



28th ETHNOBIOLOGY CONFERENCE ABSTRACTS

ALANIZ, LUCIANO (see Pink)

ALOYISIUS, BOB (Yupik; Kalskag, AK)

In order to live, love, learn and understand our roles in life, we must look to our Elders and grandparents to show us the real way to accomplish these responsibilities. They are our direct link to our ancestors who gave us our spirituality, language, history, culture, heritage, traditions, customs and values. Our Elders and grandparents are our first teachers. We must learn, understand, practice and appreciate our heritage of the spiritual culture of respect. We must develop and maintain the life long practices of respecting all of creation the land, water, the air we breathe, ourselves, our families, our community members, our mother earth, our sisters and brothers that fly, roost, climb, walk, crawl, slither, burrow and swim. Above all we must respect the one that made it all, our Creator. We can do this by linking our past (our ancestors) through our Elders to our present (ourselves) and our future (our youth, our children and our infants).

Session 5: Living Tradition: Native Elders Speak on Plants, Animals, and Culture

ANDERSON, E.N. (Dept. of Anthropology, University of California, Riverside)

MADAGASCAR ON MY MIND

In 2004 I spent three weeks in Madagascar with a research tour. This allowed me to see how much a group of experts could learn in a short time about ecological management and mismanagement. There is controversy about how well or badly the Malagasy manage their fragile, biodiverse island. I learned much, and can provide tentative conclusions. The Malagasy people are managing the land much better than many earlier sources alleged. Problems of environmental overuse are real and desperate, but traditional management strategies can be foundations for improvement – if there is more sympathetic outside help and more internal awareness of problems.

Session 6A: TEK, Landscape Perceptions, and Resource Management

ANDERSON, M. KAT (Dept. of Plant Sciences, University of California, Davis)

TENDING THE WILD: CALIFORNIA'S OAKS, PROTO-AGRICULTURE, AND RESTORATION

I will discuss the indigenous uses and tending of California's oak woodlands, emphasizing findings from field work and archival research conducted with the Western Mono, Sierra Miwok, and Foothill Yokuts groups of the central and southern Sierra Nevada. Potential ecological effects of tilling, knocking, pruning, sowing, and burning will be explored. An alternative explanation for why domesticated agriculture was not adopted by tribes in parts of California will be put forth. Finally, I will suggest ways in which traditional ecological knowledge and management practices of California Indians can be used in cultural and ecological restoration work today.

Session 6A: TEK, Landscape Perceptions, and Resource Management

ANUNGAZUK, HERBERT (Inupiat; Wales, Alaska; Cultural Anthropologist, National Park Service, Anchorage)

IN QUEST OF TRADITIONAL KNOWLEDGE, LIVING WITHIN THE CALL OF THE ANCESTORS

The life trail of Alaska's indigenous people is largely unwritten. It is held in the memories of the older generations who share the knowledge they hold within them to the young in quiet poise. Education in the indigenous world is never over, and regardless of how old you are, you will live a lifetime of learning. The challenges that the people must face in the daily routine of survival are enormous but the rewards are great. For unknown eons the Inupiat have relied on the land and the sea from their sustenance. This way of life continues today, regardless of the many barriers they have encountered in the last 150 years.

KEYNOTE ADDRESS, FRIDAY BANQUET

BAKER, JANELLE MARIE (Department of Anthropology, University of Alberta, Edmonton)
WIXARIKA (HUICHOL) MANAGEMENT OF WILD AND DOMESTICATED AMARANTH

Wixárika people of western Mexico continue to cultivate and use amaranth species despite the suppression of amaranth use by the Spanish during the colonial period. The Wixarika use wild and cultivated amaranth species. The domesticated *Amaranthus hypochondriacus* is represented in Wixárika oral traditions that inform how and why one harvests its grain to be used in religious ceremonies. Specific growth-phase names also inform Wixárika management of *A. hypochondriacus*. Although the wild *A. hybridus* is cleaned out of garden plots during the rainy season, it is collected and consumed, forming a nutritionally significant part of the local diet.

Session 6A: TEK, Landscape Perceptions, and Resource Management

BALLUTA, ANDREW (Dena'ina; Nondalton, Alaska)

ESSAYS ON DENA'INA SURVIVAL

Andrew Balluta grew up on Lake Clark and in Nondalton, and he currently lives in Newhalen. Andrew knows the Southern Alaska Range very well, and he is an expert on Dena'ina language and traditions. He has worked as a game guide around Lake Clark and as a commercial fisherman in Bristol Bay. Between 1981 and 1989 he worked as a ranger at Lake Clark National Park and Preserve.

For many years Andrew has participated in and has facilitated research on Dena'ina language and ethnography. He is co-author with the late Linda Ellanna of *Nuvendaltun Ht'ana, the People of Nondalton*. (1992, Smithsonian Institution). At this conference Andrew will present examples of Dena'ina technical and sacred information, summarizing essays and stories by himself and by other experts in the oral traditions of the **Qizhjuh Vena** (Lake Clark) area.

Session 5: Living Tradition: Native Elders Speak on Plants, Animals, and Culture

BORAAS, ALAN (Professor of Anthropology, Kenai Peninsula College, Soldotna, Alaska) and DONITA PETER (Alaska Native Heritage Center, Anchorage, Alaska)

THE MORAL LANDSCAPE OF THE DENA'INA ATHABASCANS

In Dena'ina Athabascan traditional cosmology places could both absorb and exude information about historic events that occurred there. This historic information existed as a kind of scent and could be good, (*beggesha*), or could be bad (*beggesh*). Thus the landscape was not strictly a spatial domain, but a geo-historic space/time domain of places and the moral history of their use. Individuals had varying abilities to detect geo-historic information with shaman and those achieving a state of *k'echeltani* (true belief) having the most acute perceptions. Sentient animals, ancestor spirits, and other spirits could also detect the moral history of a place.

