaboration and Cooperation: The National Park Service Perspective
BIRKEDAL, Ted
- 9:30 Characteristics of Bureau of Indian Affairs Social Science Research in
Alaska
PRATT, Ken
- 9:50 Cooperation, Consultation and Research: Recent Efforts by the Bureau
of Land Management in Alaska
KING, Robert E.
- 10:10 *Coffee Break*
- 10:25 Panel Discussion
John P. Cook, Federal Agency
Terry Haynes, State Agency
Steve McNabb, Private Sector
Gordon L. Pullar, Native Community
Douglas Veltre, Academic Community

2250 B.P. in Prince William Sound. It is suggested that archaeological evidence of increasing social complexity may correlate with increasing use of whales in the Gulf of Alaska.

YARBOROUGH, Michael R.

Cultural Resource Consultants

"A Village Which Sprang Up Before My Very Eyes": A Historical Account of the Founding of Eklutna

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

Although a good deal has been written about the history of Eklutna, its age and origins have remained a mystery. Following a discussion of Native, Russian, and American settlements around the shores of Knik Arm, this paper will recount the founding of the village and the building of the historic St. Nicholas Chapel as recorded by Albert Lascy, a U.S. Deputy Surveyor who in 1904 surveyed two tracts "at Knik, Alaska" claimed by the "Russian Greek Mission," and Fr. Ioann Bortnovsky, a Russian Orthodox missionary from Kenai who spent the winter of 1897-1898 "in the Kenai village of Knik."

YESNER, David R.

Department of Anthropology, University of Alaska Anchorage

Subsistence Patterns of Nineteenth Century Dena'ina Populations on the Kenai Peninsula

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

Recent excavations at the Fox Farm site on Yukon Island in Kachemak Bay, and in the Squilantnu District along the Kenai River, have provided a strong new body of evidence for subsistence patterns of Nineteenth Century Dena'ina populations in coastal and interior regions of the Kenai Peninsula. Both sets of data suggest highly opportunistic foraging populations, making extensive use of small mammal, fish, and shellfish resources. Comparisons with earlier Eskimo populations of the Kachemak Bay region suggest a more catholic utilization of the same environment, unlikely to have resulted from significant environmental change in the region. Among the interior ("Mountain") Dena'ina of the Kenai River region, continuity in subsistence is indicated into the late Nineteenth century, in spite of substantial changes in technology. A lack of substantial evidence for large game utilization in this region is noteworthy. Patterns of animal butchering and consumption suggesting intensive carcass utilization are indicated in both areas. At the interior sites, the association of distinct midden deposits containing abundant animal bones with house features nearly free of such remains allows characterization of patterns of traditional Dena'ina refuse as well as consumption, and helps to increase our understanding of coastal sites where discrete depositional events are much more difficult to detect.

WORKMAN, William, Department of Anthropology, University of Alaska Anchorage
Janet Klein, Marlene Testaguzza and Peter Zollars

1992 Test Excavations at the Sylva Site (SEL 245): A Stratified Late Ocean Bay Occupation in Upper Kachemak Bay, Kenai Peninsula, Alaska

CONTRIBUTED PAPERS IN ARCHAEOLOGY SYMPOSIUM

The Sylva site is located in the inner reaches of a tidal lagoon near Aurora Spit in upper Kachemak Bay. A volunteer crew of seven excavated here for ca. 14 days in July of 1992 with support from Kachemak Bay residents and the University of Alaska Anchorage. Over 500 stone artifacts were recovered, the majority *in situ*. The most abundant diagnostic artifacts were long stemmed ground slate spear points or knives, some of which have multiple notches on the blade. Flaked stone was mainly flaking debris (some utilized flakes), but several projectile points, bifaces and unifaces were also recovered. Scoria abraders, a siltstone whetstone, several boulder spalls and hammerstones were also present. Ulus, lamps, adzes, and notched and grooved stones were absent. Five major and several minor culture-bearing strata were identified, but several, perhaps the majority, may not be significantly separated in age or cultural content. Features were burned areas and several enigmatic alignments of large stones. Almost one meter of stratified deposits, including volcanic ashes and several culture-bearing strata, lie beneath the modern beach gravels downslope from the meter high erosion face. Marine erosion is destroying the exposed portion of the site on this drowning coastline. Bones and shell were preserved in localized midden patches in the upper *in situ* beach deposits, a welcome surprise in a site this old. No organic artifacts were recovered. Davis Yesner has identified seal, whale (one vertebral plate only), porcupine, caribou, murre, dabbling duck and cod among the food remains. Shells include blue mussels, steamer and butter clams, and cockles. Immature caribou and seal suggest the site was occupied during late spring/early summer. Preliminary artifact analysis (mainly slate points) suggests cultural affinities with the late Ocean Bay tradition (Ocean Bay II/Takli Birch) on the Kodiak Archipelago and the Alaska Peninsula. The Sylva site provides the first stratigraphically documented evidence for Ocean Bay hunters in Kachemak Bay, quite likely at a time when the environment differed significantly from that of today. Typology suggests a date of 4500-4000 BP. Two radiocarbon dates have been obtained. A major Ocean Bay occupation (Stratum E¹) is dated to 4,400 ± 90 BP (Beta-58166). A date on fibrous wood from the buried downslope beach deposits (not associated with Ocean Bay material) is dated at 1,020 ± 60 BP (Beta-58167).

YARBOROUGH, Linda Finn

University of Wisconsin - Madison / USDA Forest Service

Prehistoric Use of Cetaceans in the Gulf of Alaska

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

Whale hunting has long been recognized as an important subsistence activity among Arctic peoples. It required development of specialized technologies, and held — in some cases still holds — a special cultural significance. This paper reviews current knowledge about the seasonality, distribution and population sizes of various species of Cetaceans in the North Pacific, and compares it to ethnographic and archaeological evidence for human use of Cetaceans, particularly in the Alutiiq area of the Gulf of Alaska and Prince William Sound. This evidence is also compared to recent studies of prehistoric whaling societies in the Canadian Arctic and the Bering Sea. The prehistoric southern Alaskan archaeological cetacea samples are too small to permit strong statements about hunting or scavenging by human populations. However, it appears that both mysticetes and odontocetes were being utilized by just after 4000 B.P. in the Aleutians, and by at least

ILLIAMNA ROOM

Thursday Morning, April 8, 1993

SOUTHEAST ARCHAEOLOGY

Organized by John T. Autrey

Chaired by Wallace M. Olson

- 9:10 An Update on the Exploration and Resource Evaluation of the Cave Resources on the Ketchikan Area of the Tongass National Forest, Southern Southeastern Alaska
BAICHTAL, James F.
- 9:30 Overview of Archaeological Resources Associated with Caves and Rockshelters in Southern Southeastern Alaska
CARLSON, Risa
- 9:50 Further Investigation of Submerged Cultural Deposits at Montague Harbour, Galiano Island, British Columbia — Report on the 1992 Field Season
EASTON, N. Alexander
- 10:10 *Coffee Break*
- 10:25 Bradfield Canal Fishtrap
BATTINO, Wendy
- 10:45 Sandy Beach Fish Traps
McCALLUM, Mark
- 11:05 The Inter-Relationship of Prehistoric Wooden Stake Fish Traps and Estuarine Sedimentological Processes: An Example from Northern Prince of Wales Island
PUTNAM, David E. and T. Weber Greiser
- 11:25 Changes in Tool Technology at a Prehistoric Site on Etolin Island in Southeast Alaska
SMITH, Jane L.
- 11:45 A Little Change in Elevation: The Humpback Lake Site (49-KET-304)
LIVELY, Ralph A.

12:05 - 2:00 P.M. LUNCH — ON YOUR OWN

NUTRITION AND HEALTH: Past and Present (Continued)

- 2:10 Culture and Physical Disabilities: Alaska Native Disabled and a Medical Anthropology Project
FELDMAN, Kerry
- 2:30 Seeking Solutions for Health Screening Needs of Rural Native Children: Creative Contracting
MANN, M., J. Sprott and L. Cameron

CONTRIBUTED PAPERS IN ARCHAEOLOGY

Chaired by Michael L. Kunz

- 3:10 Archaeological and Paleoecological Investigations at the Bluefish Caves, Northern Yukon
CINQ-MARS, Jacques
- 3:30 The Mesa Site: A Paleoindian Site in Arctic Alaska
KUNZ, Michael L. and Richard E. Reanier
- 3:50 *Coffee Break*
- 4:05 Preliminary Investigations at the Kheta Site, Northeastern Russia
KING, Maureen and Sergi B. Slobodin
- 4:25 On the Origins and Spread of Denbigh Flint Complex Culture in the North American Arctic: A View from Kuzitrin Lake, Central Seward Peninsula
HARRITT, Roger K.
- 4:45 Tremendous Erosion at the Pingasagruk Site, North Coast, Alaska
REINHARDT, Gregory A.
- 5:05 Radiocarbon Calibration of Archaeological Dates from the Central Gulf of Alaska
MILLS, Robin Owen
- 5:25 1992 Test Excavations at the Sylva Site (SEL 245): A Stratified Late Ocean Bay Occupation in Upper Kachemak Bay, Kenai Peninsula, Alaska
WORKMAN, William, Janet Klein, Marlene Testaguzza, and Peter Zollars
- 5:45 Analysis of Wooden Artifacts and Other Plant Materials from Three Gulf of Alaska Sites
McMAHAN, J. David

An Archeological Definition of Tanaina**THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM**

Athapaskan - Eskimo boundaries in mainland Alaska display an inland - coastal dichotomy with Athapaskans occupying the interior and Eskimos along the coast. Around Cook Inlet this boundary reaches the North Pacific Ocean. The Tanaina are the only northern Athapaskans to live on the coast and, of these, the Kachemak Bay Tanaina are the most maritime in adaptation. Here, they appear to have borrowed sea mammal hunting techniques from their nearest neighbors. When and how they did this remains to be documented. Recognizing ethnicity in archeological sites of the Gulf of Alaska can be difficult. Cook Inlet has been ethnically diverse during its 200 years of recorded history, and a similar situation may have existed prehistorically. Sites of several affiliations may underlie recent Tanaina occupations. This paper will show characteristics of Tanaina material culture from known Tanaina sites of the historic period. Stylistic features of bone awls, points and scrapers reflect a land mammal hunting tradition. Utilized stone, tools of the moment, are important, contrasting with a lack of flaked and ground stone artifacts. Wood bedding debris and patterns of garbage disposal are distinctive. Metal may have a long history with copper knives and piercing implements likely preceding the use of iron and steel. Although not documented in this data, Tanaina disposal of the dead differed from other Gulf of Alaska peoples.

Department of Anthropology, University of Alaska Anchorage

Human Colonization of the Cook Inlet Basin Before 3000 Years Ago**THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM**

Late Pleistocene glaciation constrains speculation about the earliest humans in Cook Inlet. Restudy has discredited an alleged association of artifacts and elephant bones at Chinitna Bay. Assemblages dating to the early and middle Holocene are distressingly rare. At the stratified Beluga Point site in upper Cook Inlet Reger recovered a small assemblage of cores, blades, microblades and a biface fragment which he dates by comparative typology to 8000-10,000 years ago. Additional microblade material of unknown age has been recovered from several localities on the central Kenai Peninsula, but nothing is known of the associated economy or settlement patterns. The distinctive Ocean Bay technology, clearly associated with maritime activities, thrived on Kodiak and the Alaska Peninsula between 6000 and 4000 years ago. 1992 excavations in Kachemak Bay confirmed the presence of Ocean Bay in stratified context at one site, several other less well documented occurrences are also known. The excavated occurrence has recently been dated $4,440 \pm 90$ BP (Beta-58166). A possibly similar assemblage is dated about 4000 years ago at Beluga Point. A very different highly distinctive assemblage of flaked stone tools, first isolated on Chugachik Island but now recognized elsewhere in Kachemak Bay, strongly resembles materials from the Second Millennium B.C. Brooks River Gravels phase on the Bering Sea side of the Alaska Peninsula. This Chugachik component, recently radiocarbon-dated to $4,005 \pm 100$ BP (WSU-4303), resembles Beluga Point North Component II, which Reger dates into the same time range. These peoples appear to have circumnavigated Cook Inlet rather than crossing via the Kodiak Archipelago. Possibly their principal interest was in terrestrial rather than maritime hunting. Finally, pioneer settlers of Kachemak tradition affinity reached outer Cook Inlet about 3000 years ago, presumably from Kodiak. This tradition was to dominate Kachemak Bay for several millennia, but the later prehistory of much of the rest of Cook Inlet is less well understood. Most of the early population movements into Cook Inlet described here cannot be proven to have had continuity into later prehistoric times.

natives all. This paper, based on existing publications and on records from the field, briefly reviews the recent revelations about the now notorious Project Chariot site, traces the path of cancer through the nearby village of Point Hope (the village of my research), and reports the reactions of and steps taken by the villagers. The history of the relationship between natives and whites and the inevitable development of consciousness after the revelations are here placed in a time frame and also discussed in reference to pollution undergone by other indigenous peoples of the USA.

WILMERDING, Elizabeth G.

Department of Anthropology, Washington State University

A Comparative Analysis of Textiles from Three Burial Caves in the Islands of the Four Mountains

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

A high degree of technical skill by Aleut women in the technique of twined weaving before the Russian period has been demonstrated through the 1990 excavations of Dr. Lucy Johnson at Dead Fox Cave in the Islands of the Four Mountains under auspices of the U.S. Fish and Wildlife Service and the Aleut Corporation. My task was to analyze the remains of grass burial shrouds, bags, and mats from this cave which was radiocarbon dated to approximately 700 BP. Although many of the pieces were fragmentary, enough was available to determine patterns of manufacture. Further insights into textile production was gained through a comparative study of the textiles obtained from the earlier excavation of nearby Kagamil Island caves. The range of weaving techniques and decorative designs that is available from these two collections will be presented to provide insights into an aspect of material culture rarely recovered from Aleutian sites.

WOOLEY, Christopher, Chumis Cultural Resources Services and

Karen Brewster, Commission on Inupiat History, Language and Culture, North Slope Borough

More than Just Black and White: Marvin Peter's Barrow Family Album

HISTORICAL ANTHROPOLOGY SYMPOSIUM

Many historic photograph collections from Alaska's North slope consist of images which captivated non-resident photographers. Photos of whaling camps, walrus butchering, reindeer herding, trading ships, sea ice travel, and holiday celebrations abound in the photo collections of explorers, teachers, missionaries, scientists, and other itinerant photographers on the North Slope. Sea mammal hunts, skin boat travel, dancing, and skin clothing were (and still are) favorite subjects of North Slope visitors. Such photos are valuable ethnographic records ostensibly taken either to satisfy the outsiders' intellectual need to document and understand Inupiat culture, or to capture a rare image for posterity.

The Marvin Peter collection, by contrast, highlights what is important in the local community — family, friends, relatives, and community milestones. The crisp black and white photos are primarily candid family portraits and views of Barrow life in the 1930s, 40s, and 50s. The photos preserve images of the families and civic groups of that era, and record important Barrow community events. The collection is a window into an Inupiat community which was adapting to the economic and political forces of the 20th century.

KING SALMON ROOM

Thursday Afternoon, April 8, 1993

WHERE DO WE GO FROM HERE?

The Alaska Anthropological Association's Next 20 Years

Organized and Chaired by Wendy Arundale and Phyllis Morrow

2:10 Roundtable Discussion

Wendy Arundale and Phyllis Morrow

3:50 Coffee Break

KING SALMON ROOM

Thursday Afternoon, April 8, 1993

THE WENGER DATABASE

Organized by Marvin Faulk

4:05 - 5:05

FALK, Marvin

BURCH, Ernest

FIENUP-RIORDAN, Ann

Unlocking the knowledge of circumpolar Inuit peoples is the goal of the Wenger Anthropological Database. The Database is under development at the Elmer E. Rasmuson Library of the University of Alaska Fairbanks and is being directed by Professor Marvin Falk. The significant written literature of Eskimo peoples' first contacts with non-indigenous explorers, scientists, entrepreneurs and missionaries will become available for today's students, scholars, educators, and researchers. Utilizing sophisticated computer technology, rare, out-of-print, and local materials will be made available on CD-ROM. Special computer software will allow searching and browsing of full-text Arctic accounts with accompanying illustrations.

ILLIAMNA ROOM

Thursday Afternoon, April 8, 1993

SOUTHEAST ARCHAEOLOGY (Continued)

Chaired by Wallace M. Olson

2:10 The Challenge of Project SEEK: A Look Back at the Starrigaven Excavation and Education Cooperative
IWAMOTO, Karen, and Rachel Myron

2:30 Current Findings in Interdisciplinary Anthropological Research on Subsistence in Southern Southeastern Alaska
MONTEITH, Daniel

2:50 A Review of Culturally Modified Trees in Southeast Alaska
HARDIN, Elbert A.

SOUTHEAST ARCHAEOLOGY (Continued)

Chaired by Wallace M. Olson

- 3:10 The "Lost" Totem Poles of the Brady Collection
HENRIKSON, Steve
- 3:30 Steamer Politkovsky: Ship as Historic Emblem and Artifact
BURWELL, Michael
- 3:50 *Coffee Break*
- 4:05 A Community Based Ethnoarchaeological Field Study in Southern Southeast Alaska
SCHULTE, Priscilla, and John T. Autrey
- 4:45 Discussion
AUTREY, John T.