Session 1: Alaskan Cultural Landscapes

BROWN, CECIL H. (see Turner)

BURWELL, MICHAEL (U.S. Department of the Interior, Minerals Management Service
Alaska OCS Region)

**WESTERN SCIENCE & TRADITIONAL ECOLOGICAL KNOWLEDGE: CONSENSUS OR
CONFLICT**

TEK has been part of the Alaska's resource management regime for at least a decade. This paper examines working definitions of the word "traditional" and the term TEK from emic and etic perspectives; it examines the basic principles of Western and Indigenous world views, their basic differences and similarities in looking at phenomena, and where these observational approaches overlap and conflict. Successful and failed Alaskan case studies of the collaboration between the two knowledge systems are presented. Recommendations for better future collaboration and for finding TEK's intrinsic place in resource management are presented.

Session 7: Poster presentations

CABALLERO, JAVIER (see Dalle)

CORBETT, JON (Department of Geography, University of Victoria, British Columbia) and
C. PETER KELLER AND MARY STOCKDALE

**EMBEDDED IN THE LANDSCAPE: DOCUMENTING THE RELATIONSHIP BETWEEN
PEOPLE AND THEIR PLACE USING COMMUNITY INFORMATION SYSTEMS**

Documenting and communicating local beliefs and world views is challenging for forest-dwelling communities. Much knowledge about the land is transmitted in the form of stories and legends that use metaphor and sophisticated terminology. Common forms of communication fail to capture the depth and power of the relationship (both physical and spiritual) with the land.

Researchers at the University of Victoria undertook a project that explored the potential for communities to use computer-based interactive maps in conjunction with digital video and photography to manage and present their knowledge related to ancestral lands and traditional land stewardship practices. These tools became known locally as Community Information Systems (CIS). This presentation will describe the process and impacts from developing CIS in two communities in West Kutai, Indonesia.

Session 4: Collaborative Information Systems Projects

CORDY-COLLINS, ALANA (Anthropology Program, University of San Diego, San Diego,
California)

FOLK TRINITY OF EURASIAN HERDERS

Arguably, the best-known (and perhaps best-loved?) folk belief of the modern Western world is the Santa Claus complex. The image of this rotund philanthropist, garbed in red-and-white vestments, piloting his reindeer team through the skies, sliding down chimneys into homes of the deserving, only to place his gifts under the yule tree is—upon consideration—a very curious one. This paper attempts to demonstrate how the main elements of the complex: the red-and-white dressed gift giver, the flying cervids, and the conifer arose within the shamanic practices of ancient Eurasian herders, and how they formed a sacred trinity.

Session 2: Animals in the Human Landscape

CRAWFORD, STUART (School of Environmental Studies, University of Victoria, Victoria, British Columbia)

ETHNOBOTANY OF BLACK TREE LICHEN (*BRYORIA FREMONTII*) IN SECWEPENC TERRITORY

The Secwepemc of southern interior British Columbia traditionally ate black tree lichen (*Bryoria fremontii*) as an important vegetable. Chemical variation within the species may make some populations toxic, and there are also similar-looking species that are toxic. As well, the unprocessed carbohydrates of lichens are indigestible to humans. In this study, Secwepemc elders were interviewed for traditional knowledge of lichen harvesting and preparation. Lichen was harvested and analyzed from sites in Secwepemc territory. The results indicate that traditional harvesting may preferentially select non-toxic populations of lichen and that traditional preparation may remove toxins and hydrolyze polysaccharides into digestible sugars.

Session 3: Plants in the Human Landscape

CUSACK-MCVEIGH, HOLLY M. (Native American Fish & Wildlife Society, Kenai, Alaska)
“WHAT COULDN’T BE SEEN” ENVIRONMENTAL CONCERNS AND SENSE OF PLACE IN SOUTHWESTERN ALASKA

Yup’ik Eskimo stories and personal narratives underscore the importance of human awareness and proper action in relation to the land. Careless actions and careless words can dissolve seemingly tangible boundaries between the human and the spirit world. When contaminants damage the land and waters we see a disruption of vital subsistence resources, but there is also a disruption in the spirit world. Outside agencies often fail to grasp the importance of this contemporary perspective. An examination of contamination at a site in Southwestern Alaska highlights the ways that these tensions play out, obscuring the deeper meanings of local cultural knowledge.

Session 1: Alaskan Cultural Landscapes; also on display as a Poster

CUSACK-MCVEIGH, HOLLY M. (see Stickman)

DALLE, SARAH (Department of Plant Science, McGill University, Quebec), JAVIER CABALLERO, SYLVIE DE BLOIS, and TIMOTHY JOHNS
LANDSCAPE PERCEPTION AS A BASIS FOR UNDERSTANDING LAND-USE TRENDS IN COMMUNITY FOREST MANAGEMENT IN THE MAYA ZONE, QUINTANA ROO (MEXICO)

While the ethnoecology literature documents the way people classify the natural environment, how such perceptions influence land-use/land-cover change and community forest management is rarely addressed. We quantify changes in forest cover before and after initiation of a community forestry program and examine how conservation practices are shaped by forest classification and perception. Remote sensing and participatory mapping were used to develop land cover maps from 1976 to 1997, and interviews with ejido presidents and local farmers served to document local forest classification and land-use rules and regulations. The results indicate that distinctions recognized between different forest community types are significant for interpreting both land-use patterns and for understanding local priorities for forest conservation. The relevance of these results for promotion of community-based conservation programs is discussed.

Session 6B: TEK, Landscape Perceptions, and Resource Management

DE BLOIS, SYLVIE (see Dalle)

DROZDA, ROBERT M. (see Rank)

FALL, JAMES A. (see Kari)

FJELD, FAITH (Director, Saami Baiki office, Anchorage)

SAMI HEALING STARTS WITH LOVED ONES

I will mention the use of the Drum, plants and and Sami healing techniques, and cite specific examples of healing practices that I have observed on trips to Sápmi (Samiland). Much of what I have learned has been taught to me by Dr. Elina Helander, who is a research scientist, a Sami tradition bearer and a reindeer herder from Utsjoki, Finland.

Faith Fjeld was born in Kalispell, Montana. She has a B.A. in art education from St. Olaf College and an M.A. in American Indian Studies from San Francisco State University. Her paternal ancestors were Indigenous reindeer herders from Norway and Sweden. She has dedicated her life to learning, writing and teaching about the Sami culture. She is the editor and publisher of *Báiki: the International Sami Journal*, the periodical that is credited with awakening Sami consciousness in North America. She is also the project coordinator of "The Sami: Reindeer People of Alaska" exhibit that is now touring Alaska. She lives in Anchorage, has two grown sons and two grand daughters.

Session 5: Living Tradition: Native Elders Speak on Plants, Animals, and Culture

FLOWER, MATTHEW (Department of Biological Sciences, Macquarie University, New South Wales, Australia)

ETHNOBIOLOGY OF THE WANYJIRRA PEOPLE , EAST KIMBERLEY, WESTERN AUSTRALIA

The **Wanyjirra** language group has kinship relationships within the isolated east Kimberley region of northern Australia. The **Wanyjirra** knowledge of plants, animals, and environmental processes is being lost as it passes away with the knowledge holders. The purpose of this project is to document this information.

In May 2004 contact was made with the **Wanyjirra** people. A comprehensive consultation process was the starting point, to address cultural concerns, establish project guidelines, ensure positive outcomes for participants, and to establish a familiarity between the researcher and the **Wanyjirra** people.

Using the Wanyjirra project as an example, this paper will discuss the reasoning behind and purpose of ethnobiological fieldwork in a remote part of Australia, and will briefly compare Indigenous and western scientific knowledge systems.

Session 4: Collaborative Information Systems Projects

FOWLER, CATHERINE S. (Dept. of Anthropology, University of Nevada, Reno)

DEATH VALLEY AGRICULTURE REVISITED

The origin and antiquity of gardening among Mojave Desert peoples in California has been much debated. Most data point to the relatively late (early to mid 1800s) introduction of the Southwest crops, but they are less clear about other indigenous plants. Oral testimony for the Timbisha Shoshone of Death Valley suggests late transmission of the Southwest complex from the adjacent Southern Paiute and lower Colorado River peoples, but is vague about others. A review of herbarium collections from old gardening sites shows the retention of remnant vegetation suggesting what else was grown and/or encouraged.

Session 10: "It's Not Just About Corn": Ethnobotany South of the 38th Parallel

FRESQUEZ, THERESA M. (Office of Archaeological Studies, Santa Fe , NM)

CORDAGE, KNOTS, BUNDLES, AND BASKETRY FROM HIGH ROLLS CAVE IN THE SACRAMENTO MOUNTAINS, SOUTH-CENTRAL NEW MEXICO

High Rolls Cave (ca. 1260 to 950 B.C.) is an Archaic dry shelter that lies along a high canyon wall in the Sacramento mountains. Archaeological investigations have revealed a variety of perishable materials including fragments of culinary experimentation, and of many plant based manufacturing processes. Identifying processed material required

considerable exploration of methodologies. Nearby larger Fresno shelter indicates the two shelters were used differently, and apparent in variable taxa. A comparison of functional implications of floral remains for the two sites has the potential of shedding some light on the multiplicity of Archaic adaptations in the Sacramento Mountains.

Session 10: "It's Not Just About Corn": Ethnobotany South of the 38th Parallel

GAWEL, MARCIE N. (see Reinhardt)

GEMEINHARDT, TODD R. (see Nolan)

GILBERT, REV. TRIMBLE (Gwich'in, Arctic Village, Alaska)

THE CUMULATIVE EFFECTS OF GLOBAL WARMING SURROUNDING ARCTIC VILLAGE, ALASKA

Rev. Trimble Gilbert is a life-long Neets'aii Gwich'in Athabascan who grew up deep in the Brooks Range in Arctic Village, Alaska. He spent his formative years as a nomadic hunter-gatherer. He and his family hunted caribou, moose, water fowl year-round game birds, salmon and resident fish species, porcupine, muskrats, ground squirrel, bears, and rabbits. They would follow a yearly cycle from the Sheenjik River fishing for salmon, with foot travel to and from Arctic Village, and then on to the headwaters of the Njuunjik (nee: Juunjik River) and Chandalar Rivers, and back again for winter on the Sheenjik, at **Khiinjik Zhee** (Salmon Village on the Sheenjik River).

Rev. Gilbert has been an Episcopal Minister since 1978, and he has also traveled many places as an Athabascan fiddler. For many years Rev. Gilbert has been speaking about the Arctic National Wildlife Refuge issue, big game hunting and fishing encroachment in the Chandalar River Valley, and other concerns of his community. He is steeped in the oral traditions and hunting lore of his community.

KEYNOTE ADDRESS, THURSDAY MORNING

GROVER, MARGAN ALLYN (U.S., Army Corps of Engineers, Alaska District)

INUUNIAGVIAT KAKTOVIKMIUT: CHANGING LANDSCAPES, TRADITIONAL LANDUSE, & THE ARCTIC NATIONAL WILDLIFE REFUGE

The people of Kaktovik, Alaska, call their homeland *Inuuniagviat Kaktovikmiut*. This is a territory that encompasses about 90,000 acres, from 100 kilometers into the Beaufort Sea south to the Continental Divide, and from the Canadian border west to Prudhoe Bay. *Inuuniagviat Kaktovikmiut* also includes parts of the Arctic National Wildlife Refuge, specifically the "1002 Area," which is important habitat for the Central Arctic and Porcupine Caribou herds and possibly contains millions of barrels of crude oil. This paper will explore some mechanisms developed by the people of Kaktovik for dealing with their dynamic and politicized environment.