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA

Organized and Chaired by Peter Bowers and Becky Saleeby

- 8:30 Background and Development of the Barnette Street Archaeological Project
GANNON, Brian
- 8:50 Preliminary Report on the Barnette Street Archaeological Project
ADAMS, William, Peter Bowers and Robert Weaver
- 9:10 The Fairbanks Mining District: Historical Developments on Upper Fish Creek
SATTLER, Robert, E. James Dixon, Andrew Higgs, and Robert Tsigonis
- 9:30 Archaeological Patterning at Placer Mining Camps: A Comparison of Three Interior Alaska Mining Districts
SALEEBY, Becky
- 9:50 Historical Archaeology of the Alaska-Gastineau Mine, Juneau, Alaska
BOWERS, Peter
- 10:10 *Coffee Break*
- 10:25 An Inventory of Historical Archaeology Pertaining to Mines in Southern Southeastern Alaska
MONTEITH, Daniel and Kerry Foster
- 10:45 Abandoning the Cult of the Artifact: Cultural Landscape Management on the Chilkoot Trail, Chilkoot Trail National Historic Site
HEMS, David

STEFFIAN, Amy F., University of Michigan Museum of Anthropology and James J.K. Simon, Department of Anthropology, University of Alaska Fairbanks
Nutritional Stress Among Prehistoric Foragers of the Central Alaskan Gulf
NUTRITION AND HEALTH SYMPOSIUM

Radiographic analysis of human long bones from two Kachemak tradition sites on Kodiak Island, Alaska, identified the presence of Harris lines in multiple skeletal elements from numerous individuals. Based on previous anthropological evaluations of human ecology in the productive environments of the Gulf of Alaska, this is an unexpected finding. Anthropologists have traditionally argued that high level of biological productivity along the Gulf coast promoted economic stability and long-term continuity in exploitation strategies. This paper presents recently collected data on nutritional stress, evaluates the social and economic contexts of this stress, and argues that subsistence shortfall was a recurring problem for Kodiak foragers. In short, it appears that there was no simple relationship between environmental productivity and economic stability in the productive coastal environments of the central Gulf of Alaska.

STILLWATER, Barbara
Alaska Native Women's Health Project
Cervical Cancer and the Alaska Native Women's Health Project
NUTRITION AND HEALTH SYMPOSIUM

In response to the disproportionately high rates of cervical cancer among Indigenous women, the Alaska Native Women's Health Project was created to reduce the morbidity and mortality from invasive cervical cancer. During the first phase of the project we interviewed 500 Indigenous women to assess their knowledge, attitudes, beliefs, and practices regarding cancer, cancer screening, and existing health services. Based on this data we designed a model women's health care clinic at Alaska Native Medical Center. Acknowledging cultural barriers to cancer screening, such as differences in illness beliefs, concepts of disease, and communication styles, the project has provided culturally sensitive outreach education programs and comprehensive health services, tracking, and follow-up programs. The focus of today's discussion is a preliminary analysis of the cultural barriers to cervical cancer screening for Alaska Native women.

TEMPLIN, David
Rheumatoid Arthritis in an Inupiat Eskimo Population
POSTER SESSION
No Abstract Received

THILL, Michael and Mary-Jo Thill
Gaff Rigged Productions
Aleut Evacuation: Behind the Scenes
CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM
A discussion of the creation of the historical documentary film "Aleut Evacuation" concerning the relocation and internment of Aleuts during World War II.

TURNER, Edith
University of Virginia
Native Reactions to Nuclear Contamination: The Social Aspect
NUTRITION AND HEALTH SYMPOSIUM

Medical anthropology in Alaska, as well as centering on health, life styles, and traditional healing, may well include another very serious theme, that of the use of the outback for nuclear experimentation, and the effect of the latter on natives and non-

Life Histories as Aggregated Data: How do Reported Experiences of Growing Up Link to Contemporary Parenting Beliefs/Behavior.

CONTRIBUTED PAPERS IN CULTURAL ANTHROPOLOGY SYMPOSIUM

Most life histories in anthropology are single biographies/autobiographies of "typical" or "unusual" persons, either meant to explicate the ordinary in a cultural group, to highlight the uniqueness of outliers or outstanding persons, or to elucidate the effects of processes of culture change as exemplified over the life course of a single individual. Less often employed are aggregate life history data to search for psychological universals or to understand what might be true for groups of people on the basis of gender, race, social class, culture, or historical period, according to Runyan (1982). The purpose of this paper is to explore theoretical and methodological issues related to life history data on young adult parents to look for links between experiences one had as a child and one's own contemporary parenting style. What assumptions underlie this approach? What can be gained by this kind of research, if anything?

STANEK, Ronald T.

Division of Subsistence, Alaska Department of Fish and Game

Belukha Hunters of Cook Inlet, Alaska

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

This paper discusses the human harvest and use of belukha whale (*Delphinapterus lucas*) in Cook Inlet, Alaska. A small population of belukha inhabit the waters of Cook Inlet and a portion of the Gulf of Alaska. The harvest of belukha is an issue of growing importance throughout Alaska and Canada as estimates of population size and harvestable quantities are made. In 1988 the Alaska Inuvialuit Belukha Whale Committee was formed to organize conservation efforts among Canadian and Alaskan hunters and management agencies. Evidence of belukha harvest activities by prehistoric peoples of Cook Inlet has been documented at several archaeological sites around the inlet. Hunting the belukha during historic times occurred for subsistence, predator control, and commercial purposes. Currently, there is an active group of Native hunters, residing in the Cook Inlet area and who come from other parts of the state, hunting in the inlet where conditions and whales are often found more desirable than other places. Hunting activities and distribution of whale products occurs among close friends and relatives, and is often highly competitive among groups of hunters.

STANEK, Ronald T., Rita Miraglia and Lisa Tomrdle

Division of Subsistence, Alaska Department of Fish and Game

Subsistence Harvest of Wild Resources at Port Graham, Nanwalek, and Seldovia

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

The Alaska Department of Fish and Game, Division of Subsistence, has conducted research on subsistence uses of wild fish, shellfish, game, and plants in Alaskan communities since 1978. The authors summarize information on subsistence harvests of the three lower Kenai Peninsula communities of Port Graham, Nanwalek (English Bay), and Seldovia. The paper focuses on data for the period April, 1991 through March, 1992 comparing and contrasting the patterns of resource harvest and use, including numbers and diversity of resources used, and patterns of exchange. There is also a discussion of the effect of the *Exxon Valdez* oil spill on subsistence in Port Graham and Nanwalek, as well as changes since 1989.

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA

Organized and Chaired by Peter Bowers and Becky Saleeby

- 11:05 Growing Up in Kennecott: The Kennecott Kids Oral History Project
KAIN, Ann
- 11:25 Toxic Archaeology: CRM of Industrial Sites in Alaska
REAM, Bruce
- 11:45 History and Archaeology: Interactive Identification and Evaluation of
Historic Mining Sites
HOVIS, Logan W.

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC:

Hunting The Largest Animals

Organized by Carol Zane Jolles, Allen P. McCartney, and Roger K. Harritt

Prehistoric Whaling Studies - Chaired by Allen P. McCartney

- 8:50 The Use of Naturally Beached Bowhead Whale Remains in the
Investigation of Thule Eskimo Whaling
SAVELLE, James H.
- 9:10 Prehistoric Beluga Whale Hunting at Gupuk, Mackenzie Delta,
Northwest Territories
FRIESEN, T. Max and Charles D. Arnold
- 9:30 Size Selection of Precontact Bowhead Whales
McCARTNEY, Allen P.
- 9:50 Whaling and/or Reindeer-Herding in Choris Culture: Arctic Chameleon
or Chimera?
MASON, Owen K. and S. Craig Gerlach
- 10:10 *Coffee Break*
- 10:25 From Caribou and Seals to Large Whales: Some Suggested Parameters
for Investigating Prehistoric Socio-Territorial Change in Bering Strait
HARRITT, Roger K.
- 10:45 Prehistoric Use of Cetaceans in the Gulf of Alaska
YARBOROUGH, Linda Finn
- 11:05 Whaletraps on the North Pacific?
DUMOND, Don E.
- 11:25 The Whale Hunting in the North-Western Bering Sea (Zakhtin Culture)
OREKHOV, Alexander, with Interpreter Katerina Solovjova
- 11:45 OREKHOV Continued

ILLIAMNA ROOM

Friday Morning, April 9, 1993

CONTRIBUTED PAPERS IN CULTURAL ANTHROPOLOGY

Chaired by Craig Mishler

- 9:10 Ecology and Native American Thought III: Sustainability
NOWAK, Michael
- 9:30 *The Marine Mammal Protection Act and Traditional Defenses in Two Recent Court Cases*
LINKOUS, Jennifer *Student Paper Competition Winner*
- 9:50 The "Nunamiut Experience": Tourism in Anaktuvuk Pass
BLACKMAN, Margaret B.
- 10:10 *Coffee Break*
- 10:25 Public Gains / Private Losses: Emigration, Outmarriage and the Gendered Construction of Work in Southwest Alaska
HENSEL, Chase
- 10:45 Life Histories as Aggregated Data: How do Reported Experiences of Growing Up Link to Contemporary Parenting Beliefs/Behavior?
SPROTT, Julie
- 11:05 Native New Life and Alaskan Eskimo Gospel Music
MISHLER, Craig
- 11:25 A Closed Society: A Police Department as an Urban U.S. Subculture
HAYNES, Helen

12:05 - 2:00 P.M. LUNCH — ON YOUR OWN

KATMAI ROOM

Friday Afternoon, April 9, 1993

HISTORICAL ANTHROPOLOGY

Organized and Chaired by Ty Dilliplane and Robert King

- 2:10 Charley Village
BLAND, Richard
- 2:30 "...signs appropriate and natural...": Russian Crests, Medals, and Gifts Among the Natives of Alaska
HENRIKSON, Steve
- 2:50 Relaxing Far from Home: Colonist Recreation in Russian America
DILLIPLANE, Timothy L.
- 3:10 The Pribilof Islands in the 1870's: The Story of Dr. Henry H. McIntyre and His Remarkable Photographs
KING, Robert E.

SEITZ, Jody

Division of Subsistence, Alaska Department of Fish and Game

Production of Wild Resources for Home Use by the Community of Hope

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

The Division of Subsistence conducted research on the use of wild resources by Hope residents for the year August 1, 1990 to July 31, 1991. Historical use of resources, as well as estimates of harvest amounts, participation, amount of exchange within the community, patterns of harvesting, demographic and economic information were documented. Per capita harvests and participation were quite similar to Cooper Landing and Whittier, which were also documented during the same period, as well as to the other communities along the Kenai Peninsula road system. Variations were found in the size and composition of the harvest between Hope and Whittier. Hope and Cooper Landing had similar patterns as compared to Whittier. Differences were found in access, availability of game and marine resources, and patterns of sharing.

SIEGEL-CAUSEY, Douglas, Museum of Natural History, University of Kansas and Christine Lefevre, Laboratoire d'Anatomie Comparee, Museum National d'Histoire Naturelle

Biodiversity and Human Paleoecology in the Western Aleutians: Perspectives, Problems and Promises in the Avifaunal Remains from Buldir Island

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

A new research initiative in the Western Aleutians (including archaeologists Debra Corbett [USF&W] and Stephen Loring [Smithsonian], zooarchaeologist Lefevre and paleobiologist Siegel-Causey) combines archaeological and paleoecological research strategies to examine the unique cultural accomplishments of the Sasixnan Aleut and their ancestors. Detailed systematic midden excavations on several islands are designed to reveal exploitation patterns of local hunter-gatherer populations as well as to provide quantitative information on the paleoecology of the coastal biota. Analysis of faunal material allows modelling of the past biogeographic distribution of marine vertebrates, and permits assessment of the putative effects of global change in the Holocene on the littoral ecosystem.

SMITH, Jane L.

USDA Forest Service, Tongass National Forest, Stikine Area

Change in Tool Technology at a Prehistoric Site on Etolin Island in Southeast Alaska

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

In 1992 Forest Service Archaeologists investigated two prehistoric shell midden sites on the shore of Anita Bay on Etolin Island. A small percentage of each site was tested by excavating units through thick stratified deposits of cultural refuse. Artifacts, samples of midden, and wood charcoal were removed from each defined stratigraphic layer and analysed. Radiocarbon dates were obtained from upper and lower strata. The work at site 49 PET 134 suggests that within a time span beginning by at least ca. 1,790 BP and ending some 700 years later, raw material preference varied with technological changes in tool manufacture. However, context and postdepositional effects may have influenced preservation, indicating that different technologies were used contemporaneously.

18.3 per 1000 (age adjusted to the 1980 U.S. population). Rates in the ethnic groups within Alaska vary over 5-fold. Type II diabetes is the result of both genetic and life-style factors. We believe that the data supports public health efforts at primary prevention.

SCHULTE, Priscilla, University of Alaska Southeast, Ketchikan Campus and John T. Autrey, USDA Forest Service, Tongass National Forest, Ketchikan Area
A Community Based Ethnoarchaeological Field Study in Southern Southeast Alaska
SOUTHEAST ARCHAEOLOGY SYMPOSIUM

A video presentation documenting an ongoing ethnoarchaeological project involving the USDA Forest Service archaeologists, University of Alaska 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.

SEARLES, Edmund Q.S. and Eugene Hunn, Department of Anthropology, University of Washington and Darryll Johnson, Cooperative Park Studies Program, University of Washington
Subsistence Uses of Plants in the Lake Clark National Park and Preserve
Subsistence Zone: Shifting External Parameters and Local Responses
THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

Few studies of subsistence harvests in rural Alaska have focused on the subsistence uses of forest and vegetal resources. The preliminary results of a study of these resources by the members of the residence zone communities of Lake Clark National Park and Preserve reveal a wide range of subsistence practices and preferences within several of the communities. These practices and preferences are sustained by expanding economic opportunities, a changing technological base, and, in one community, a resurgence in interest in the medicinal uses of local wild plants. Labor and capital investment in the acquisition of forest and vegetal resources varied greatly from household to household, and reasons for this variability are explored.

This paper also includes a discussion of methodological issues, specifically, the combination of door to door surveys and ethnographic fieldwork. The initial ethnographic component of the research enabled the researchers to identify critical aspects of wood and plant uses in each of the six communities, including a number of local conservation strategies for managing local forest and vegetal resources.

The goals of the survey are critically evaluated, and, based upon local responses and attitudes towards the project as a whole, the attainability of those goals is discussed. The types of responses to the survey instrument ranged from full cooperation and even interest to complete frustration and anger towards the project as a whole, leading eventually to refusal to cooperate with the study. Certain strategies were used to enhance cooperation, and the success of these strategies will be evaluated. We identify some sources of tension between the National Park Service and subsistence zone residents and discuss how these differences create barriers that could prevent future research in the region. The positive effects of this survey, including the fact that it provides a medium for communication between subsistence zone residents and Park and Preserve personnel, including resource managers, are also evaluated.

KATMAI ROOM

Friday Afternoon, April 9, 1993

HISTORICAL ANTHROPOLOGY

Organized and Chaired by Ty Dilliplane and Robert King

- 3:30 Climate Correlates of the 19th Century Inupiat Population Movement from Kotzebue Sound to Norton Sound as Reconstructed from Tree-Rings
 LEWIS, Michael A.
- 3:50 *Coffee Break*
- 4:05 *The Days of Yore: Alutiiq Mythical Time*
 PARTNOW, Patricia H. *Student Paper Competition Winner*
- 4:25 *More than Just Black and White: Marvin Peter's Barrow Family Album*
 WOOLEY, Christopher and Karen Brewster
- 4:45 "Greetings from Alaska": The Anthropology of Souvenir Postcards of "The Last Frontier," 1898-1993
 KING, Robert E.
- 5:05 Discussion

KING SALMON ROOM

Friday Afternoon, April 9, 1993

NATIVE WHALING THE WESTERN ARCTIC AND SUBARCTIC (Continued)

Ethnographic and Historic Studies - Chaired by Carol Zane Jolles

- 2:10 Space, Time, Crews, and Qariyit
 LARSON, Mary Ann
- 2:30 Whaling — A Ritual of Life
 ANUNGAZUK, Herbert O.
- 2:50 Paul Silook and the Ethnohistory of Whaling on St. Lawrence Island
 JOLLES, Carol Zane
- 3:10 Sex and Size Composition of Bowhead Whales Landed by Native American Whalers
 BRAHAM, Howard W.
- 3:30 Quantification of Subsistence and Cultural Need for Bowhead Whales by Alaska Eskimos
 BRAUND, Stephen R.
- 3:50 *Coffee Break*

THE ANTHROPOLOGY OF COOK INLET

Organized by Nancy Yaw Davis

Session I: An Overview - Chaired by Karen Wood Workman

- 2:00 Introduction to Symposium
DAVIS, Nancy Yaw
- 2:05 Introduction to Session
WORKMAN, Karen Wood
- 2:10 Late Wisconsin Glaciation of the Cook Inlet Region with Emphasis on Kenai Lowland
REGER, Richard D.
- 2:30 Human Colonization of the Cook Inlet Basin Before 3000 Years Ago
WORKMAN, William
- 2:50 Dena'ina as an Archaic Peripheral Language
KARI, James
- 3:10 Memories of Cook Inlet in the '30s and Afterthoughts on Kachemak Bay
de LAGUNA, Frederica
- 3:50 Coffee Break

Session II: Upper Inlet - Chaired by Jim Fall

- 4:05 Little Ice Age History of Portage Glacier and the Placer River Glaciers, Turnagain Arm Area
CROSSEN, Kristine J.
- 4:25 Tiq'atl'ena Bena (Hewitt Lake) Archaeological Research Project, 1992 Investigations
DIXON, R. Greg
- 4:45 "The Village Which Sprang Up Before My Very Eyes": An Historical Account of the Founding of Eklutna
YARBOROUGH, Michael
- 5:05 Fish Tales: The Social Function of Stories in a Small Commercial Fishing Operation on Fire Island
CRAVER, Amy
- 5:25 Belukha Hunters of Cook Inlet, Alaska
STANEK, Ronald T.

were twice as many domestic features at each camp in the Nabesna district as in the other two districts. This figure is greater than would be expected in light of the relative productivity of the three districts. Some suggestions for resolving this apparent contradiction are proposed after interpreting site remains in the context of long-term placer mining developments in each district. This integration of archeological and historic data has the potential of enhancing our mental images of mining camp life in the early decades of this century and promoting our understanding of how historic events and economic realities on a state-wide and national level filtered down to affect the lives of even the most remote settlers on the Alaska mining frontier.

SATTLER, Robert, E. James Dixon, Andrew Higgs, Northern Land Use Research and Robert Tsigonis, Fairbanks Gold Mining

The Fairbanks Mining District: Historical Developments on Upper Fish Creek
ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

Cultural resources management research associated with the development of the Ft. Knox mine has revealed a continuous history of mining on Upper Fish Creek, Fairbanks Mining District. The Ft. Knox Project area is located approximately 15 miles north of Fairbanks on the north side of Gilmore Dome. Gold was discovered in the area in 1901 by legendary prospectors Felix Pedro and Thomas Gilmore, and the next year the first wave of prospectors and miners came to the Fairbanks region. Field survey, archival research, and oral history have documented seven episodes of culture history based on mining technologies, socioeconomic factors, and residential patterns: Prehistoric (before ca. 1901), High-grade Bonanza Placer Mining (1901 to 1909), Early Lode Mining (1910 to 1923), Early Low-grade Placer Mining (1910 to 1942), Late Lode Mining (1924 to 1945), Late Low-grade Placer Mining (1924 to 1942), and Post World War II (1946 to present).

SAVELLE, James H.

Department of Anthropology, McGill University

The Use of Naturally Beached Bowhead Whale Remains in the Investigation of Thule Eskimo Whaling
NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

Naturally beached bowhead whale remains are common throughout much of the Arctic, and date from at least the early Holocene. While such remains are proving increasingly important in paleoenvironmental reconstruction, their potential contribution to the investigation of prehistoric whaling in northern areas has generally gone unrecognized. This paper describes a recent study of naturally beached bowhead whale morphometrics and taphonomy in the central Canadian Arctic. The results are in turn applied to the issues of a) Thule Eskimo whale hunting vs. whale scavenging, and b) the timing and cause of the original Thule expansion into the central and eastern Arctic.

SCHRAER, Cynthia

Alaska Native Health Center

The Occurrence of Diabetes Among Alaska Natives
NUTRITION AND HEALTH SYMPOSIUM

Past studies indicated that diabetes was rare among Alaskan Eskimos and Athabascan Indians. Because of large increases in the prevalence of type II diabetes in many indigenous populations undergoing "westernization" of life style, a patient registry was developed in 1986 and rates have been calculated for the years 1985 to 1991. Overall, among Alaska Natives, the prevalence of diabetes has increased from 15.7 to

Evidence for the age of the Naptowne glaciation is provided by radiocarbon dating. Calcareous barnacle plates found at Kenai and Kalifornsky in glaciomarine deposits related to the Killey stade are 16,000 to 16,500 years old. Radiocarbon dates associated with deposits of the Naptowne glaciation along the shores of Turnagain Arm and Knik Arm, firmly establish that the Elmendorf advance is between 12,300 and 14,000 years old. Elsewhere, radiocarbon dates provide only minimum ages.

During late Wisconsinan time, glaciers expanded into the Cook Inlet trough from highland sources in the Alaska-Aleutian Range to the west, in the Alaska Range and Talkeetna Mountains to the north, and in the Chugach-Kenai Mountains to the east. Greater snow accumulations in the Alaska-Aleutian Range produced larger ice masses, which at their maximum flowed eastward across Kenai lowland and joined locally with less vigorous, west-flowing ice from the Chugach-Kenai Mountains. Subsequently, these ice masses thinned, separated, and eventually receded into their upland source areas. Marine waters invaded Cook Inlet as early as 16,500 years ago and reached the upper inlet about 15,000 years ago. Most of Kenai lowland has been ice free for the past 15,000 years and, therefore, may have been available for colonization by early inhabitants of Alaska.

REINHARDT, Gregory A.

Department of Behavioral Sciences, University of Indianapolis

Tremendous Erosion at the Pingasagruk Site, North Coast, Alaska

CONTRIBUTED PAPERS IN ARCHAEOLOGY SYMPOSIUM

At the northwest corner of Peard Bay, Pingasagruk subsumes a large prehistoric village and small historic settlement. The Terrain, consisting of low sand dunes intermittently stabilized by vegetation, has long been subject to various erosion processes. Chief among these are Chukchi Sea storm surges from the west, high winds, defoliation, and limited digging for artifacts. Comparison of a 1949 aerial photograph with site-edge mapping in 1986 reveals losses along Pingasagruk's Chukchi Sea margins of more than 60 m inland and the total eradication of well over 200 m from the site's western end. Several house pits visible in 1949 no longer exist, and retrodicting erosion rates back to the time of presumed occupation suggest the former presence of a huge land mass here and a major site as well.

RUBERG, Sherry

Aleut Institute

The Future of the Past: An Aleut Agenda

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

No Abstract Received

SALEEBY, Becky

National Park Service

Archeological Patterning at Placer Mining Camps: A Comparison of Three Interior Alaska Mining Districts

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

The archeological remains of domestic features such as cabins, doghouses, etc. which comprise historic placer mining camps provide details about the lives of past miners and prospectors than often cannot be found in historic records. A test of this premise was made by analyzing site information gathered at several mining camps in three mining districts - the Nabesna, Nizina, and Kantishna districts - which now lie on National Park Service lands. The results of the analysis showed that on average there

ALEUTIAN ROOM

Friday Evening, April 9, 1993

SOCIAL HOUR

5:30 p.m. - 7:30 p.m. No-Host Bar

DINNER BANQUET

6:30 p.m. - 9:30 p.m. *Featuring the*

Alaska Anthropological Association
Awards Ceremony

KEYNOTE ADDRESS

"THE FUTURE OF THE PAST:

The New Technologies and How They Are Changing Our Understanding of
Prehistory"

Dr. W. Fredrick Limp

Center for Advanced Spatial Technologies

University of Arkansas, Fayetteville

Dr. Limp has more than 20 years experience in geographic information systems, computer databases, remote sensing, spatial analysis, and related technologies in Anthropology and Archaeology. He has taught courses on these topics for NASA, The Space Remote Sensing Center, Rutgers University, Colorado State University, National Park Service, U.S. Army, and others. Dr. Limp is a recipient of the 1990 GAIA award for his contributions to the GIS community and his work has been featured in magazines such as Omni, New Scientist, and Delta Sky as well as on public television and radio. He is a columnist for the GIS newsletter GRASSCLIPPINGS, is the Treasurer for the Open GIS Foundation and is on the Executive Board of the Arkansas GIS Forum where he was an author of statewide legislation on GIS and LIS. He has written more than 60 publications on GIS, computer applications and remote sensing including a monograph on multi-spectral digital imagery. He has served as a consultant to many federal, state and private organizations and currently is Principal Investigator on research projects funded by NSF, NPS, SCS, Corps of Engineers, US Forest Service and others, including development of both the National Archaeological Database and the National Bioarchaeological Database. He serves on the Society for American Archaeology's Task Force on Curation. He is the Director for the Center for Advanced Spatial Technologies, with a staff of 29, and the National Center for Resource Innovations at the University of Arkansas, which is a congressionally funded program to transfer GIS technologies to state, county and local governments. He is an Associate Professor in both the Departments of Anthropology and Geography. He previously was the Assistant Director and Interim Director of the Arkansas Archeological Survey.

His current research focuses on the development of GIS-based continental scale environmental reconstructions using AVHRR imagery and other data sources and compares it to the distribution of the more than 950,000 reported archaeological sites, the analysis and computer-assisted visualization of Civil War battles, development of cost-effective data acquisition methodologies for rural governments initiating GIS systems and the integration of modern spatial statistics in GIS analyses.

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS

Organized and Chaired by Stephen Loring

- 8:30 Opening Remarks Including a Short Video Sequence Originally Shot by Ales Hrdlicka in 1936
LORING, Stephen
- 8:50 Reflections on the History of Aleutian and Kodiak Island Anthropology, Archaeology and Ethnography
LAUGHLIN, William S.
- 9:10 Biodiversity and Human Paleoecology in the Western Aleutians: Perspectives, Problems and Promises in the Avifaunal Remains from Buldir Island
SEIGEL-CAUSEY, Douglas and Christine Lefevre
- 9:30 Excavations on Buldir Island, Site KIS-008, in 1991
CORBETT, Debra
- 9:50 After You Dr. Hrdlicka: Another Hole in the Little Kiska Midden
LORING, Stephen
- 10:10 *Coffee Break*
- 10:25 The Umqan Burials on Anangula Island
FROLICH, Bumo
- 10:45 Aleut Subsistence in the Shumagin Islands
JOHNSON, Lucille Lewis, Rowena Bowman and George Gale
- 11:05 A Comparative Analysis of Textiles from Three Burial Caves in the Islands of the Four Mountains
WILMERDING, Elizabeth G.
- 11:25 Discussion

ALASKA ESKIMO WHALING COMMISSION

Chaired by Allen P. McCartney

ROUNDTABLE DISCUSSION — CONTINUATION OF NATIVE WHALING SYMPOSIUM

8:30 - 11:45

Discussants: Burton Rexford, Chairman
Leonard Apangalook, Sr., Vice Chairman
Elijah Rock, Sr., Secretary
Rossman Peetook, Treasurer
and
Herbert O. Anungazuk, Whaling Captain from Wales

tion tests are given, and a practical discussion of computational algorithms and implementation of these methods on personal computers is provided.

REGER, Douglas, State of Alaska Office of History & Archaeology and Alan Boraas, Kenai Peninsula College

An Overview of the Radiocarbon Chronology in Cook Inlet Prehistory
THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

Recently obtained radiocarbon dates from sites on the Kenai Peninsula clarify the existence and age of several cultural stages. A Kachemak related stage lasted roughly from 1000 B.C. to A.D. 1000 and a late Prehistoric stage began about A.D. 1000. With a few exceptions, the later period appears to represent occupation of the western Kenai Peninsula by Denaina Athapaskans. Investigators at some sites in Kachemak Bay and Turnagain Arm interpret Late Prehistoric occupations as remains left by visitors from adjacent areas.

Kachemak related remains along streams of the central Kenai Peninsula are generally coincident with similar sites in the Kachemak Bay area and beyond. The central Peninsula occupations, previously referred to as a local variant of the Kachemak Culture, will more usefully be known as "Riverine Kachemak." Radiocarbon dates suggest that Riverine Kachemak continued after its more southern relative disappeared.

Occupations prior to the Kachemak stage have been found at several locations but remain ill defined. Re-evaluations by Workman, of existing and very recently obtained data indicate emergence of a clearer view of the complex earlier occupations.

REGER, Richard D.

Alaska Division of Geological and Geophysical Surveys

Late Wisconsin Glaciation of the Cook Inlet Region with Emphasis on Kenai Lowland

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

The complex landscape of the lowlands bordering Cook Inlet is primarily a result of invasion of the Cook Inlet trough by large glaciers during the last major glaciation, which began in southcentral Alaska about 25,000 years ago and ended about 9,500 years ago. For the past 29 years, our understanding of the history of glaciation in Kenai lowland has been based primarily on the innovative work of T.N.V. Karlstrom. As a result of his regional survey of morainal morphologies, Karlstrom envisioned a 4-fold model of late Wisconsinan glaciation in southcentral Alaska. He designated the type area of the Naptowne glaciation as Kenai lowland near Sterling (then called Naptowne). From oldest to youngest, Karlstrom divided the Naptowne glaciation into the Moosehorn, Killey, Skilak, and Tanya stades, and he identified type moraines among the series of moraines in the vicinities of Skilak and Tustumena Lakes. Unfortunately, deposits of the Naptowne glaciation were not reliably dated in the type area, and correlations with moraines in other areas were based primarily on similar landform morphologies and similar soil development. Problems in reconciling Karlstrom's glacial model with the field evidence have forced revision of his model.

Key evidence for correlating moraines and associated landforms throughout Kenai lowland is provided by the Lethe tephra, a distal volcanic ash of dacite composition that was explosively erupted between 12,500 and 16,500 years ago from an unidentified vent in the vicinity of Mount Katmai. Using electron microprobe analyses, this very distinctive airfall tephra has been identified at 25 localities from Anchor River to Swanson River, where it is located on landforms of Killey or older ages. Because the Lethe tephra represents an instant of geologic time, its presence allows reliable correlation of moraines and associated landforms from Turnagain Arm to Kachemak Bay.

attitudes of the crew himself. There is information on the murder of the trader Holt, at Knyk, and of McIntyre, at Kodiak. The diary is supplemented by the author's ethnographic notes, and copies of letters. A translation of the entire diary will appear at the end of 1993.

PRATT, Ken
Bureau of Indian Affairs
Characteristics of Bureau of Indian Affairs Social Science Research in Alaska
FEDERAL RESEARCH COOPERATION IN ALASKA SYMPOSIUM
No Abstract Received

PUTNAM, David E. and T. Weber Greiser
Historical Research Associates, Inc.
The Inter-Relationship of Prehistoric Wooden Stake Fish Traps and Estuarine Sedimentological Processes: An Example from Northern Prince of Wales Island
SOUTHEAST ARCHAEOLOGY SYMPOSIUM
Recent archaeological investigations on northern Prince of Wales Island in southeast Alaska resulted in the recognition of some previously undescribed phenomena. Curvilinear features of raised relief composed of gravel and organic materials were found to be associated with prehistoric wooden stake fish trap remains in the intertidal zone of low energy estuarine environments at the mouths of tributaries. Examination of the features in the field, combined with aerial photo analyses of the patterns of identified wooden stakes, tributary and distributary channels and surface topography suggests that a time-transgressive process of human construction and maintenance combined with deposition of various materials from both fluvial and marine sedimentary systems to significantly alter the natural estuarine regime. This paper explores the perceived relationship in the context of a particular site in Red Bay. Speculation is offered on the implications of these data.

REAM, Bruce
Hart Crowser
Toxic Archaeology: CRM of Industrial Sites in Alaska
ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM
No Abstract Received

REANIER, Richard E.
Computer-Intensive Statistical Methods in Archaeology
TECHNOLOGY IN ANTHROPOLOGY SYMPOSIUM
The widespread availability of advanced computer hardware technology has made computer-intensive statistical methods an important component of the archaeologist's toolkit. Monte Carlo methods and approximate randomization tests employ the speed of modern computers to rapidly generate large numbers of samples from populations, which can then be used with an appropriate statistic to test archaeological hypotheses. Monte Carlo statistical methods utilize random samples from a specified population distribution to test the hypothesis that one's data are a random sample from that population. Approximate randomization tests rely on samples from the randomization distribution to test the hypothesis that one's data are a random sample from that distribution. An important aspect of these methods is that almost any test statistic can be used that reasonably measures the hypothesis being tested. This frees the archaeologist from having to employ a test statistic for which mathematical statisticians happen to have derived the sampling distribution. Archaeological examples of both Monte Carlo and approximate randomiza-

ILLIAMNA ROOM

Saturday Morning, April 10, 1993

THE ANTHROPOLOGY OF COOK INLET (Continued)

Session III: Middle Inlet - Chaired by Alan Boraas

- 8:30 An Overview of the Radiocarbon Chronology in Cook Inlet Prehistory
REGER, Douglas and Alan Boraas
- 8:50 The True Believer Among Kenai Peninsula Dena'ina: Evolution of a Belief System
BORAAS, Alan and Donita Peter
- 9:10 Tyonek in the 1880s: From the Diary of V. V. Stafeev
PIERCE, Richard
- 9:30 The Presence of the Past
LINGREN, Alexandra
- 9:50 Production of Wild Resources for Home Use by the Community of Hope
SEITZ, Jody
- 10:10 Coffee Break

Session IV: Outer Inlet - Chaired by Nancy Yaw Davis

- 10:25 Subsistence Patterns of Nineteenth Century Dena'ina Populations of the Kenai Peninsula
YESNER, David R.
- 10:45 An Archaeological Definition of Tanaina
WORKMAN, Karen Wood
- 11:05 "Released to Reside Forever in the Colonies": Founding of a Russian American Company Retirement Settlement at Ninilchik, Alaska
ARNDT, Katherine L.
- 11:25 Subsistence Uses of Plants in the Lake Clark National Park and Preserve Subsistence Zone: Shifting External Parameters and Local Responses
SEARLES, Edmund Q.S., Eugene Hunn and Darryl Johnson
- 11:45 Subsistence Harvest of Wild Resources at Port Graham, Nanwalek, and Seldovia
STANEK, Ronald T., Rita Miraglia and Lisa Tomrdle

ALEUTIAN ROOM

Saturday Noon, April 10, 1993

LUNCH

12:05 p.m. - 2:00 p.m.