Session 1: Alaskan Cultural Landscapes

GUERRA-RENNICK, TONANTZIN (Native American Spiritual Leader and State Chaplain for the Dept. of Corrections, State of California, 1996-2003)

DAUGHTER OF HARVESTING TRADITIONS

Visual presentation of Native medicinal plant harvesting as practiced in Native traditional methodology by Native women in the California central mountain areas. Display will include photos, plant samples and description of plant usage as well as harvesting methods as applied for multi usage. Preparation context for preventative health, system balancing, ritual and ceremonial application in community, clan and/or incarcerated environments. Each of these populations have separate and distinct

protocols for availability, preparation, storage and usage. Story telling of my harvesting experiences and of how the above mentioned environments prepared me to teach the joys of being firmly planted in Mother Earth's traditions.

Session 7: Poster Presentations / Table Display

HANSON, DIANE K. (Alaska Consortium of Zooarchaeologists; Army Corps of Engineers)
SUBSISTENCE AT UIVVAQ, NORTHWEST ALASKA

Uivvaq was a coastal community in western Alaska occupied between A.D. 900 and the 1950s. Uivvaq's proximity to pack ice, caribou migration routes, chert outcrops, bird colonies, and open leads placed it in an ideal location. It became the second most important settlement in the Point Hope area. Fauna from the site were primarily small and medium seals, caribou, and some small whales. After the meat was removed, seal bones were burned for fuel, and caribou long bones were broken to remove marrow. Despite the coastal setting, fish and gastropods were rare and are likely from pinniped stomachs.

Session 2: Animals in the Human Landscape

HARRINGTON, DAVID (Department of Biological Sciences, Macquarie University, NSW Australia), and JIM KOHEN

COLLABORATIVE INDIGENOUS BIORESOURCES RESEARCH IN AUSTRALIA

Australian Aboriginal people have used customary ecological resources for tens of thousands of years. However Indigenous communities in Australia are losing this knowledge. To investigate these issues, Macquarie University has started the Indigenous Bioresources Research Group (IBRG).

We engage in collaborative studies with Aboriginal communities and provide training and support within a unique collaborative environment with the dual aims of discovering new medicinal agents and providing sustainable financial opportunities to Indigenous communities.

Our talk will provide details of our aims and methodologies, how we ensure full Indigenous ownership of any publications and commercial developments and the priorities indigenous partners have expressed when drafting agreements. Finally we will outline our strategies to facilitate financial development in Indigenous communities through the preservation and dissemination of ethnobiological knowledge.

Session 4: Collaborative Information Systems Projects

HASTORF, CHRISTINE (Department of Anthropology, University of California, Berkeley)
MEALS FOR THE DEAD AT EARLY SETTLEMENTS OF THE TITICACA BASIN, BOLIVIA

The earliest settlements thus far noted in the large and productive Titicaca Basin center on ceremonial spaces where gatherings occurred to feast the ancestors. Evidence for these early gatherings come from the Formative site of Chiripa. Memorializing the lineages through these food activities is seen in the architecture, plant and animal remains, the ceramics and the contents of the ceramics, via stable isotopes. These meals do not include maize until late in the sequence, but focus on meat, fish, quinoa and potatoes. Ritual and quotidian foodways will be discussed as they relate to the spiritual world of the lake dwellers.

Session 10: "It's Not Just About Corn": Ethnobotany South of the 38th Parallel

HUNN, EUGENE (Department of Anthropology, University of Washington, Seattle)

ETHNOBIOLOGY IN FOUR PHASES

I recognize four phases of ethnobiology: I, II, III, and IV. Ethnobiology I begins well before the formal naming of ethnobiology as a scholarly endeavor at the end of the 19th century. This initial phase has been widely characterized, albeit oversimply, as essentially utilitarian. Ethnobiology II was elaborated in the cognitive/linguistic anthropology of the 1960s. Ethnobiology III stresses the importance of knowledge as applied to make a living. Ethnobiology IV emphasizes the rights of indigenous peoples to control their traditional knowledge. I elaborate this framework here and consider how these diverse perspectives might be integrated more effectively in the future.

Session 9: Science, Language, and Classification

IGNACE, MARIANNE (Simon Fraser University – Kamloops Program, Kamloops, British Columbia)

ABORIGINAL LANGUAGE SURVIVAL AND TRADITIONAL ECOLOGICAL KNOWLEDGE: LESSONS FROM BRITISH COLUMBIA FIRST NATIONS

In recent years, linguists, anthropologists and ethnobiologists have increasingly pointed to an explicit link between biological diversity and linguistic diversity, and thus between language, culture and environment. What specific role, then, does an indigenous language play in the maintenance of traditional ecological knowledge, and subsequently, of ecological diversity and sustainability?

Based on examples from the Pacific Northwest and Interior Plateau of British Columbia, this paper will explore how knowledge about complex ecological inter-relationships and interactions is encoded in oral histories and stories, often in subtle ways that employ the lexical, grammatical and pragmatic categories specific to an indigenous language.

The fact that Aboriginal languages in Northwestern North America are critically endangered, coupled with changed environments and species, is leading to an imminent “extinction of experience” as knowledge is increasingly told, validated and disseminated in English. This paper will also explore what is at stake for the future of the knowledge and use of environments, and what can be done to revive languages and the traditional ecological knowledge they entail.

Session 9: Science, Language, and Classification

JOHNS, TIMOTHY (see Dalle)

JOHNSON, LESLIE MAIN (Athabasca University, Edmonton, Alberta)

ON “WILLOWS” AND “BRUSH” – NORTHERN DENE ECOLOGICAL AND ETHNOBOTANICAL KNOWLEDGE OF PLANTS AND PLACES

“Willow” for Northern Athabaskan speakers appears to represent a term of plant classification, and a designator of a vegetation type. Genera included in “willow” include shrubby *Salix*, *Alnus*, *Cornus*, and *Populus*. Low shrubs such as Labrador tea (*Ledum groenlandicum*) or berry bearing plants such as *Rosa*, *Ribes*, *Rubus* and *Vaccinium* are NOT “willow.” “Willow” is a vegetation type which impedes travel, tends to occur along water courses, and provides food and habitat for moose, bears and ptarmigan. For Kaska, “willows” as a habitat type contrast with “brush,” which consists of dense, scrubby *coniferous* vegetation, a suitable habitat for snaring rabbits.