KEYNOTE LUNCHEON ADDRESS

"DIET, DISEASE, and DNA:
Technology and Bioarchaeology"

Dr. Jane Buikstra

Center for American Archaeology
University of Chicago

Dr. Buikstra is Professor of Anthropology at the University of Chicago. She received her B.A. in Anthropology at DePauw University and her M.A. and Ph.D. at the University of Chicago, specializing in physical anthropology. Before teaching at the University of Chicago, she was a faculty member at Northwestern University (from 1970 to 1986). Dr. Buikstra was elected to the National Academy of Sciences in 1987, and has been a Resident Scholar of the School of American Research (1984-1985). She was a past president of the American Anthropological Association (1989-1991) and the American Association of Physical Anthropologists (1985-1987). She is recognized as one of the leading scholars in the world in the areas of human osteology, paleopathology, paleonutrition, forensic anthropology, and bioarchaeology. She has authored or co-authored nine books, and written over 75 scholarly articles. She has served in numerous professional positions, ranging from research associate to member of the board of directors, for the Field Museum of Natural History, Smithsonian Institution, and Museum of the American Indian, as well as the Society for American Archaeology, Human Biology Council, and Archaeological Conservancy. She is currently working on an NSF grant entitled "Chiribaya: A Biocultural Approach to the Study of a Prehistoric Andean Polity," and directs the University of Chicago Archaeological Field School in Kampsville, Illinois.

OHLER, Jason

Educational Technology Program, University of Alaska Southeast

Toward Online Anthropology

TECHNOLOGY IN ANTHROPOLOGY SYMPOSIUM

Millions of people all over the world are "going online" joining what they often refer to as "online communities." Using a common personal computer (like an IBM PC or Macintosh), a \$100 black box called a "modem", and a regular phone line, they are connecting through one of the thousands of access points in a global electronic data network to interact with friends, professional associates, and anyone else with whom they can develop and maintain an often purely electronic relationship.

Last year the Juneau Arts and Humanities Forum funded research into the study of online communities and the formation of online anthropology, which is defined in its broadest sense as the study of the electronic communities in which people gather online through electronic mail, computer conferencing, and other means of computer-mediated communication (CMC). This presentation will consist of a progress report on these activities.

OREKHOV, Alexander

The International Pedagogical University, Magadan, Russia

The Whale Hunting in the North-Western Bering Sea (Zakhtin Culture)

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

The Zakhtin culture developed in the 2nd millennium B.C., when groups of hunters, moving along the water courses, emerged from the continental interior to the sea coast. Zakhtin culture was a resultant adaptation to the exploitation of marine resources. Whale bones were found in the earliest complex. Was it regular whale hunting or not, it's a problem. In Zakhtin culture development of whale hunting by means of bow and arrow. It was tradition. Zakhtin people did not adopt the harpoon complex, in spite of prolonged contact with early Eskimo and Koryak cultures.

Whale bones used in construction of roofs of dwellings, for marking the spirit places, making tools.

PARTNOW, Patricia H.

University Of Alaska Fairbanks

The Days of Yore: Alutiiq Mythical Time

HISTORICAL ANTHROPOLOGY SYMPOSIUM

After the 1912 eruption of Novarupta volcano near the village of Katmai, many Alaska Peninsula Alutiiqs were relocated to the new village of Perryville. Narratives describing the disaster are told to this day, and now serve as both history and origin myth for Perryville inhabitants. Moreover, life in the days before the eruption is now portrayed in mythical terms, and the distinction between the Alutiiq folklore genres *unigkuat* (myth) and *quliyanguat* (legend) has disappeared. It is posited that this collapse of the two genres is the result of altered conceptions of history originating from the eruption.

PIERCE, Richard

Tyonek in the 1880s: From the Diary of V. V. Stafeev

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

V. V. Stafeev, a Russian who stayed on in Alaska after 1867, provides many facts concerning the ethnography, economy, and social history of the period 1880-1895. During that period the writer served in trading posts at Nuchek, Tyonek, Douglas (on the Alaska Peninsula), and Kodiak. Entries while at Tyonek, 1884-1888, mention Tanaina shamanism, hunting routines, the conduct of the fur trade, and beliefs, and indicate the

MOORE, Mary Jane and Janet Clarke

Department of Anthropology, San Diego State University

Alcohol Metabolism Enzymes as Biological Deterrents for Alcohol Abuse Among Ethnic Asians and Native Americans, with Implications for Indigenous Circumpolar Peoples

NUTRITION AND HEALTH SYMPOSIUM

Research has shown that the enzymes responsible for alcohol metabolism, alcohol dehydrogenase (ADH) and aldehyde dehydrogenase (ALDH), each have isozyme variants. Some of these variants are responsible for differences in the rate of alcohol and acetaldehyde metabolism, and occur in varying frequencies among diverse ethnic groups. One of these isozymes ALDH², is a null inactive variant which has a lower affinity for acetaldehyde, the toxic form of alcohol. Individuals who are homozygous or heterozygous for this isozyme metabolize acetaldehyde much slower, and exhibit greater adverse reactions to alcohol, including pronounced facial flushing. Ethnic Asians with the inactive ALDH isozyme apparently have a negative biological deterrent to alcohol abuse and alcoholism. Facial flushing after alcohol ingestion has also been observed among some Native Americans. Because of the apparent close biological affinity to Asians, it has been assumed that this response is due to the inactive ALDH variant isozyme, but that the isozyme does not provide the same biological protection against alcohol abuse. A review of the literature was undertaken to explore several issues, including: evidence of ALDH² providing a biological deterrent; ALDH isozyme frequencies among Asian and Native American populations; alcohol abuse and alcohol-related problems among Asians and Native Americans; and biological affinity between Asians and Native Americans. Information on circumpolar groups will be emphasized wherever possible. The presence or absence of a biological deterrent among various ethnic groups may have important implications for prevention and treatment of alcohol abuse.

NOWAK, Michael

Colorado College

Ecology and Native American Thought III: Sustainability

CONTRIBUTED PAPERS IN CULTURAL ANTHROPOLOGY SYMPOSIUM

Subsistence is an integral part of culture and as such is subject to the elements of change affecting it. Models of culture change usually involve many variables such as alteration in population dynamics, habitat changes, social systems, and ideological paradigms. Changes affecting a people's subsistence system are in themselves complex and frequently multifaceted. Models exist today that attempt to account for "patterns" that may emerge from the phenomenon of cultural adaptation. Addressed here are specific considerations of the long-range viability of a number of current practices. These are addressed in terms of resource dynamics, cultural preference, and legal restrictions. Concepts such as evolutionary ecology and optimal foraging theory can provide elegant frameworks within which to view traditional subsistence dynamics. To some extent they even allow for the acculturative changes that are seen today, but it seems that such models are more effective in explaining the past than predicting the future. Elements that make for stability in northern Native American subsistence patterns may be examined under two major categories: resource availability, and cultural integrity.

KATMAI ROOM

Saturday Afternoon, April 10, 1993

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS
(Continued)

Chaired by Stephen Loring

- 2:10 Changes in Aleut Kayak Forms
LUBISCHER, Joseph
 - 2:30 Current Aleutian Studies at the University of Alaska Fairbanks: Part I
BLACK, Lydia, Jerry Jacka and Miranda Wright, Sarah McGowan and Natalia Taksami — Multiple Presenters
 - 2:50 Current Aleutian Studies at the University of Alaska Fairbanks: Part II
BLACK, Lydia, Jerry Jacka and Miranda Wright, Sarah McGowan and Natalia Taksami — Multiple Presenters
 - 3:10 Serving Clío: Public History in the Aleutians
FAULKNER, Sandra M.
 - 3:30 Our History Has Value: Aleut Memories of WWII
MADDEN, Ryan
 - 3:50 *Coffee Break*
 - 4:05 Aleut Evacuation: Behind the Scenes — A 20-minute Video
THILL, Michael and Mary-Jo Thill
 - 4:25 The Future of the Past: An Aleut Agenda
RUBERG, Sherry
 - 4:45 Discussion
Stephen Loring
-

KING SALMON ROOM

Saturday Afternoon, April 10, 1993

THE ANTHROPOLOGY OF COOK INLET (Continued)

Chaired by Nancy Yaw Davis

- 2:10 Panel and Audience Discussion — Short commentaries on papers presented
Daniel Alex, Alan Boraas, Katherine Johnson, Jim Fall, Gordon Pullar, and Karen Wood Workman
- 2:40 Question: What next? What needs yet to be done?
Audience comments, suggestions, questions and discussion
- 3:50 *Coffee Break*
- 4:05 Closing Summary of the Symposium: Nancy Yaw Davis

ILLIAMNA ROOM

Saturday Afternoon, April 10, 1993

TECHNOLOGY IN ANTHROPOLOGY: Applications And Implications

Organized and Chaired by Thomas F. Eidel

- 2:10 The Implications and Impacts of Digital Technology on Anthropological Research
EIDEL, Thomas F.
- 2:30 Computer-Intensive Statistical Methods in Archaeology
REANIER, Richard E.
- 2:50 Toward Online Anthropology
OHLER, Jason
- 3:10 "Remote Sites Anthropology": A Renewed Approach to the Study of Isolated Settlements
DILLIPLANE, Timothy L.
- 3:30 Low Altitude Photogrammetry
MIYATSUKA, Yoshito, Masaki Shimizu and Fukuji Abe
- 3:50 *Coffee Break*
- 4:05 Laser Transits and Geographic Information Systems: The Anatomy of Three American Paleoarctic Tradition Microblade Sites
LUTZ, Bruce J. and Douglas Anderson D.
- 4:25 Obsidian Analysis: Progress Report
COOK, John P.

KING SALMON ROOM

Saturday Afternoon, April 10, 1993

ALASKA ANTHROPOLOGICAL ASSOCIATION

5:30 p.m. Annual Business Meeting

Aerial photographs from these platforms are very useful and give important information to us. A single aerial photo can cover the following:

Rope-Way:

CAMERA (f-stop)	ALTITUDE	FILM SIZE	AREA
35mm (f=35mm)	12 m	2.4 x 3.6 cm	8.2 x 12.2 m
35mm (f=24mm)	12 m	2.4 x 3.6 cm	12.0 x 18.0 m
6x6 (f=38mm)	12 m	5.3 x 5.3 cm	16.7 x 16.7 m

Kite Balloon & Radio Controlled Helicopter:

CAMERA (f-stop)	ALTITUDE	FILM SIZE	AREA
35mm (f=24mm)	50 m	2.4 x 3.6 cm	50.0 x 75.0 m
35mm (f=24mm)	100 m	2.4 x 3.6 cm	100.0 x 150.0 m
6 x 6 (f=38mm)	50 m	5.3 x 5.3 cm	69.7 x 69.7 m
6 x 6 (f=38mm)	100 m	5.3 x 5.3 cm	139.4 x 139.4 m
6 x 6 (f=38mm)	200 m	5.3 x 5.3 cm	279 x 279 m
6 x 6 (f=38mm)	300 m	5.3 x 5.3 cm	418 x 418 m

MONTEITH, Daniel

USDA Forest Service, Tongass National Forest, Ketchikan Area

Current Findings in Interdisciplinary Anthropological Research on Subsistence in Southern Southeastern Alaska

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

In recent years the increased demands and restrictions on all resources, especially "subsistence" resources, in Alaska, has spurred a considerable interest in documenting and understanding subsistence activities. In most cases this research has failed to successfully combine the various subdisciplines of anthropology. A more in depth understanding of the issue can be developed by integrating archeology, ethnohistory, and anthropological ethnographies. Through this interdisciplinary approach I have found that the Tantakwaan (Tongass) and the Sanyakwaan (Cape Fox) Tlingit groups have maintained subsistence activities, patterns, networks, and territories for hundreds of years. Much of the Tlingit culture and subsistence lifestyle still exists, and is congruent with past activities. However, current public policy toward the Tlingit language and subsistence lifestyle may spell the demise of the Tlingit culture. Current anthropological methods and research could play a pivotal role in the future.

MONTEITH, Daniel and Kerry Foster

USDA Forest Service, Tongass National Forest, Ketchikan Area

An Inventory of Historical Archaeology Pertaining to Mines in Southern Southeastern Alaska

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

This paper will examine the untapped potential for historical archaeology on mining in Southern Southeastern Alaska. The Ketchikan Area has a rich mining history. In all over 70 past producing mines or developed deposits are located on the area. In addition claims were filed on hundreds of non-producing claims. the variety, type, and condition of these historic mines is staggering. Minerals extracted included: gold, silver, lead, copper, iron, uranium, barium, tungsten, and platinum, as well as, marble, which was quarried and shipped extensively along the Pacific Coast in the early part of the century. Most of these mines remain on United States Forest Service Land. The paper will address the needs for archaeological research on these mines, and the contributions this research could have on the cultural history of the area.

MILLS, F. Owen

Department of Anthropology, University of Alaska Fairbanks

Radiocarbon Calibration of Archaeological Dates from the Central Gulf of Alaska
CONTRIBUTED PAPERS IN ARCHAEOLOGY SYMPOSIUM

This paper presents a complete calibrated list of all available radiocarbon dates from the Pacific Eskimo region of the Central Gulf of Alaska. Comparisons are made between local calibrated cultural histories within the region, and previous chronologies based on uncalibrated dates. Results demonstrate the existence of a synchronic prehistoric cultural change at about 940 cal B.P. in the northwestern part of the Alaska Peninsula, the Kodiak Archipelago, Kachemak Bay, Upper Cook Inlet, and possibly Prince William Sound. Proxy climatic and other data from this and neighboring regions have revealed a coincident cultural shift along the Pacific northern Northwest Coast, as well as the spread of Sitka Spruce (*Picea sitchensis*) from southeast Alaska into Prince William Sound and the northeastern Kodiak Archipelago. These changes likely relate to the Medieval Climatic Optimum that occurred ca. 700-1200 B.P. in southeast and south-central Alaska.

MISHLER, Craig

Alaska Department of Fish & Game

Native New Life and Alaskan Eskimo Gospel Music

CONTRIBUTED PAPERS IN CULTURAL ANTHROPOLOGY SYMPOSIUM

During the 1950s Alaskan Yu'pik and Inupiaq Eskimos developed a great affection for white country gospel music learned through radio broadcasts and vinyl recordings. Living in isolated bush communities, they successfully emulated several styles of this music and began recording their own songs. Starting in the early 1970s, a non-denominational organization called Native New Life brought them together under a common roof at the annual Native Musicale held in Anchorage. Native New Life now provides a platform of recognition and an urban mass media outlet for Alaska's many Native country gospel performers. In doing so, it has developed an important statewide network between artists and their audiences and has created many new opportunities for collaboration between the artists themselves.

MIYATSUKA, Yoshito, Masaki Shimizu and Fukuji Abe

Shin Air Survey

Low Altitude Photogrammetry

TECHNOLOGY IN ANTHROPOLOGY SYMPOSIUM

Cultural Property Sections (for example, Board of Education in local Japanese government) have excavated many archaeological sites each year. In 1992, over 20,000 sites were destroyed by construction; so we must excavate and measure many archaeological sites. Under Japanese "Flight Law", we can't fly airplanes under 300m above ground levels; but archaeologists need low altitude aerial photography and large scale maps for their archaeological site reports.

Under these conditions we thought about and developed "Low Altitude Photogrammetry". We considered the kinds of platforms that could be used to take aerial photos for archaeological research, taking into consideration low cost as a factor.

The results follow:

ALTITUDE	PLATFORM	CAMERA
0-12 m	Rope-Way	35mm, 6 x 6 in
10-300 m	Kite Balloon	35mm, 6 x 6 in
30-500 m	Radio Controlled Model Helicopter	35mm, 6 x 6 in

ABSTRACTS

ADAMS, William and Peter Bowers, Northern Land Use Research and Robert Weaver, Hart Crowser

Preliminary Report on the Barnette Street Archaeological Project, Fairbanks, Alaska

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

No Abstract Received

ANUNGAZUK, Herbert O.

National Park Service, Alaska Region

Whaling — A Ritual of Life

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

Whaling is a sacred affair to the Inupiat hunter. It involves an infinite preparation process and is a duty that begins at childhood and rarely ended with death. The cycle continues as the name of the deceased is given to a newborn child following the death of a noble hunter. The belief is that a child will be a successful hunter when he is given the name of an esteemed elder. The name transforms the newborn into a part of a new family as relatives of the deceased sees the babe as the hunter returned. Massive jawbones of bowhead whales adorning the gravesites of whale hunters in coastal whaling communities serve as monument to the whalers after their passing. The belief that the sea mammal harbors spirits is very strong among the Northern Inuit and is reflected in the active role of the woman who is responsible for the preparation of hides for boat covers and clothing necessary for warmth. Appropriate ceremony must be conducted when a whale is landed by the whaling crew to avoid insult to the spirit of the whale and other sea mammals.

It takes years for a person to assume the leadership role of a whaling crew. Some may assume this position through inheritance following the death of a whaling captain. When this occurs the new captain is usually under the guidance of elders whose duty it is to pass on the intricate knowledge of the skills involved in the art. The use of traditional whaling equipment has been affected greatly by modern technology. In some whaling communities the umiak, rawhide lines or sealskin floats are no longer used. The skills needed in the preparation of natural resources is not being taught to the younger generations that are continuing the intricate whaling tradition. The plunge into the twentieth century has been severe and some whaling communities have had their share of moments which severely tested their will to continue as hunter gatherers. Massive death to influenza epidemics or other diseases was wrought upon many communities on many occasions that attested to the near extinction of the art. Today the contest is strong in nine whaling communities throughout Alaska where again, each year the moon tells the hunter, 'it is time'; the boats are launched and the quest begins anew.

ARNDT, Katherine L.

"Released to Reside Forever in the Colonies": Founding of a Russian-American Company Retirement Settlement at Ninilchik, Alaska

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

By the 1820s administrators in Russian America found themselves burdened with a number of employees whom old age or illness had rendered unfit for colonial services but who, for various reasons, could not be sent back to Russia. As a partial solution, the Russian-American Company sought and received imperial permission to establish what it hoped would be self-supporting retirement settlements in the colonies. One of the earliest sites proposed was Ninilchik, on Cook Inlet, but it took 20 years and two false starts

before a small settlement finally took hold there. This paper examines the retirement problem and Ninilchik's suitability as a retirement site from both the Company's and the retirees' perspectives.

BAICHTAL, James F.

USDA Forest Service, Tongass National Forest, Ketchikan Area

An Update on the Exploration and Resource Evaluation of the Cave Resources on the Ketchikan Area of the Tongass National Forest, Southern Southeastern Alaska
SOUTHEAST ARCHAEOLOGY SYMPOSIUM

The exploration and resource evaluation of the extensive cave and karst resources continues on the Ketchikan Area of the Tongass National Forest. Over 190 caves have been mapped and inventoried. Significant discoveries continue to be made. Speleothems with unique growth forms have been discovered. Deep shafts with vertical glaciers containing wood and bone fragments have been described. Paleontological and cultural materials have been found within many caves. Last years excavations and explorations have resulted in the recovery of several Pleistocene/Holocene vertebrates. Remains of four black bear, five grizzly, a fisher, and a marmot, the latter three now extinct on Prince of Wales Island, were removed. A preliminary study of the invertebrate fauna of the caves has resulted in identification of several cave adapted organisms. Salmon have been discovered spawning within some cave passages.

Studies now are changing focus from purely cave resource protection to understanding the karst ecosystem, possibly the most productive ecosystem in Southeastern Alaska.

BATTINO, Wendy

USDA Forest Service, Tongass National Forest, Stikine Area

Bradfield Canal Fishtrap

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

In 1992 Forest Service archaeologists conducted a site documentation survey in Bradfield Canal, an area traditionally utilized and claimed by the Nanyaayih clan of the Stikine Tlingit. Archaeologists discovered the Bradfield Fishtraps extending along approximately 1/2 mile of tidal flats. The nearest anadromous stream is Tom Creek which lies 1/2 mile east of the fishtraps. Three additional smaller traps were observed along tidal flats in this survey. In two forested areas, within 30-50 m of the fishtraps, cultural depressions were located; possibly utilized for storage of fish. The fishtrap technology observed at Bradfield Canal in relation to recorded sites will be discussed.

BIRKEDAL, Ted

National Park Service

Collaboration and Cooperation: The National Park Service Perspective

FEDERAL RESEARCH COOPERATION IN ALASKA SYMPOSIUM

No Abstract Received

BLACK, Lydia, Jerry Jacka, Miranda Wright, Sarah McGowan and Natalia Taksami

Department of Anthropology, University of Alaska Fairbanks

Current Aleutian Studies at the University of Alaska Fairbanks: Part I and Part II
CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

A current research initiative (including Lydia Black and her students at the University of Alaska Fairbanks and Aleut communities in the Eastern Aleutians) explores the relevance of the past for the present. Changing economic and subsistence practices and their concomitant social consequences are examined for the role they play in structuring contemporary Aleut communities. Presented by multiple individuals.

McCARTNEY, Allen P.

Department of Anthropology, University of Arkansas

Size Selection of Precontact Bowhead Whales

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

Measurement of whale bones associated with Thule Eskimo sites in the Central Canadian Arctic has demonstrated that small yearlings and 2-3 year old animals of 7-10 m live length were regularly selected by hunters prior to Euroamerican contact. This pattern has consistently been found at coastal sites on Somerset, Prince of Wales, Bathurst, Cornwallis, and Devon islands since we began a measurement program there in 1978. Using a schedule of cranial, mandibular, scapular, and cervical vertebral measurements devised by Edward Mitchell (Arctic Biological Station, Ste. Ann-de-Bellevue, Quebec), live animal length has been estimated using multiple linear regression models derived from 14 recently killed Alaskan bowheads of known size collected by Floyd Durham (Los Angeles County Museum). Of almost 10,500 bowhead elements counted, representing a minimum number of animals of 963, whale sizes were estimated from approximately 345 crania, 780 mandibles, 220 scapulas, and 120 cervical vertebrae.

Given these data, it is suggested that: (a) most, if not all, arctic/subarctic large whale hunting included selection for smaller animals which were less dangerous to kill, easier to tow ashore and butcher, and tasted better; (b) precommercial bowhead whaling along the northwestern Alaskan coast also emphasized small whale use, based on anecdotal and nonsystematically collected information; and (c) bowheads of the Bering Sea-Beaufort Sea stock of the western Arctic are anatomically and behaviorally similar to those of the Davis Strait stock of the eastern Arctic, thereby permitting direct comparisons about effective killing and use by Natives of both regions.

McMAHAN, J. David

State of Alaska Office of History & Archaeology

Analysis of Wooden Artifacts and Other Plant Materials from Three Gulf of Alaska Sites

CONTRIBUTED PAPERS IN ARCHAEOLOGY SYMPOSIUM

During the summer of 1991 the Office of History and Archaeology investigated archaeological sites in Prince William Sound, the outer coast of the Kenai Peninsula, and Shuyak Island to assess the effect of crude oil from the Exxon Valdez oil spill. Excavation and surface collection at three of the sites (SEW-068, SEL-215, and AFG-098) produced assemblages which include significant quantities of worked wood and other botanical residues. Microscopic and macroscopic analysis revealed insights about raw materials, workmanship, and material availability. The possible inclusion of materials outside their current ranges holds implications for trade relations between Pacific Eskimo groups. A combination of unique and conventional identification procedures has potential for other projects.

McMAHON, Brian

Alaska Native Health Center

Viral Hepatitis in Alaska Natives

NUTRITION AND HEALTH SYMPOSIUM

No Abstract Received

services were lacking. Why this is the case and why contracting for nursing services may be the future trend in care provision is presented. In addition, practical pointers for design of a model contract is included.

MARSH, David

Native Suicide in Southwest Alaska: 1979-1990

NUTRITION AND HEALTH SYMPOSIUM

No Abstract Received

MASON, Owen K., Alaska Quaternary Center, University of Alaska Museum and S. Craig Gerlach, Department of Anthropology, University of Alaska Fairbanks
Whaling and/or Reindeer-Herding in Choris Culture: Arctic Chameleon or Chimera?

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

Based on organic remains from the type site on Choris Peninsula, the Choris phase is identified with reindeer "herding," round houses, pottery, labrets and oil lamps. A distinctive barbed harpoon head is reported only from Kotzebue Sound and at the northern Yukon Terr. site of Engigstciak. Reviewing the lithic scatters identified as Choris in northwest and northern Alaska during the 1970s/1980s, only the burinated biface stands out as a defining characteristic for Choris, although micoblades co-occur in many non-stratified surface sites and also at Onion Portage. The age of Choris culture is 2900-2100 14C yr BP, based on a handful of radiometric dates (<25). This time interval witnessed heightened storm erosion and, possibly, anomalous winter and summer precipitation that produced higher runoff into Kotzebue Sound and altered marine productivity. Beach ridge sites (n=113) at Cape Espenberg and Cape Krusenstern indicate that the extremely mobile Choris people likely camped in pole structures for short term sealing and cached goods for future use. Choris represents a brief period of cultural interaction, perhaps immigration, between Alaskan and antecedent (3100 BP) and contemporary (2900-2700 BP) Chukotkan peoples. The penetration of Choris people into the Brooks Range appears sudden and tentative; indicative of low population densities and contact with a pre-existing population. Re-analysis of Choris faunal remains shows that both reindeer herding and whaling are unlikely possibilities.

McCALLUM, Mark

USDA Forest Service, Tongass National Forest, Stikine Area

Sandy Beach Fish Traps

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

Since 1989 community volunteers and students have assisted Forest Service archaeologists to record five intertidal fish traps at the Sandy Beach Site near Petersburg. The traps consist of heart-shaped stone and wooden stake alignments with funnel leads. The traps are of a design not well documented in southeast Alaska. Pending radiocarbon age determinations will be presented. The paper will examine the challenges and benefits of utilizing volunteers and incorporating public outreach in archaeological projects. The paper will also address the use of archaeological sites for ancillary educational activities, such as using land surveying students to map fish traps.

BLACKMAN, Margaret B.

Department of Anthropology, SUNY -Brockport

The "Nunamiut Experience": Tourism in Anaktuvuk Pass

CONTRIBUTED PAPERS IN CULTURAL ANTHROPOLOGY SYMPOSIUM

Tourism, long an important industry in Alaska, grew rapidly in the 1970s with the oil boom. In the 1980s ANILCA, which generated parks, monuments, and preserves, opened up new realms of tourist possibilities in the 49th state. Anaktuvuk Pass, drop off point for backpacking visitors to the Gates of the Arctic National Park, home to the Simon Paneak Memorial Museum constructed in 1986, and, above all, quintessential picturesque native village nestled in the Brooks range, doubles its population each summer with tourist visitors intent on experiencing the "real" Alaska. This paper looks at the development of tourism in Anaktuvuk Pass, its problems and potentials.

BLAND, Richard

University of Oregon

Charley Village

HISTORICAL ANTHROPOLOGY SYMPOSIUM

Charley Village was a late prehistoric - early historic Han Athapaskan village located somewhere on the Yukon River between the communities of Eagle and Circle. It was visited in historic times (the end of the 19th - beginning of the 20th centuries) by several Euroamericans who left written accounts. Despite these accounts, and the fact that Charley Village is perhaps the Han Village most often mentioned in literature, its actual location remained a mystery. During the summer of 1992 the site was finally located.

BORAAS, Alan and Donita Peter

Kenai Peninsula College

The True Believer Among Kenai Peninsula Dena'ina: Evolution of a Belief System

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

Before contact the Kenai Peninsula Dena'ina had a highly developed belief system which could result in one becoming a *k'ech' eltanen* or "true believer." Achieving the spiritual state of true belief (*k'ech' eltani*) resulted in viewing nature as an ordered, symmetrical system of replication maintained by performing certain rituals. European contact traumatized this belief system because, though the non-believing Europeans did not practice the requisite rituals, Kenai Peninsula ecosystems were not drastically changed until the early part of the twentieth century. The resulting chaos led to modification of the traditional world view more consistent with, but not an exact copy of, European models of nature.

BOWERS, Peter

Northern Land Use Research

Historical Archaeology of the Alaska-Gastineau Mine, Juneau, Alaska

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

As a result of the proposed re-opening of the historic Alaska-Juneau Gold Mine, a cultural resources inventory and assessment was undertaken in 1991. Following archival research, recording local histories, and archaeological survey, 21 historical sites were identified. The majority of the identified sites represent sub-features of the Alaska-Gastineau Mining (AGM) Company system which operated between 1912 and 1921. The AGM Company, together with the Treadwell Group and Alaska-Juneau Mine, represent one of the three major efforts at consolidating the Juneau hard-rock mining operations. Following the classification system of Hardesty (1989b), the physical

remains of the AGM Company infrastructure may be broken down into a number of archaeological features, including technology features (mine, adit, compressor buildings, mill, assay office middens), domestic features (cottage ruins, railroad workers houses, trash dumps), and mining landscapes (tailings piles, assay office middens, railroad grades). The sites have the potential for helping to document a wide range of activities associated with the AGM Company operations: underground extraction of ore, transportation to the mill, milling and assaying, industrial support system, and domestic-residential system. The AGM Company operation was significant in Alaskan mining history for a number of reasons, particularly for the technological processes which were pioneered in these mining and milling operations. The rise, brief fluorescence, and failure of the AGM Company are discussed in the context of Juneau's mining past.

BRAHAM, Howard W.

Alaska Fisheries Science Center, National Marine Fisheries Service
National Oceanic and Atmospheric Administration

Sex and Size Composition of Bowhead Whales Landed by Native American Whalers
NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

Native subsistence bowhead whaling in western North American and far eastern Arctic can be divided into at least three historic periods: archeological and early subsistence (c. 2000 B.P. to 1885), commercial shore based whaling (1885 to c. 1909) and modern native subsistence (20th Century). Throughout this history, various changes occurred in the methods used by native Americans to hunt and land bowhead whales, depending upon the socioeconomic and technological influences at the time. Changes in the growth, development and redistribution of the native population, or changes in the traditional values of the culture, have resulted in shifts in subsistence practices including how and where resources are acquired. In the case of whaling, resulting changes are seen not only in the total number of whales landed (or lost), but also the sex and size (body length) composition of the catch. (These changes may further influence the biological productivity of the whale population depending upon whether the population is large and robust, or small and isolated as recently thought for bowhead whales in the western Arctic.)

Information on the number of bowhead whales landed by Arctic natives prior to the whale's "discovery" by Yankee commercial whalers in 1848, is unknown. Archeological evidence suggests that smaller bowheads may have been hunted from shore or ice near settlements, whereas larger bowheads were more likely exploited only after stranding. Limited anecdotal data exist on the number of whales harvested by subsistence users until the early 1900s; more complete data were gathered thereafter. Over the past 20 years, the total number, and sex and size distribution of bowheads in the harvest has been well documented. Although incomplete, the evidence suggests that subsistence whaling practices probably changed little until the early 1970s when an unprecedented large number of bowheads were struck and landed or lost by American Eskimo whalers (i.e., 1915-69 = ≤ 20 /yr; 1970-75 = 48/yr; 1976-77 = 100/yr). In 1978, national and international political-conservation pressures resulted in a quota system that further influenced the traditional bowhead hunt.

This paper presents an analysis of the total number, sex and size composition of bowhead whales taken at nine native villages in western Alaska since 1973. Also considered are data on the number of bowheads landed at native sites in Alaska and Chukotka this century. Trends in the harvest data in all likelihood reflect parallel changes in anthropological or ecological conditions of culture, biology and behavior. Such influences as socioeconomic attitudes, cultural resurgence in whaling for bowheads,

different from the data that would have been collected using standard archaeological locational instruments and techniques.

Laboratory analysis was enhanced by the use of ARC/INFO. This Geographic Information System (GIS) program creates spatial representations of previously determined artifact attributes. A single attribute or a combination of attributes can be rapidly selected and the associated artifacts displayed. Thus, many potential spatial artifactual relationships can be examined. Topographic data as well as other geographic information can also be graphically represented, and the relationship of artifacts to these features can be displayed and analyzed.

The total station permitted collection of a larger data set then could have been assembled using conventional means, and the analysis made possible by the GIS allows us to interpret this data in ways that would not have been possible had conventional analytic methods been employed. These new technologies have made it possible for us to delineate the spatial arrangements of artifacts or object clusters in order to interpret and describe the composition of the prehistoric groups that utilized the ridge upon which the microblade localities are located.

MACK, Robert

Department of Anthropology, University of Alaska Anchorage
Traditional Methods of Food Processing, Cultural Change and Implications for Health and Disease: An Exploratory Paper
NUTRITION AND HEALTH SYMPOSIUM

Homo Sapiens is conspicuous by the degree of sophistication it brings to food preparation, processing and storage. The nutritional effects of traditional methods of food preparation including grinding/pounding/grating; soaking, drying, heat treating and fermentation, are selectively reviewed and discussed. These remarks are followed by a critical examination of a number of detrimental effects, associated with cultural change and modernization, on several of these traditional methods of food processing. Data from Alaska and Central America (Mexico & Guatemala) are utilized for discussion. Specifically, the use of modern plastic containers has increased the risk of C. Botulism for Alaska Natives, while preliminary data suggests that changes in traditional Maize processing is escalating the nutritional risk for many Indigenous Central Americans. Recommendations are made to counter the negative effect on health and disease patterns of these changes and suggestions for further in depth research are espoused.

MADDEN, Ryan

American History Department, University of New Hampshire
Our History Has Value: Aleut Memories of WWII
CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM
No Abstract Received

MANN, M., J. Sprott and L. Cameron

Seeking Solutions for Health Screening Needs of Rural Native Children: Creative Contracting

This paper describes the utility of using contract Public Health Nursing Services in rural Alaska to meet the high volume demand for Early and Periodic Screening, Diagnosis and Treatment (EPSDT) of children. Legal, financial, sociocultural, structural, and policy issues and barriers related to contracting are discussed. It is interesting to note that while special contracts for physician services, physical therapy, speech and language evaluation have commonly been employed as stop-gap measures to provide services when staff numbers were short, this strategy has not routinely been applied when nursing

Bifacial and unifacial chipped stone tool assemblage, which lacks both a ground stone or microlithic element is unique in this region and may represent use of the area by an interior group, use of the site prior to 5000 B.P., or a specialized large game hunting tool kit used by coastal people during the Developmental Northwest Coast Stage. Additional research is needed to establish the relationship of this assemblage within the proposed chronology of the region.

LORING, Stephen, Arctic Studies Center, Department of Anthropology
National Museum of Natural History, Smithsonian Institution

After You Dr. Hrdlicka: Another Hole in the Little Kiska Midden
CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

A research initiative in the Western Aleutians is designed to further reveal the unique cultural achievements and history of the Aleut societies that once flourished on the Rat and Near Island groups. These islands are the western terminus of a linear island archipelago that stretches over a thousand miles from the Alaskan mainland. The Aleutians support a complex and bountiful maritime ecosystem which has sustained human occupations for perhaps 4000 years.