Session 9: Science, Language, and Classification

JONES, LINDA (English and Ethnobotany Instructor, Sitting Bull College, Fort Yates, North Dakota)

“THEY KEEP DIGGING IT UP” PROTECTING *ECHINACEA ANGUSTIFOLIA* ON THE STANDING ROCK NATION

Echinacea angustifolia has been used medicinally by the Lakota for thousands of years. Recently, Echinacea has also become a popular “herbal remedy” for non-Indians. This new-found fame has promoted serious over-harvesting, which has caused the decimation of my Echinacea stands on the Standing Rock Reservation. Methods of protection must be implemented if we are to save this plant for future generations. Our elders feel that the Standing Rock Nation’s tribal government must take immediate action by promoting sustainable use and harvesting of Echinacea – using both traditional management techniques and creating legislation to protect Echinacea under tribal, state, and federal law.

Session 6A: TEK, Landscape Perceptions, and Resource Management

KARI, JAMES (University of Alaska Fairbanks) and JAMES A. FALL (Alaska Dept. of Fish & Game, Anchorage)

THE RECONSTRUCTION OF DENA’INA GEOGRAPHY

The reconstruction of indigenous geographic names can be meaningful for language maintenance and public education. Shem Pete (1896-1989), the brilliant Dena’ina raconteur from Susitna Station, Alaska, was one of the most versatile storytellers in 20th century Alaska. His lifetime travel map in Upper Cook Inlet of approximately 13,500 square miles is one of the largest ever documented in this degree of detail for a small-scale society. In this presentation we will give an overview of the expanded 2nd edition of *Shem Pete’s Alaska* (2003, University of Alaska Press). The Dena’ina place names are presented in sixteen drainage-based chapters and are annotated with comments and stories by Shem Pete and more than fifty other contributors, and by a selection of photographs, maps and historic references.

Session 1: Alaskan Cultural Landscapes

KARST, AMANDA (Environmental Studies, University of Victoria, BC) and NANCY TURNER
THE ETHNOECOLOGY OF BAKEAPPLE (*RUBUS CHAMAEMORUS*) IN SOUTHEASTERN LABRADOR

Rubus chamaemorus (bakeapple, cloudberry, Rosaceae) has been a popular food source with many communities living in subarctic and arctic areas of North America. The berries, which are high in Vitamin C, likely served as a major source of this vital nutrient to these northern communities, which had limited access to fruit. While there has been considerable documentation concerning the use and importance of bakeapple to communities, there has been little research on bakeapple use by groups living on the east coast and on the specifics of its use with any group. My general objectives were to document ethnobotanical knowledge about bakeapple in a local Métis community from Labrador. I gathered information regarding: 1. history of bakeapple use by the community; 2. local observations about habitat characteristics and influences on fruiting; and 3. Traditional gathering and processing practices. My results show that this fruit was a valuable food source in this community traditionally, and is still important despite numerous changes (e.g. in subsistence and economy) that have occurred in this area.

Session 3: Plants in the Human Landscape

KEEFER, MICHAEL E. (Centre for Non-Timber Resources, Royal Roads University, BC)
THE ECOLOGY AND ECONOMY OF THE FIRE MORELS IN SOUTHEASTERN BC

Morels (*Morchella*:Fr. ssp.) are widely known as being amongst the finest wild fungus foods; in Western North America, they are best known to fruit after wildfires. The summer of 2003 in the Kootenay Region was characterized by intense heat, smoke from wildfires and a backcountry travel ban. There are many unanswered questions concerning the *Morchella spp.*, and how the life cycle and ecology of this fungus interact with fire and other disturbances. The research used ecological and ethnological survey methods together in order to gain both scientific data and contemporary ecological knowledge from the morel pickers.

Session 3: Plants in the Human Landscape

KELLER, C. PETER (See Corbett)

KOHEN, JIM (see Harrington)

KOZIOL, KATHRYN (Department of Anthropology, University of Arkansas, Fayetteville)
CLOSE ENCOUNTERS OF THE ANIMAL-KIND: AN ANALYSIS OF HUMAN PERCEPTIONS OF ANIMALS BASED ON PROXIMAL RELATIONS

In this study I will evaluate how humans perceive animals and how proximity influences these decisions. I will examine how liked and disliked animal categories are guided based on their interactions with populations. Therefore, the studied population consists of individuals who primarily self-identify as either Northern or Southern. In other words, the people included in this analysis are from different environmental and social areas within the United States, and will incorporate different animals into their liked and disliked categories based on their respective interaction levels. The methods of data analysis are most closely linked to ethnoscientific methods and are used paying close attention to both cultural and ecological salience of animals that are included under each category. The primary objective of this research is to see why people systematically like and dislike certain animals, and if it relates to a spatial component.

Session 7: Poster Presentations

LAKE, FRANK KANAWHA (see Todt)

MANCABELLI, ANDREW D. (University of Arkansas, Fayetteville)
SYMBOLIC MEANING AND EMOTION IN JAPANESE ETHNOZOOLOGY

This paper uses ethnoscientific methods to explore the Japanese emotional assessment of the five ethnozoological life forms – mammals, birds, fish, snakes/reptiles, and bugs/insects. Surveys were administered to 42 respondents from both rural and urban backgrounds in Southern Japan. Each respondent rated the five life forms in order of most liked to least liked, and completed two free-lists: the names of animals they regard positively, and the names of those regarded negatively. While significant intra-group concordance was found with respect to the life form ratings, a number of creatures from negatively-rated life forms appeared on free-lists of liked creatures. These liminal creatures are culturally salient in Japanese aesthetics, and are subjected to greater symbolic representation and metaphoric extension in local expressive traditions.