In 1992, excavations were conducted on Little Kiska along one side of a large shell midden village site. The site had previously been "mined" by Ales Hrdlicka in 1936 and by Japanese soldiers during World War II. Excavations revealed over four meters of stratified deposits which included a complicated whale-bone lined pit feature.

LUBISCHER, Joseph
Changes in Aleut Kayak Forms

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

Aleut kayak forms have been examined for structural and stylistic changes in the century subsequent to Bering's 1741 voyage. The sample base includes burial cave artifacts, reports by *promyshlenniki* and explorers, and full size kayaks collected in the 19th century. Recent radiographic examination of the Etholen Collection kayak with ivory joinery is included. Similarities between kayak parts from burial caves (Islands of Four Mountains) and Bering Sea kayaks are pointed out. The 'classic' Aleut baidarka is suggested to be an Aleut-Kodiak hybrid which resulted from the centralization of power in the Russian-American Company and a functional focus on extended sea-mammal hunting trips.

LUTZ, Bruce J. and Douglas D. Anderson
Department of Anthropology, Brown University
Laser Transits and Geographic Information Systems: The Anatomy of Three American Paleoarctic Tradition Microblade Sites
TECHNOLOGY IN ANTHROPOLOGY SYMPOSIUM

The first large-scale archaeological excavations in the vicinity of the Deadfall Syncline Coal Mine (near Cape Beaufort, northwestern Alaska) were conducted during August 1992. Three microblade localities relating to the American PaleoArctic Tradition were excavated.

Field data collection was enhanced by the use of a Wild TC 1000a total station, an instrument that uses a laser beam to locate objects and points in space. The speed and precision of the total station distinguish it from the standard optical surveying instruments. The speed with which it is able to locate points in space permitted us to determine the position of all archaeological objects, not just the few that were intentionally worked into stone tools. Its precision made it possible to distinguish closely spaced objects. These two characteristics allowed us to collect data that are, in effect, qualitatively

political pressures and unaccustomed demands, or natural advancements in whaling practices and equipment, may have all been important. In addition, trends in the data may also have resulted from an increase in the size of the bowhead whale population, short-term change in behavior from localized human pressures, or from subtle shifts in the distribution of whales by sex or size-class because of environmental conditions.

BRAUND, Stephen R.
Stephen R. Braund & Associates

Quantification of Subsistence and Cultural Need for Bowhead Whales by Alaska Eskimos

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

When the International Whaling Commission (IWC) removed its exemption that allowed aboriginal subsistence whaling in 1977, traditional Alaska Eskimo bowhead whaling became regulated by the IWC for the first time. Although the IWC banned subsistence whaling for the 1978 hunting season it later granted the Alaska Eskimos a small quota. This paper will describe how the contemporary importance (human need) of bowhead whaling to the Alaska Eskimos was established. The paper will also include a discussion of the methods used to quantify the subsistence and cultural need for bowhead whales by Alaska Eskimos and how this need increased from an annual bowhead quota of 12 landed (or 18 struck) in 1978 to the current level of 41 landed (or 54 struck).

BROADBENT, Noel
Division of Polar Programs, National Science Foundation
The National Science Foundation and Social Science Research in Alaska
FEDERAL RESEARCH COOPERATION IN ALASKA SYMPOSIUM
No Abstract Received

BURCH, Ernest
No Title Given
THE WENGER DATABASE SYMPOSIUM
No Abstract Received

BURWELL, Michael
Minerals Management Service
Steamer Politkofsky: Ship as Historic Emblem and Artifact
SOUTHEAST ARCHAEOLOGY SYMPOSIUM

The steamer Politkofsky was the last steamer built at Sitka by the Russian-American Company. Built in Sitka in 1863 and transferred to U.S. interests in 1867, the Politkofsky embodies most important eras in Alaska's early history and surfaces to commemorate a number of significant events in the history of the Pacific Northwest. Because of its participation in these major historic epochs and its long history as working towboat, it took on, even before its demise, a colorful maritime personality that eventually translated into its importance as physical emblem and artifact. Each of its salvaged cannons has generated its own unique narrative: one is now at the State Museum at Sitka after years in front of the Governor's Mansion in Juneau, another was donated in 1921 to the Washington State Historical Society in Tacoma, a third is said to reside at Fort Ross in California, the fourth cannon is housed in Seattle's Museum of History and Industry after years of gracing the Capital Hill estate of one of the Sound's early sawmill owners. The Politkofsky's brass whistle, blown at the transfer ceremony at Sitka in 1867, resurfaces to open the Alaska-Yukon Pacific Exposition in 1909 and the Century 21 Exposition in Seattle 1962 (both times the whistle being activated electronically by

Presidents). When and by whom the whistle was salvaged is still unanswered. A cribbage board made from the vessel's yellow cedar hull was sent to Alaska Gov. J.F.A. Strong by Capt. Billie Moore and now is housed in the State Museum in Juneau. As the ship gradually disintegrated in St. Michael Bay, its hand-forged copper spikes were pounded into letter openers and sold to tourists in St. Michael and Seattle as souvenirs. It appears that other important ships of this era were parceled out in a similar manner. Museum curators have established that a similar redistribution of ship parts was done with the famous Hudson's Bay Company steamer Beaver.

CARLSON, Risa

USDA Forest Service, Tongass National Forest, Ketchikan Area

Overview of Archaeological Resources Associated with Caves and Rock Shelters in Southern Southeastern Alaska

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

In the past two years a number of new cultural sites in caves and rock shelters have been found on the Ketchikan Area of the Tongass National Forest. There are occupations in rock shelters ranging from sea level to 300 feet in elevation. Some of these include burials which may or may not be related to the occupation. The caves have been utilized in several ways. Long term habitation is evidenced in several caves on the west coast of the outer most islands in the southern Alexander Archipelago, typified by deep middens made up of an incredibly diverse collection of faunal remains. In Kit-n-Kaboodle Cave there are many rooms and passages which are utilized as living areas. Thousands of tiny limpet, chiton, mussel, clam, and cockle shells had been arranged on all the cracks and ledges of the walls. Wolf's Lair, approximately 60 feet above sea level, is the size of a football field with corresponding cathedral ceilings. Resting on former beach gravels are a number of hearths which may represent different living areas. At El Cap Cave, two obsidian points were found over three hundred feet from the entrance of the cave through a difficult passage.

Only the most cursory examinations of most of these caves and shelters has been possible, but preliminary Carbon-14 dates show use extending over the past three thousand years. Although no cultural materials earlier the 3,500 B.P. have been found, the 10,000 to 11,000 year old faunal remains from El Cap Cave indicate the possibility of a coastal corridor in the early Pleistocene.

CINQ-MARS, Jacques

Canadian Museum of Civilization

Archaeological and Palaeoecological Investigations at the Bluefish Caves, Northern Yukon

CONTRIBUTED PAPERS IN ARCHAEOLOGY SYMPOSIUM

Keeping in mind that the nearly-completed investigations at the Bluefish Caves are but a first exploratory step in what can only be seen as a long term research project, I will attempt in this paper to present a synthetic overview of the most important sets of palaeoecological and archaeological information that have come to light in the course of the last decade or so. Needless to say, emphasis will be placed on the fact that some of the Bluefish Caves evidence can be used to demonstrate that the better documented very Late Glacial eastern Beringian cultural manifestations had antecedents which can be traced back well into the Full Glacial and beyond.

groups. Trade relationships with incoming Europeans will be explored as will the effects of new hunting technologies on Native subsistence patterns.

In addition, this research will attempt to detect indicators of climate and/or weather changes in the 19th century in the tree-ring record of the Kobuk River drainage. Ecological relationships will be developed to link the resulting climate reconstruction to resource fluctuations that may have influenced the resident human population to relocate in search of more advantageous subsistence territories. A climate reconstruction chronology will be developed for Kotzebue Sound and compared with the culture history of Seward Peninsula Inupiat groups. The chronology will be reconstructed back in time to develop a pattern of human response to climate variation that may be used to interpret variation in the archaeological record of this region.

LINGREN, Alexandra

The Presence Of The Past

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

Members of the Kenaitze Tribe, IRA are descendants of the Dena'iana who once fished, hunted, trapped and lived on the Kenai Peninsula. Today's Kenaitze live daily lives much as others do. They belong to the Kenaitze Indian Tribe, IRA, a federally recognized tribe, organized under the Indian Recognition Act of 1934, as amended for Alaska in 1936. Tribal members and lineal descendants number more than 800.

The Tribe seeks to reaffirm and preserve cultural traditions and language while forging a future of economic stability and social health. In developing and administering social, health and cultural programs to serve Native Alaskans throughout the Kenai peninsula the Tribe honors its ancestor's values and traditions. These programs and efforts to preserve traditional values and culture are the focus of this presentation.

LINKOUS, Jennifer

Department of Anthropology, University of Alaska Fairbanks

The Marine Mammal Protection Act and Traditional Defences in Two Recent Court Cases

CONTRIBUTED PAPERS IN CULTURAL ANTHROPOLOGY SYMPOSIUM

This paper explores the use of the "traditional" defense in two court cases which fall under the Marine Mammal Protection Act - a civil case regarding the use of sea otter and a criminal case regarding the wasteful taking of walrus. The rationale and debate behind the passage of the Alaska Native exemption in the Marine Mammal Protection Act of 1972 is discussed along with aspects of the Court's rulings on traditional hunting practices as they conflict with the Act and Fish and Wildlife Service regulations.

The effect of the Marine Mammal Protection Act and other laws which seek to codify culture are also discussed and the need for such laws is briefly examined.

LIVELY, Ralph A.

USDA Forest Service, Tongass National Forest, Ketchikan Area

A Little Change in Elevation: The Humpback Lake Site (49-KET-304)

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

Despite surveys of tens of thousands of acres on the Tongass National Forest, no prehistoric sites at elevations over 100 feet above sea level had been found in southeast Alaska prior to the fall of 1991. Between November 1991 and February 1992, three sites were located at elevations near the 300 feet contour line. Two of these were in caves or rock shelters. The third, 49-KET-304, is an open air, multi-component site at Humpback Lake. The upper component represents a post contact hunting camp ca. 1800. The lower component has a minimum age of 1740±90 B.P. but is probably older. The

LARSON, Mary Ann
Brown University / University of Alaska Fairbanks
Space, Time, Crews, and Qariyit

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

The qariyit (ceremonial houses) of Northern Alaska have close ties to Native whaling, particularly in communities where qargi membership is/was at least partially determined by whaling crew membership. This paper addresses the ways in which the qargi institution may have affected the spatial layout of North Slope communities and the changes which may have occurred following the introduction of Euroamerican whaling practices.

LAUGHLIN, William S.
Department of Ecology and Evolutionary Biology, University of Connecticut
Reflections on the History of Aleutian and Kodiak Island Anthropology, Archaeology, and Ethnography
CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

This is a summary version of the updated version of my keynote lecture of 1974 scheduled for the 20th year Anniversary Volume of the Alaskan Anthropological Association. It begins with "Dead Man's Daddy", Hrdlicka's Aleut name because he came every year and took the dead people back to Washington, his unique field methods, admonitions, and abominable cooking. As an unrepentant misogynist he insulted women on occasion, a habit that contributed to the Larsen Bay-Smithsonian dispute. He liked children, saw the value of growth studies, and was an indefatigable worker, even when injured. He met with Okladnikov in 1939 which paved the way for the joint Russian-American excavation of Anangula in 1974. Dina Brodsky and Waldemar Jochelson composed a multidisciplinary team. Her measurements of Aleuts have been found, he was the first to consider a Bering land bridge, ignored by Hrdlicka in favor of Bering Strait and recent entry into America. Hrdlicka did recognize the hypertropic humerus of the male Aleut kayak hunters and correctly related it to their kayaking. This explains how the Aleuts got their high-speed kayaks up to high speeds. These kayaks have been replicated by G. Dyson, J. Lubischer and E. Arima. and were reintroduced in Nikolski. Two reburials are shown and discussed with suggestions for explaining in greater detail the value of preserving the dead and linking them to their living descendents as a means of establishing land claims and jurisdictional history and culture, and physical welfare.

LEWIS, Michael A.
Climate Correlates of the 19th Century Inupiat Population Movement from Kotzebue Sound to Norton Sound as Reconstructed from Tree-Rings
HISTORICAL ANTHROPOLOGY SYMPOSIUM

During the early to mid-19th century Inupiat groups from the southern shore of Kotzebue Sound moved south across the Seward Peninsula and took up residence on the eastern shore of Norton Sound. Although received knowledge indicates this population movement was in response to the opening of a trade outlet on Norton Sound, it seems more likely, given other evidence, that this relocation was part of an overall adaptive pattern on the part of the natives of western Alaska, in which movement between bioregions was a normal response to resource fluctuations resulting from climate variation.

Ethnohistorical research will attempt to characterize the cultures of the southern Kotzebue Sound region at contact and compare these groups with historically and archaeologically known cultures of Norton Sound. Archaeological evidence will be considered to show similarities and differences between the material remains of both

COOK, John P.
Steese/White Mountain District, Bureau of Land Management
Obsidian Analysis: Progress Report
TECHNOLOGY IN ANTHROPOLOGY SYMPOSIUM

Considerable progress has been made in the analysis of Alaskan obsidian over the last year. The project is comprised of two major elements: source identification and hydration measurements. Although the former is fundamental to reliable dating and has been the major focus of our research this last year, significant advances have been made in consolidating a hydration measurement database.

Using Instrumental Neutron Activation Analysis (INAA), X-Ray diffraction (XRF) and microprobe analyses, more than 900 samples of obsidian have been analyzed for their elemental composition. These three methods will be compared and evaluated for their efficiency and reliability in differentiating Alaskan obsidians. Each has particular strengths and weaknesses. The statistical results of these analyses will be compared and the distinguishing signatures of the obsidians will be identified.

These characterization results will, in turn, be integrated with a body of hydration measurements that have been obtained on the samples.

CORBETT, Debra
U.S. Fish and Wildlife Service
Excavations on Buldir Island, Site KIS-008, in 1991
CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

In 1991 the only known midden site on Buldir Island was tested by a multidisciplinary team from the University of Kansas, Museum of Natural History in Paris and U.S. Fish and Wildlife Service. Two test pits were excavated to discover the nature and extent of the deposits and to determine the sites suitability for research on Beringian paleo-biogeography.

The test pits, nearly two meters deep, spanned nearly 1000 years of intermittent use of the site. Preservation was excellent. Not only was bone well preserved but quantities of wood, grass and other vegetation, hair and eggshells and membranes were recovered. These materials offer a unique glimpse into little known aspects of Aleut technology and subsistence.

This paper describes the excavations and cultural materials recovered. Analysis focused on the nature of the site occupation and the place of origin of the occupants.

CORBETT, Debra, U.S. Fish and Wildlife Service and
Douglas Reger, State of Alaska Office of History & Archaeology
The Alaska Heritage Stewardship Program
POSTER SESSION

The *Exxon Valdez* oil spill brought hundreds of people to the remote beaches of south central Alaska for cleanup activities. One effect of this influx was increased access to archaeological sites which had been protected by their isolation. Damage to sites has continued since cleanup. Mitigation of such damage is expensive and does not address the ultimate cause of the damage.

Successful archaeological stewardship programs in Arizona, and Texas, prevent vandalism through public education and regular patrols of threatened sites. An Alaska program, being developed by the U.S. Fish and Wildlife Service and the State of Alaska Office of History and Archaeology is intended to be self sustaining and locally based. Interested persons will volunteer with participating land owners and receive training. The volunteers will patrol sites, reporting any new damage. Stewards may also engage in other preservation activities such as collecting oral histories, documenting artifact

collections and organizing and participating in Archaeology Week and other public education programs. Governmental involvement will be limited to necessary record keeping, advisory and technical assistance and, if necessary, law enforcement activities.

Public reception has been positive and enthusiastic with interest throughout the oil spill area as well as the Aleutians, Ketchikan and the Seward Peninsula. We hope to have stewards active in summer 1993.

The poster provides background on the program and illustrates potential steward activities. The program is evolving and suggestions are welcome.

CORDES, Penelope M.

State of Alaska, Section of Epidemiology, AIDS/STD Program

Epistemology, Epidemiology, Anthropology, and AIDS Prevention

NUTRITION AND HEALTH SYMPOSIUM

An ethno-epistemology is a culture's way of knowing, and of evaluating evidence. It influences how new information is received and processed by its members. The newness of AIDS presents an opportunity to recognize this process, and the seriousness of the AIDS pandemic requires that we pay attention to it. Epidemiology, an empiricist paradigm central to the Western scientific understanding of AIDS transmission, contrasts with other cultural conceptions of the disease. Alaska Native, African-American, and fundamentalist Christian reactions to AIDS prevention information are instructive examples of how a peoples' historical experience, political present, and ideology influence their epistemologies. The implications for applied anthropology and AIDS prevention are discussed.

CRAVER, Amy

Fish Tales: The Social Function of Stories in a Small Commercial Fishing Operation on Fire Island

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

Since the early 1930s Les Wernberg, his family, and a variety of hired help have commercially salmon fished off the shores of Fire Island. This paper is concerned with the following question: What function does Les Wernberg's personal narrative stories serve with regard to the fishing crew and their sense of group identity? My analysis suggests that history and tradition are controlled and interpreted, on the island, by the instructive models Les provides in his stories. These stories enhance and legitimate this particular fishing community's sociability with one another.

CROSSEN, Kristine J.