Session 8: Ethnomedicine, Symbolism

MASON, RACHEL (National Park Service, Anchorage, Alaska)

WHITHER ACONITE ?

Aconite (monkshood) is a hardy perennial in southern Alaska. Highly toxic alkaloids are present in the plant, particularly in its roots. The pre-contact use of aconite poison in whale hunting has been well documented in the Kodiak area and is a subject of debate in the Aleutians. Among the Koniags, the preparation of poisoned darts, along with other whaling knowledge and ritual, was closely guarded by an elite group of whale hunting specialists. This paper explores contemporary and recent historical uses of aconite in Alaska, and attempts to discover threads of continuity between indigenous practices and present-day sea mammal hunting.

Session 2: Animals in the Human Landscape

MASON, RACHEL (see Ramos)

MAZZATENTA, CLAUDIO (Dept of Biology, Bronx Community College – CUNY, Bronx, New York)

MEDICINAL PLANTS AND SHAMANISM IN THE AMAZON VARZEA

Varzea shamanism in the Peruvian Amazon is Tapirillo near Iquitos is discussed. Shamans use 55 plant species to cure 37 different health problems. Plant inventory indicated that 42 different plant species are available, but shamans use only 16 species for 18 health problems. Use of other 39 plants is discussed. Data are compared to the *Amazonian Ethnobotanical Dictionary* by Duke and Vasquez (1994) and 10 new health uses were reported. It can be speculated that shamans have the knowledge to cure their people but are not motivated to improve their abilities because the new generation is not interested in pursuing this healing craft

Session 8: Ethnomedicine, Symbolism

MCBRIDE, PAMELA J. (see Toll)

MULHOLLAND, SUSAN (see Yarborough)

NASH, DAPHNE (The Centre for Cross-Cultural Research, Canberra Australia)

FISHING AT “THE LOG”: PASSING ON INDIGENOUS KNOWLEDGE ON THE SOUTH COAST OF NEW SOUTH WALES

By exploring their living environmental knowledge with Yuin people, this project illustrates how indigenous knowledge transforms and also demonstrates the modes of transmission that are ensuring knowledge creation and maintenance. My preliminary fieldwork shows both continuity and change in a distinctly modern and indigenous environmental worldview. I propose that indigenous people of south coast New South Wales possess a system of environmental knowledge which is neither wholly traditional nor western but which is identifiably indigenous and that indigenous people are actively involved in its formulation and transmission.

Session 6B: TEK, Landscape Perceptions, and Resource Management

NOLTIE, DOUGLAS B. (see Nolan)

NOLAN,, JUSTIN M. (Dept of Anthropology, University of Arkansas, Fayetteville), MICHAEL C. ROBBINS, TODD R. GEMEINHARDT, and DOUGLAS B. NOLTIE

CATCHING ON TO ETHNOICHTHOLOGY: THE EFFECTS OF FORMAL TAXONOMIC TRAINING ON FRESHWATER FISH CLASSIFICATION

This study examines the effects of formal laboratory training on the classification and cognition of freshwater fish among college students at a large U.S. University. We use ethnoscientific methods to investigate how similarity judgments and perceptions of freshwater fish change upon completion of an ichthyology course. Using a control group of anthropology students for comparison, we find that both groups adopt a morphological-functional model of classification at the start of the semester. While the ichthyology group shifts to a phylogenetic model of classification after completing the course, the control group demonstrated no change.

Our data indicate that the learning process may affect both the taxonomic understanding and cultural appreciation of zoological resources. We suggest that educators and policy-makers can profit from these findings by appropriately structuring both scientific and public communications regarding sustainable resources and their management.

Session 9: Science, Language, and Classification

PETE, MARKLE (Ahtna, Tazlina AK)

Session 5: Living Tradition: Native Elders Speak on Plants, Animals, and Culture

PETER, DONITA (See Boraas)

PFEIFFER, JEANINE M. (Science and Society Program, University of California, Davis) and MASYARAKAT TADO (Tado Community)

COLLABORATIVE ETHNOBIOLOGICAL RESEARCH AND TRADITIONAL ECOLOGICAL KNOWLEDGE CONSERVATION IN EASTERN INDONESIA

The research pioneers a multifaceted approach to document and conserve traditional ecological knowledge and practice in an indigenous community undergoing rapid intergenerational change. A bilateral venture, the Tado Cultural Ecology Conservation Project, combines scientific study with community development initiatives to institutionalize long-term conservation of biocultural diversity. Research undertaken by local research associates, indigenous parataxonomists, tribal elders, and native experts has engendered community-wide participation in research design, hypothesis testing, data collection, analysis, review and publication. The project's participatory research methodology demonstrates the relevance of applying international conventions regarding traditional indigenous knowledge (TIK) and intellectual property rights (IPR) to ethnobiological field research.

Session 4: Collaborative Information Systems Projects

PINK, WILLIAM J. (San Jacinto, California) and LUCIANO ALANIZ

DIVERSITY AND EXPANSE OF USE OF SUMAC BY CALIFORNIA INDIANS

Examination of the diversity and expanse of use of Sumac (*Rhus trilobata*) by California Indians. Presentation includes power point presentation demonstrating manipulation of Sumac for basket weaving material. The presentation will also include a segment on the preparation of materials for basket weaving. From San Diego County to Modoc County, Sumac is a major resource utilized by many Tribes for weaving baskets. In addition, the berry produced by the Sumac was eaten or a drink was made from the berry. Sumac is known by several common names to include: Squaw Bush, Skunk Bush,

Lemonade Berry, and Sour Berry. It is also an indicator plant when searching out archaeological sites.

Session 3: Plants in the Human Landscape

RABOFF, ADELIN PETER (Fairbanks, Alaska)

EATING CARIBOU

This photo presentation is about hunting, butchering, and packaging caribou meat and other products among the Gwich'in Athabascans of Northeastern Alaska. I discuss the traditional community caribou drive and the modern-day caribou hunting practices. I show what is left behind in the field and what is brought home to the urban or rural household and the cutting and packaging of meat for consumption. Also what is done with the bones, hooves, and skin of the caribou.