Department of Geology, University of Alaska Anchorage

Little Ice Age History of Portage Glacier and the Placer River Glaciers, Turnagain Arm Area

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

During the 19th century, Portage Glacier was able to act as a portage way between Passage Canal in Prince William Sound, and Turnagain Arm in Cook Inlet, because for many years the ice was considerably expanded from its present location, and Portage Lake did not exist at the ice terminus. Portage Glacier, and its tributary, Burns Glacier, produced a continuous ice mass from the crest of Portage pass to the end of Portage Lake. Thus only a 2 km hike up Portage Pass from tidewater in Passage Canal would bring one to an easily accessible ice tongue that continued down into Portage Valley, ending about 10 km from Turnagain Arm. Records indicate both historic and prehistoric use of this portage. These 2 ice tongues advanced to their maximum positions prior to 1810 and remained in extended positions for about 100 years. By 1914, a lake began forming

KUNZ, Michael L., U.S. Bureau of Land Management, Arctic District and Daniel Gullickson, U.S. Bureau of Land Management, Fairbanks Support Center
Archaeologistics in Arctic Alaska and the Mesa Site

POSTER SESSION

This is a 28 minute video which demonstrates the planning and logistics requirements involved in doing fieldwork in arctic Alaska using the Mesa Site as an example. The first ten minutes of the video describes and shows all the planning and logistic tools necessary to establish and operate a base camp in a remote setting on the northern flank of the Brooks Range. The final 18 minutes of the video discuss the research history of the Mesa Site, the work currently underway, the site's radiocarbon chronology, the Mesa Culture's place in the Paleoindian Tradition and the lack of any obvious Siberian Paleoindian progenitor.

KUNZ, Michael L., U.S. Bureau of Land Management, Arctic District and Richard E. Reanier

The Mesa Site: A Paleoindian Site in Arctic Alaska

CONTRIBUTED PAPERS IN ARCHAEOLOGY SYMPOSIUM

Research at the Mesa Site (KIR-102) over the last 15 years has demonstrated that an intensive Paleoindian occupation occurred there during Late Pleistocene/Early Holocene times. The site lies in the northern foothills of the Brooks Range atop a Mesa-like ridge that rises 60 m above the surrounding terrain. A suite of 13 radiocarbon dates from seven hearths indicate the site was occupied at intervals between 9,700-11,700 radiocarbon years ago. Many of the more than 50 lanceolate projectile points recovered from the site have been found in direct association with the hearths. The site lacks any evidence of utilization by other regional cultures, and thus, unlike most shallow arctic sites, the assemblage is uncontaminated by the material remains of other cultures. The existence of this site demonstrates the need for recognition of a Northern Paleoindian period in the cultural chronology of northern Alaska.

LANCASTER, Miriam J.

Alaska Native Health Center

Botulism Among Alaska Natives

NUTRITION AND HEALTH SYMPOSIUM

The morbidity of food bourn botulism (*Clostridium botulinum*) among Alaska Natives approximates 100 times that of the lower-48 states with mortality rates as high as 40% of all patients with botulism. All cases in Alaska are thought to occur among Alaska Natives eating traditionally prepared foods. This talk includes an overview of the presenters 1990 article with an update of the morbidity and mortality of food bourn botulism in Alaska. The pathophysiology of botulism will be presented as well as a comparison between botulism in Alaska and the lower-48. The focus connects traditional Alaska Native food preparation and the occurrence of botulism in Alaska. The presentation ends by summarizing current issues surrounding food bourn botulism.

Reference:

Lancaster, M. J. (Jan 1990). Botulism: North to Alaska. *American Journal of Nursing*. pp. 60-63.

KING, Robert E.

Bureau of Land Management

Cooperation, Consultation, and Research: Recent Efforts by the Bureau of Land Management in Alaska

FEDERAL RESEARCH COOPERATION IN ALASKA SYMPOSIUM

As part of its work in managing federal lands in Alaska, the Bureau of Land Management engages in different types of research. This ranges from "scientific" research involved the testing of theories through original observation, study, and experimentation, to the inventory and monitoring of resources on a daily basis. More recently, research has included social questions about subsistence and more.

This paper will briefly comment on some of the various types of ongoing research performed by the Bureau of Land Management, including cooperative efforts.

KING, Robert E.

Bureau of Land Management

"Greetings From Alaska": The Anthropology of Souvenir Postcards of "The Last Frontier," 1898-1993

HISTORICAL ANTHROPOLOGY SYMPOSIUM

The year 1898 is well known in northern North America for its association with the Klondike Gold Rush. Yet it also marks an important change in United States postal regulations allowing for the mailing of privately-produced, picture postcards. From 1898 onward, these souvenir "visions" of Alaska in ever-increasing numbers began being sent far and wide. In some cases, they provided the first pictures ever seen by people of Alaska, thus helping create the all-important first impressions about the region and its inhabitants. However, over the years what postcards showed of Alaska changed, with new "images" replacing older ones.

This paper, using slides, will examine how Alaska has been portrayed over the years, how this relates to changing ideas about the state, and what this says about American culture of the last 100 years and its fascination with "The Last Frontier" state.

KING, Robert E.

Bureau of Land Management

The Pribilof Islands in the 1870s: The Story of Dr. Henry H. McIntyre and His Remarkable Photographs

HISTORICAL ANTHROPOLOGY SYMPOSIUM

The earliest known photograph ever taken in Alaska was in 1866. Following that, relatively few pictures were made until the 1880s and 1890s, with those of the early 1870s particularly rare. Of the few done during this latter time, a little-known set in stereo format was taken by Dr. Hugh H. McIntyre, a physician and Civil War veteran from Vermont. McIntyre, as an employee of the Alaska Commercial Company, served as superintendent of the seal fisheries on the Pribilof Islands, holding that post for around 20 years. As early as 1872, he began taking pictures showing what life was like on St. Paul and St. George Islands in the first decade after the departure of the Russians.

This paper, using slides, will discuss Dr. McIntyre's career, including his use of stereo photographs when speaking to Congress about conditions of the Aleut people on the Pribilofs. These views, some of them recently-discovered and to be shown publicly for the first time, provide new insights into what life was like in that part of Alaska around 120 years ago.

along the western edge of Portage Glacier, and its enlargement continued to the present day. In a similar fashion, Spencer and Bartlett Glaciers, extended to their maximum positions in Placer Valley about 1890, and both would have made excellent portages between Blackstone Bay in Prince William Sound and the interior of the Kenai Mountains. Dendrochronology and lichenometry have been used to ascertain the chronology of these ice bodies, and show that all have been retreating in a steady fashion for the past 100 years.

DAVIS, Wyndeth V.

National Park Service

What's in NADB? A Fresh Look at the National Archaeological Data Base for Alaska

POSTER SESSION

No Abstract Received

de LAGUNA, Frederica

Memories of Cook Inlet in the '30s and Afterthoughts on Kachemak Bay

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

No Abstract Received

DILLIPLANE, Timothy L.

Relaxing Far From Home: Colonist Recreation in Russian America

HISTORICAL ANTHROPOLOGY SYMPOSIUM

The leisure activities of Russian colonists in North America are explored in this presentation. A survey of selected documentary, oral history, and archaeological sources is summarized, and relevant information identified. Recreational activities are analyzed in light of the overall physical and work environments in which they occurred. Analysis to isolate Russian and/or other cultural elements within these recreational pursuits is also done. Concluding remarks discuss challenges for future research on the topic.

DILLIPLANE, Timothy L.

"Remote Sites Anthropology": A Renewed Approach to the Study of Isolated Settlements

TECHNOLOGY IN ANTHROPOLOGY SYMPOSIUM

Remote settlements of the past and present — this paper suggests that anthropological examinations of such communities, if oriented in a certain direction, contain untapped potential, specifically, those studies which focus on the changeability of culture may (1) continue to expand our knowledge of the settlements being studied, (2) contribute to the theoretical foundations of Anthropology, and (3) provide a valuable perspective to those planning the isolated communities of the future. Each of these points is discussed in the light of selected previous studies and other relevant topics.

DIXON, R. Greg

Tiq'at'l'ena Bena (Hewitt Lake) Archaeological Research Project, 1992 Investigations

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

1992 archaeological investigations in a locality of the Tiq'at'l'ena Bena Archaeological Site (Alaska Heritage Resources Survey site TAL-049) at Hewitt Lake, Alaska revealed a number of semi-subterranean dwelling and cache pit features spread along the northeast shore of the lake for about .8 km. A substantial quantity of occupational evidence along with stone and bone artifacts, tephra samples, soil samples, radiocarbon

samples, fauna remains, and other cultural traces were collected in a test of one of the dwellings. Remains of historic, proto-historic and prehistoric occupations were indicated there. The information obtained is expected to be of value to debate on the Eskimo-Dena'ina interface in the Cook Inlet area and related questions concerning the earliest arrivals of Dena'ina Athabascans in the Upper Inlet area. Analyses of the data gathered will be presented in a masters project paper to be completed in 1994.

DUMOND, Don E.

Department of Anthropology, University of Oregon

Whaletraps on the North Pacific?

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

The presence at Izembek Lagoon of a prehistoric house with rafters of whale mandibles combines with recent studies of the behavior of the Pacific gray whale (*Eschrichtius robustus*) to suggest that several lagoon systems on the Bering Sea coast of the Alaska Peninsula may have functioned as aboriginal whale traps. Additional archaeological and ethnographic evidence is discussed, with possible implications for the Northwest Coast.

EASTON, N. Alexander

Northern Research Institute, Yukon College

Further Investigations of Submerged Cultural Deposits at Montague Harbour, Galiano Island, British Columbia — Report on the 1992 Field Season

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

Fieldwork at Montague Harbour in 1992 completed excavation of the fourth underwater unit to glacially scoured bedrock at a depth of about 2.4 metres below the seabed, about 4 metres below tidal datum and 80 metres offshore. Paleoecological data includes evidence of a "reverse littoral sequence" in the deposits, in which contemporary marine sediments overlie faunal and floral materials typical of increasingly higher intertidal eco-zones. The faunal inventory of the basal deposits is characterized by high percentages (up to 90%+ of the total level faunal remains) of barnacle (*Balanus glandula*), bent-nosed clam (*Macoma nasuta*), and periwinkle (*Littorina scutulate*), all species of the upper intertidal and supra intertidal eco-zones. Numerous artefacts were recovered, including a nearly complete unilaterally barbed antler harpoon from sediments below radio carbon dated levels of nearly 7,000 years bp. Stylistically the harpoon conforms to that of the Marpole Culture (c. 2400-1600 bp), before and after which the unilateral style is absent, replaced by toggle head harpoon technology. Based on the current stylistic chronology the harpoon may be considered intrusive, however this chronology only extends to the Locamo Culture period of 3200 to 2400 bp. The preceding Charles Culture period (c. 6500-3200 bp) likely used harpoons, based on the evidence of sea mammal remains within the faunal record of several Charles period sites, but no example of harpoons have been recovered. Thus, the Montague Harbour harpoon may represent the first example of this technology from the Charles Culture (or its antecedent) and suggests an oscillation between unilaterally barbed and toggle head harpoons several times in this region. Direct AMS dating of the artefact should resolve this ambiguity.

Glacier Lodge. An outgrowth of that reunion was the Kennecott Kids Oral History Project. The "kids" were all school age children growing up in a "company town" located in the remote Wrangell Mountains during the 1920s and 1930s. One would expect stories of hardship, isolation, and boredom; instead they lived comfortably, developed close relationships, and participated in many activities. Much of the mining history of Kennecott has been written and is fairly well known. Development, methodology and results of the Kennecott Kids Oral History Project have given us new perspective on Kennecott. The project provides the basis from which the social history of Kennecott can begin to be told.

KARI, James

Alaska Native Language Center, University of Alaska Fairbanks

Dena'ina as an Archaic Peripheral Language

THE ANTHROPOLOGY OF COOK INLET SYMPOSIUM

As lexical evidence accumulates on contiguous Alaska Athabaskan languages, the Dena'ina language of Cook Inlet can be viewed as being the archaic periphery at the northwesterly frontier of an expanding Athabaskan language family (A model of the sequence of Dena'ina incursions into Cook Inlet basin is presented in Kari 1988). The data sources that enhance the picture of regional linguistic prehistory include the following: verb prefix morphology and morphophonemics within the Dena'ina dialects; the distribution of tabooistic innovations; the distribution of lexicon that is ecotically conspicuous; the distribution of precontact loanwords; and information on regional band names and band distributions.

Reference:

Kari, James, 1988. Some Linguistic Insights into Dena'ina Prehistory, in *The Late Prehistoric Development of Alaska's Native People*, ed. by R. Shaw, R. Harritt, and D. Dumond. *Aurora* No. 4, pp. 319-339.

KING, Maureen, Department of Anthropology, University of Washington
and Sergi B. Slobodin

Preliminary Investigations at the Kheta Site, Northeastern Russia

CONTRIBUTED PAPERS IN ARCHAEOLOGY SYMPOSIUM

The Kheta site, located in the Upper Kolyma region in northeast Russia, was discovered by S. B. Slobodin in 1991. Surface collection and excavation was conducted during that year, and again by Slobodin and King in 1992. Artifacts associated with the earliest occupation of the site were found within alluvial gravels and bedrock. A thin loess overlies the artifact level, a deposit that likely dates prior to the occurrence of forest vegetation in the region. The loess is in turn overlain by tephra, identified as the Elickhan tephra dating to ca. 8,500 B.P. The artifact assemblage is composed of stone debitage, cores, tools and two beads. The materials are typologically similar to artifacts from the Aldan basin (Diuktai culture) and the Kamchatka Peninsula (Ushki level VI). The stratigraphic position of the material in conjunction with artifact typology suggest that the site is terminal Pleistocene or early Holocene in age. It represents one of a small number of sites in far northeastern Russia that date to this time period.

posed new, stable explanations. Two case studies will address a question about technological adaptation at a cyanide concentrator and a series of questions on land usages and chronology in a remote lode mining district.

IWAMOTO, Karen and Rachel Myron

USDA Forest Service, Tongass National Forest, Chatham Area

The Challenge of Project SEEK: A Look Back at the Starrigaven Excavation and Education Cooperative

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

During the 1991-1992 school year thirteen Mt. Edgecumbe High School students, four teachers and seven Forest Service archeologists participated in Project SEEK (Starrigaven Excavation and Education Cooperative). Mt. Edgecumbe High School is a state run boarding school located in Sitka, Alaska. The project was unique in that the students were involved in not only the excavation, but they were also responsible for the subsequent analysis of the data and the final write-up. The purpose of this project was twofold; to provide a unique hands on educational opportunity for the students, and to accomplish a needed mitigation measure designed to protect an archeological site.

Four of the participating archeologists recently received the 1991 Alaska Region "Windows on the Past" Award for their contributions to Project SEEK. Along with a brief summary of the details of the Project, the two authors take a moment to reflect upon this unusual cooperative endeavor.

JOLLES, Carol Zane

Department of Anthropology, University of Washington

Paul Silook and the Ethnohistory of Whaling on St. Lawrence Island

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

A considerable body of data exists concerning whaling practices on St. Lawrence Island, Alaska, in the early twentieth century. Several researchers, most notably Charles Hughes, Dorothea Leighton, Alexander Leighton, Jane Murphy, and others have utilized this information. What is seldom discussed, however, is the vast majority of the data relies on the contributions of a single indigenous consultant, Paul Silook. In this paper, I discuss the influence of Paul Silook's work and its implications for our understanding of St. Lawrence Island whaling practices.

JOHNSON, Lucille Lewis and Rowena Bowman, Department of Anthropology, Vassar College and

George Gale, University of Connecticut

Aleut Subsistence in the Shumagin Islands

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

Preliminary studies of the faunal remains from the Chernabura Spit Site (XSI-007) have indicated that the site's residents focused their subsistence efforts on a limited number of the array of species of fish, birds and mammals available in the area. The patterns of remains from different areas of the site also vary, indicating either changes through time in prey preference or differential use of the site areas.

KAIN, Ann

National Park Service

Growing Up in Kennecott: The Kennecott Kids Oral History Project

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

In 1990 a reunion of former Kennecott residents was organized by Inger Jensen Ricci and Eleanor Tjosevig Eidemiller with Rich and Jody Kirkwood of the Kennecott

EASTON, N. Alexander

Northern Research Institute, Yukon College

The Northern Research Institute at Yukon College

POSTER SESSION

No Abstract Received

EIDEL, Thomas Frank

Bureau of Land Management

The Implications and Impacts of Digital Technology on Anthropological Research
TECHNOLOGY IN ANTHROPOLOGY SYMPOSIUM

The personal computer revolution has brought easy access of digital technology to the professional and research community. Along with this access have come both problems and benefits that a researcher with a traditional academic background may not be prepared to deal with. It has also brought new considerations, new responsibilities and a need for new levels of expertise not necessarily part of traditional anthropological training.

This paper will attempt to address some of the basic concerns and considerations which should be a part of successfully dealing with this recently available technology.

FALK, Marvin

University of Alaska Fairbanks Rasmuson Library

No Title Given

THE WENGER DATABASE SYMPOSIUM

No Abstract Received

FAULKNER, Sandra M.

National Park Service

Serving Clio: Public History in the Aleutians

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS SYMPOSIUM

Serving Clio, the History Muse, as a public historian means serving multiple publics. The diverse needs of federal, state, and local governments determine research goals. The National Park Service (NPS) uses the results of historic research to make management decisions to fulfill its mission to preserve and protect resources. The NPS also administers the National Historic Landmarks (NHL) program which focuses attention on historic and archeological resources of exceptional value to the nation as a whole.

Cultural resources, such as historic buildings, objects, archeological sites, or landscapes, are the physical manifestation of historical events. The public historian uses research methods to discover the meaning of these resources, to place them in context within the historic process. For the public historian, research is often resource driven, rarely conducted purely to add to the pool of knowledge. In the past few years, the Alaska Regional Office, NPS, conducted several projects in response to the rapid and severe increase in development pressure on Aleutian Island resources.

FELDMAN, Kerry

Department of Anthropology, University of Alaska Anchorage

Culture and Physical Disabilities: Alaska Native Disabled and a Medical Anthropology Project

NUTRITION AND HEALTH SYMPOSIUM

Between 3% - 4% of Alaskan Native peoples today experience some kind of physical disability according to a recent report by the Institute for Social and Economic Research of the University of Alaska Anchorage. A new awareness of the needs and rights of disabled American citizens has been developing due to the recent Congressional Act regarding the rights of disabled persons. It is common sense to anthropologists to assume that treatment of and care for any population's health needs must involve consideration of their culturally-mediated notions of health, medical care and how to help oneself deal with a problem. This is not common sense to most of the western medical establishment yet, however. This paper describes an ongoing community service project engaged in by the author in Anchorage involving a local hospital's rehabilitation unit that asked for some cultural training and Alaskan Native people who experience permanent spinal column injuries or strokes. It describes the data on Native American disabilities nationwide, as well, and the problems other researchers have identified in trying to provide culturally appropriate care for Native Americans. Students, native and non-native, have been involved in the local project as well and their efforts will be described. If possible, they will be present to discuss what they have learned and are now trying to do regarding the project.

FIENUP-RIORDAN, Ann

No Title Given

THE WENGER DATABASE SYMPOSIUM

No Abstract Received

FRIESEN, T. Max, Department of Anthropology, McGill University and

Charles D. Arnold, Prince of Wales Northern Heritage Centre

Prehistoric Beluga Whale Hunting at Gupuk, Mckenzie Delta, Northwest Territories

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

In the late prehistoric period, the Mackenzie Delta region was occupied by the most populous Inuit societies in Canada. These large populations, and by extension their rich culture, were made possible by an economy based on a great diversity of resources, among which the most important was the seasonally abundant beluga whale (*Delphinapterus leucas*). This paper presents analysis of over 1,600 beluga bones excavated from a cruciform sod house at Gupuk, a large site located on the East Channel of the Mackenzie River. These analyses will be used to characterize the processes of beluga procurement and processing at Gupuk, and to delineate the overall economic importance of beluga to Mackenzie Inuit society.

FROHLICH, Bruno

Department of Anthropology, National Museum of Natural History,
Smithsonian Institution

The Umqan Burials on Anangula Island

CURRENT RESEARCH AND SCHOLARSHIP IN THE ALEUTIANS

Contrary to other Arctic population groups, pre-contact Aleuts applied mortuary practices which focused on a high respect for the deceased. This resulted in the development of several unique methods of preserving, storing and disposing of human bodies.

deemed "incontrovertible evidence" of Russia's claims in North America - the Native inhabitants were presented with bronze crests and silver medals bearing the double-headed eagle, crest of the Russian imperial crown. Along with a sincere wish to establish peace and demonstrate goodwill, the Russians felt that the gifts would demonstrate their early presence and claims to territory.

Other gifts, such as documents, engravings, beads, and brass hats, were also given to chiefs along the coast of Alaska, often as a part of official presentation ceremonies. Explorers representing other European nations, and the United States, also used gift and ceremony to establish relations with the Native Americans elsewhere on the continent. Well into the 20th century, Russia's gifts to Alaskan Natives are kept as symbols of rank and prestige by the descendants of chiefs. This paper explores the purposes, methods of presentation, and meanings of these gifts, based on historical writings, oral history, and the collections of the Alaska State Museum and other institutions.

HENSEL, Chase

School of Education, University of Alaska Fairbanks

Public Gains / Private Losses: Emigration, Outmarriage and the Gendered Construction of Work in Southwest Alaska

CONTRIBUTED PAPERS IN CULTURAL ANTHROPOLOGY SYMPOSIUM

In Southwest Alaska, Yup'ik Eskimo women hold the predominance of wage labor jobs and graduate from college at much higher rates than Yup'ik men. I argue that differential rates of male and female employment and educational success result from women having been "culturally pre-adapted" to Western work. They possess (and possessed) significant cultural capital which they can convert into the symbolic capital of degrees and certificates, and into employment.

Conversely, in the personal sphere, western contact has resulted in a variety of losses of autonomy and opportunity. I argue that differential immigration and out marriage can be at least partially explained as a result of these public gains and private losses.

HOLMES, Charles E., State of Alaska Office of History & Archaeology,

David R. Yesner, Department of Anthropology, University of Alaska Anchorage and

Kristine J. Crossen, Department of Geology, University of Alaska Anchorage

Middle Tanana Valley Archaeology: The Broken Mammoth Project

POSTER SESSION

This poster summarizes investigations conducted over the past three seasons at three sites near Shaw Creek. Radiocarbon dates provide a framework for regional cultural chronology and the history of local loess deposition.

HOVIS, Logan W.

National Park Service

History and Archaeology: Interactive Identification and Evaluation of Historic Mining Sites

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

The presentation is an informal, illustrated discussion drawing on field experience to demonstrate the "hows and whys" of a profitable interaction between the disciplines of history and archaeology in the location, evaluation, and interpretation of historic mining sites. A consideration of the interplay between physical and textual sources of information in the historical and industrial archaeology of mining are central to the discussion. Case studies present situations where, at first, archaeological and historical evidence appeared to be in conflict: the physical evidence posed new questions; additional research

HEMS, L

Canadian Parks Service, Archaeological Services

Abandoning the Cult of the Artifact: Cultural Landscape Management on the Chilkoot Trail, Chilkoot Trail National Historic Site

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

Situated at the northern end of the Alaska panhandle and straddling the international border between Canada and the United States, the Chilkoot Trail has been one of the most important passes into the north-western interior of the continent. From 1897-1900 it witnessed the passage of thousands of gold seekers into the Yukon during the last great North American gold rush.

The immense variety and density of its cultural remains presents difficult problems for Cultural Resource Managers at this National Historic Site. These problems are intensified because the Chilkoot Trail may be the only National Historic Site in Canada where recreational activities such as backpacking and camping in and around historic sites is permitted as part of the visitor's experience. These difficulties are being resolved by viewing the Chilkoot as a landscape feature, created through the interplay of humans and natural history, with recreational use being a continuation of this interaction between humans and the landscape. By understanding how the interplay of topography and past land-use helped create the landscape, archaeologists can assist in ensuring that site development activities promote similar modern site use patterns as those which occurred during the gold rush. This can limit the amount of stress the present environment receives. The goal of this management approach is one of maintaining the overall landscape through sensitive, and appropriate forms and levels of natural/cultural interactions, interactions which have resulted from gold rush activities. Through regular monitoring, and measuring the effectiveness development has on promoting desired site use, human and natural coalescences can be interpreted fulfilling the need for the Chilkoot Trail National Historic Site to be an active, ongoing, living, outdoor museum.

HENRIKSON, Steve

Alaska State Museum

The "Lost" Totem Poles of the Brady Collection

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

The group of totem poles at Sitka National Historic Park was collected by Governor John Brady for the Alaskan exhibit at the Louisiana Purchase Centennial Exposition, held in St. Louis in 1904. While most of the carvings were returned to Alaska, a few remained in the lower 48. The poles that made it back were displayed along "lover's lane" in Sitka, but following the replication of some of the poles by the Civilian Conservation Corps in the 1930s, some of the original carvings were removed from the park. Over the past several years, some of these "lost" totemic carvings have been located in Alaska and the lower 48. This paper examines the history of these missing pieces, and illustrates the difficulties and conflicting philosophies related to the stewardship of monumental totemic carvings from the early 20th century to the present day.

HENRIKSON, Steve

Alaska State Museum

"...signs appropriate and natural...": Russian Crests, Medals, and Gifts Among the Natives of Alaska

HISTORICAL ANTHROPOLOGY SYMPOSIUM

Beginning in the eighteenth century, Russian explorers and traders established diplomatic relations with Native Alaskans, and in the process presented special gifts to Native leaders. While the land itself was marked with crosses and secret metal tablets -

The selection of a specific method depended on socio/cultural factors and the availability of natural resources, such like the presence of caves, and cliff over-hangs. One burial method includes the Umqan system. Umqan is the Aleut word for storage cellar but have proven to be Aleut burial places. Umqan were first reported on Southwestern Umnak Island including Anangula Island, however, numerous similar structures have recently been reported resulting in a significantly larger geographical distribution. The Umqan structures are predominantly located on hills adjacent to village sites. They consist of centrally located burial chambers surrounded by v-formed trenches constructed so that surface water is guided away from the burials. Excavations of three Umqan on Anangula Island have enhanced our understanding of such burials and their systematic place in the system of Aleut mortuary practices.

GANNON, Brian

Alaska Department of Transportation and Public Facilities

Background and Development of the Barnette Street Archaeological Project

ARCHAEOLOGY AND THE MINING FRONTIER IN ALASKA SYMPOSIUM

The impetus behind the first urban archaeology to be done in Fairbanks is the combined Illinois Street and Barnette Street reconstruction projects proposed by the Department of Transportation and Public Facilities (DOT&PF). These projects entail widening and realigning parts of Illinois Street, widening of Barnette Street, and construction of a new bridge across the Chena River, connecting Illinois Street with Barnette Street. These federally funded highway projects directly affect the location of E.T. Barnette's landing in 1901, and other sites associated with Fairbanks' developing commercial center. Consequently, archaeological investigations were initiated in compliance with Section 106 of the National Historic Preservation Act. The first task towards addressing the archaeology comprised a detailed archival study of Fairbanks' historic waterfront and its archaeological potential. This 1986 study (Ketz and Arundale) also identified research questions to be addressed such as Fairbanks' early economic development, responses to fires and floods, and construction techniques for riverboat docks. A borehole testing program was proposed to locate buried artifacts. A limited drilling program ensued in 1986-87 in conjunction with foundation studies for the proposed bridge. Boreholes were placed along the upper banks on both sides of the Chena River, yielding artifacts of glass, metal, wood, and ceramics at depths of 6-8 feet on the south side, and 10-12 feet on the north side. To establish more precise limits of buried artifacts, a more intensive borehole program was conducted in 1989. Twelve boreholes were placed around the First Avenue and Barnette Street area, and virtually all produced artifacts. The upper riverbank area predictably yielded the most abundant and varied assemblage. Coupled with records of previous construction and location of utilities, a map of archaeological potential was prepared to guide future excavations. With the presence of buried artifacts established, a more intensive archaeological testing program was developed to reveal intact historic features and their contexts. In August 1992, a consultant was selected by the DOT&PF to carry out the investigations. Four test excavations were strategically placed to yield maximum amounts of data; three along the upper south riverbank, at the location of the former Pioneer and Northern Commercial Company Riverboat docks; and one along the western side of Barnette Street, just south of First Avenue. The constraints of doing such work in an urban environment necessitated proceeding directly with more comprehensive data recovery to mitigate proposed construction impacts as significant cultural features were found. Obstacles were encountered during the development of this project, including: some public skepticism; misperceptions of early test results; bureaucratic entanglements; inherent complexities of

work in an urban environment; and unseasonably cold weather during excavations. These difficulties were offset by the outstanding performance of the archaeologists, remarkably well preserved in-situ historic resources, positive media coverage, and enthusiastic spectators.

HANSON, Christine, Department of Anthropology, University of Alaska Anchorage and R. Joan Dale, State of Alaska Office of History & Archaeology

Vertebral Anomalies in a Medieval Sample

POSTER SESSION

The pattern of spinal anomalies, in particular spina bifida occulta, in skeletons from a medieval Norwegian sample was found to differ from patterns reported by others (Barkley, 1978; Ferembach, 1963; Bennett, 1972; Roche, 1951). The skeletons, from the 1969-1979 excavations of St. Gregory's Church in Trondheim, Norway, date from ca. A.D. 1150-1381. All individuals were categorized as adult based on standard dental and osteological markers. Sexing was also based on standard osteological criteria (see Hanson, 1986). Seventy-one males, 90 females and 40 individuals of unknown sex were scored for presence or absence of spina bifida occulta, bifid cervical spines and spondylolysis. The present study found sex differences in the distribution and frequency of spina bifida, with incidence peaking locally in females in the S5 region while the male pattern is more diffuse. In both sexes spina bifida occulta was primarily confined to the sacral region. The occurrence of spina bifida did not differ significantly (chi-square = .63, df = 1) between males and females but the frequencies in some individual vertebrae were significantly higher ($p < .10$) in males. However, in both sexes the normal S5 was open (90.91% open neural canal). Other spinal anomalies such as bifida cervical spines or spondylolysis were very rare in both sexes.

HARDIN, Elbert A.

USDA Forest Service, Tongass National Forest, Stikine Area

A Review of Culturally Modified Trees in Southeast Alaska

SOUTHEAST ARCHAEOLOGY SYMPOSIUM

This paper reviews the results of Forest Service studies in Frosty Bay, Anita Bay and a group of culturally modified trees (CMTs) recorded on Kuiu Island. In these three years over 2000 CMTs have been recorded. Together these three studies represent the largest collection of CMTs recorded in central southeast Alaska. In addition to the findings of these three studies all nine types of recorded CMTs will be discussed as to use and cultural significance. A short section on tool mark morphology will be presented. Other items discussed will be the relationship between archaeological sites and CMTs; and the relationship between scar morphology and topography, CMT management problems, considerations and opportunities will also be addressed.

HARRITT, Roger K.

National Park Service

From Caribou and Seals to Large Whales: Some Suggested Parameters for Investigating Prehistoric Socio-Territorial Change in Bering Strait

NATIVE WHALING IN THE WESTERN ARCTIC AND SUBARCTIC SYMPOSIUM

In a recent paper (Harritt 1992), I outlined similarities and differences between socioterritorial organization among Eskimo groups in Siberia, the Bering Sea Islands and western Alaska. Of particular interest in this review are changes that occurred as a result of developing whale hunting focus in Alaskan villages that relate to adoption of the Siberian open-water whaling techniques. Northwest Alaskan sites such as those at Wales and the Point Barrow vicinity provide opportunities for investigating processes of change

from the rudimentary types of organization found in groups that were focused on small sea mammals and caribou to the more complex organization found in villages fully engaged in the pursuit of large whales. The present paper suggests that investigations can shed light on the development of the whaling village in western Alaska lies in intensive excavation of whaling villages such as those in the vicinity of Point Hope, including Walakpa, Nunaglak where the remains of Birnirk, Punuk cultures are found relating these remains to those of Western Thule culture, such as those documented at Utkiagvik. Precise dating of remains within sites should shed light on the development of the traditional whaling village from ancestral cultures. Pertinent data in this investigative approach are especially those represented by faunal remains and objects and materials specifically related to the pursuit of large whales. Such intensive investigations of sites are rare in Alaskan archaeology, but establishing the nature of cultural development in Bering Strait will require such an approach. It is equally important that future ethnographic studies of western Alaskan whaling villages address the processes by which egalitarian Eskimo societies such as those documented historically for Alaska began to evolve toward the ranked societies represented in Siberian Eskimo villages.

HARRITT, Roger K.

National Park Service

On the Origins and Spread of Denbigh Flint Complex Culture in the North American Arctic: A View from Kuzitrin Lake, Central Seward Peninsula

CONTRIBUTED PAPERS IN ARCHAEOLOGY SYMPOSIUM

Testing conducted by the National Park Service at Kuzitrin Lake in 1990 resulted in encounters with surface and buried Denbigh remains dating to 5,500-4,000 calibrated years BP (raw ages of $4,750 \pm 170$, $4,770 \pm 260$, $3,770 \pm 80$, and $3,810 \pm 65$). Comparisons made with calibrated ages of Denbigh remains at Iyatayet and Onion Portage reveal that the combined radiometric ages falling within distinct groupings of 5,500-5,400 found in calibrated ages at Kuzitrin Lake and Iyatayet, and ~4,300-4,000 calibrated years BP found Kuzitrin Lake, Iyatayet and Onion Portage. These data suggests that remains found in coastal and interior Seward Peninsula represent the initial appearance of Denbigh culture in North America, sometime around 5,500 years ago. Groups continued to inhabit the areas originally colonized, but a diffusion to areas to the north and south, and across Arctic North America occurred over the following centuries, as reflected in Denbigh remains of 4,300-4,000 years in age, found at the three locations named above, and in Denbigh sites located in both northern and southern Alaska.

HAYNES, Helen

A Closed Society: A Police Department as an Urban U.S. Subculture

CONTRIBUTED PAPERS IN CULTURAL ANTHROPOLOGY SYMPOSIUM

This paper is written both emically and etically, with "insider" information being translated into an "outsider" synopsis of the cultural study group. It is in no way meant to be demeaning to the profession which we all need in "civilized" societies, but is meant as a study of an interesting urban subculture, whose behavior and power is, magnified generally in a negative manner, to the point that the society has "closed" ranks, in order to protect themselves from negativity. They are hamstrung by laws and court decisions and feel that they are caught in the middle. The occasion where officers are praised for heroism is not often, when in fact their entire career is one of heroism on a regular basis. It is not the purpose of this paper to indicate that police officers never step outside the law, but this "fishbowl" life has alerted them to be circumspect regarding who is "allowed in." It is also the purpose of this paper to demonstrate the daily stressors they have to deal with. The setting for this department is a large north-western city, with approximate population of 250,000, and an ethnic minority of approximately 15%.