Session 2: Animals in the Human Landscape

RAMIREZ-SOSA, C.R. (Department of Biology, Southern Connecticut State University, New Haven, Connecticut)

BIOCULTURAL DIVERSITY IN PANAMA: THE CASE OF THE NASO PEOPLE.

The Naso people live in the Bocas del Toro Province along the Teribe and Changuinola Rivers. They practice subsistence agriculture of domesticated and semi-domesticated plants within small plots on the Talamanca mountains. They select agricultural plots to reduce any negative effects on the surrounding biological diversity. Preliminary field plant interviews were done last year and the results are presented at this meeting. Plots near the community of Sieykin will be mapped using G.P.S. Floristic inventories will be done to assess the diversity of plants and to identify the maintenance of domesticated, semi-domesticated and wild species in each agricultural plot.

Session 10: "It's Not Just About Corn": Ethnobotany South of the 38th Parallel

RAMIREZ-SOSA, CARLOS R. (see Reinhardt)

RAMOS, JUDITH (Yakutat Tlingit Tribe, Yakutat Alaska) and RACHEL MASON (National Park Service, Anchorage, Alaska)

TRADITIONAL ECOLOGICAL KNOWLEDGE OF TLINGIT PEOPLE CONCERNING THE SOCKEYE SALMON FISHERY OF THE DRY BAY

The Yakutat Tlingit Tribe and the National Park Service have collaborated to document Tlingit traditional ecological knowledge about salmon ecology and fisheries management in the Dry Bay/Alsek River Delta. Historically Northwest Coast Peoples including Tlingit have managed fishing and fish populations. Each Tlingit clan or house managed and controlled specific rivers or, in larger rivers, sections of rivers in southeast Alaska. Traditional beliefs about reincarnation of animal spirits and a kinship with animals contributed to how Tlingit traditionally treated and handled salmon and animals. In recent decades, sockeye salmon have dramatically declined in the Dry Bay/Alsek area. It is hoped that this study, by showing how the Tlingits historically understood and managed sockeye habitat, population and harvest in the Dry Bay/Alsek area, will aid in developing a restoration plan.

Session 6A: TEK, Landscape Perceptions, and Resource Management

RANK, LOUANN (IGERT-Resilience & Adaptation Program, Institute of Arctic Biology & Dept of Anthropology, University of Alaska Fairbanks) and ROBERT M. DROZDA
RESILIENT LANDSCAPE INTERPRETATION IN YUP'IK PLACE NAMES OF THE YUKON-KUSKOKWIM DELTA

Lower Kuskokwim River Native elders explain that most traditional Yup'ik place names relate to subsistence resources. Under the Alaska Native Claims Settlement Act of 1971, Section 14(h)(1), interviews conducted with Yup'ik elders in the 1980s have documented geographical names within a 5,000-square mile area of the Yukon-Kuskokwim Delta. These toponyms can be used to interpret cultural landscape perspectives, delineating subsistence use areas in association with freshwater networks and flora and fauna. Contextual meanings, past and present, of intergenerational Yup'ik place names offer potential for resilient interpretation of landscape despite sociocultural and biophysical change at local levels.

Session 1: Alaskan Cultural Landscapes

REINHARDT, J.F. (Dept. of Biology, Southern Connecticut University, New Haven, CT), MARCIE N. GAWEL, and CARLOS R. RAMIREZ-SOSA

MEDICINAL PLANTS ALONG A LENCA TRAIL IN EASTERN EL SALVADOR, C.A.

A preliminary ethnobotanical study was done along a trail in Moncagua, San Miguel, El Salvador. This trail runs through an area where Lenca people may have inhabited prior to colonization near the Quelepa Site. A field plant interview was conducted with a local resident who uses medicinal plants to treat common illnesses. All the medicinal plants on the trail were collected and mapped using a GPS. He provided information of preparation and application for fourteen species (13 families). This study attempts to document medical ethnobotanical knowledge in the area and to determine Lenca biocultural survival in Mesoamerica.

Session 7: Poster Presentations

ROBBINS, MICHAEL C. (see Nolan)

SALEEBY, BECKY (Archeologist, National Park Service, Anchorage, Alaska)
INUKSUK CARIBOU-HUNTING DRIVELINES IN THE BROOKS RANGE OF NORTHERN ALASKA

For untold generations, Inupiat of northern Alaska constructed complex drivelines out of stone cairns, or inuksuk, for funneling migrating herds of caribou into lakes or corrals for slaughter. Archaeologists have documented the remnants of these lines and have interviewed village elders about them. This paper provides an overview of the literature on caribou drivelines and suggests possible avenues of research for archaeologists. A broad focus on the drivelines as but one of many features and sites on the landscape, which functioned together as critical components of an overall prehistoric hunting strategy, is discussed as one fascinating avenue to pursue.

Session 2: Animals in the Human Landscape

SPERANZA, ROSE (Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks)

KOYUKON ATHABASCAN PLANT KNOWLEDGE

This poster will demonstrate, using all publicly available materials, the type of educational aids that can be developed for the bi-lingual or Alaskan classroom. In this particular case, the emphasis will be on the plant world and how the Koyukon conceive of and use the plants in their environment.

Session 7: Poster Presentations

STEPHAN, ALBERTA (Dena'ina, Eklutna AK)

Session 5: Living Tradition: Native Elders Speak on Plants, Animals, and Culture

STICKMAN, KAREN E. (Native American Fish & Wildlife Society, Alaska Regional Office, Anchorage, Alaska) and HOLLY M. CUSACK-MCVEIGH

WATER WAYS: ALASKAN NATIVE CONNECTIONS TO WATER

The Native American Fish and Wildlife Society's Tribal Water Quality program encourages Alaskan Native communities to monitor and protect their own valued resources. Group discussions of traditional ecological knowledge (TEK) reflect a complex interconnectedness to water. These cultural understandings extend far beyond what outside agency representatives may understand from a western scientific perspective. *Water Ways* is a project that encourages a holistic approach. Participants reflect upon issues of water consumption, water as a host for resources, and as a means of transportation. There is also a call for recognition that Native Science integrates important spiritual beliefs and cultural practices

Session 1: Alaskan Cultural Landscapes; also a Poster Display

STICKWAN, GLORIA (Ahtna, Tazlina AK)

Session 5: Living Tradition: Native Elders Speak on Plants, Animals, and Culture

STOCKDALE , MARY (see Corbett)

STURTEVANT, KELLY M. (University of Arkansas, Fayetteville))

EXPLORING THE COLOR CONNECTION: THE PERCEPTUAL COMPONENT OF PLANT SELECTION AND USE

Humans heavily utilize only a few dozen of the estimated 250,000 species of flowering plants. While a number of models have been used to explain this phenomenon, the perceptual factors driving initial plant selection have been relatively neglected. This paper proposes that plant color is a significant factor in ethnobotanical resource selection and may be prognostic of the cultural valence of plants in general. Based on fieldwork in the Ozark Mountains, ethnobotanical surveys, structured interviews, and supplemental field guides were used to identify common use patterns of various plant taxa and their associated color categories. The relationships between color and cultural meaning may prove valuable for modeling wild plant use on a cross-cultural level.

Session 9: Science, Language, and Classification

TADO, MASYARAKAT (see Pfeiffer)

TODT, DONN L. (Ashland Parks Dept, Ashland, Oregon) and FRANK KANAWHA LAKE (Karuk, Seneca, Cherokee; Environmental Sciences, Oregon State University_

A COMMUNITY CAMAS COOKOUT: THE RESTORATION OF AWARENESS

Although camas continues to grow in and around the Rogue Valley of Southern Oregon, concentrations are scattered and declining, due to agricultural and urban development. Few local residents are aware of the plant or its importance to regional Native Peoples. As a community education project, we planted a small camas swale. For the past two years, we have harvested and cooked camas and other traditional pit-cooked foods in an earth oven, raising awareness within the local community of the importance of this plant and its place in the traditions of the Rogue Valley's Native Peoples.

Session 3: Plants in the Human Landscape

TOLL, MOLLIE S. (Museum of New Mexico, Office of Archaeological Studies, Santa Fe) and PAMELA J. MCBRIDE (Museum of New Mexico, Office of Archaeological Studies, Santa Fe)

ARCHEOBOTANY IN THE LA PLATA VALLEY: NEW DATA BRIDGING CHACO AND MESA VERDE

The last few decades have brought an influx of archeobotanical data from sites in northwestern New Mexico and southwestern Colorado. These suggest considerable continuity in regional wild plant use from late Basketmaker to Pueblo III periods. This impression of stability is based on the most visible plants, a relatively small coterie of economic annuals. Corn and wood, two widespread categories of plant remains, offer our best hope for distinguishing adaptive and communication trends across time and space. Morphometrics of *Zea* cobs indicate changing farming conditions, while patterns of wood use display the only clear botanical evidence of species depletion over time.

Session 10: "It's Not Just About Corn": Ethnobotany South of the 38th Parallel

TURNER, NANCY J. (School of Environmental Studies, University of Victoria, British Columbia) and CECIL H. BROWN

CHANGING LIVES, CHANGING MEANINGS: SEMANTIC SHIFT IN INTERIOR SALISH BOTANICAL TERMS

Meanings of words are rarely stable over time; factors causing change include shifts in cultural salience of species or objects, introductions of new products and ideas, and environmental alterations. We focus on semantic changes involving botanical categories in Interior Salish. Changes in meaning of terms have resulted from shifts in lifestyles and land use patterns. The identified shifts in the meanings of "grass" to "hay" and "low growth" to "weeds" are aligned with many other changes in Interior Salish culture relating to acquisition of new knowledge, materials and practices that have in large part replaced older concepts and lifestyles.

Session 9: Science, Language, and Classification

TURNER, NANCY (see Karst)

WALKER, JENNIFER (Dept. of Anthropology, University of Minnesota, Minneapolis)
AMONG THE LIVING: ANCESTORS, MEMORY, AND THE LAY OF THE LAND IN NEOLITHIC ORKNEY, SCOTLAND

Five thousand years ago, the landscape was an active part of ritual life in Orkney. The communities of both the living and the dead co-existed in a world overlain with cosmological significance. The archaeological remains allow us to glimpse complex connections between landscape, people, animals and material culture. The architecture of tombs, their placement in the landscape and the manipulation of human and animal remains suggest a cosmology in which the ancestral community continued to inhabit the world and the collective memory of the living.

Session 7: Poster Presentations

WISNIEWSKI, JOSH (Department of Anthropology, University of Alaska, Anchorage)
"WE'RE ALWAYS GOING BACK AND FORTH" KIGIQTAAAMIUT SUBSISTENCE LAND USE

This information is part of an collaboration between Shishmaref and the Army Corps of Engineers funded project to document subsistence land use and local values. This research project explores the relationship between contemporary subsistence land use by Shishmaref residents and traditional Bering Strait territorial boundaries, as well as how the intersection between locally-generated traditional ecological knowledge of lands and resource harvesting contribute to a sense of identity. This work articulates the importance of maintaining relationships to traditionally used and occupied lands

and will contribute to a document exploring different community relocation alternatives in response to erosion of Sarichef Island.

Session 7: Poster Presentations

YAMIN, SVETA (Department of Anthropology, Resilience and Adaptation Program, University of Alaska Fairbanks)

“WHERE MUSHROOMS ARE TALLER THAN TREES:” A TUNDRA LANDSCAPE FROM AN ETHNOMYCOLOGICAL PERSPECTIVE

Arctic tundra is rich mushroom country, and mushroom-picking is an important present-day subsistence activity throughout the Russian North. In the Bering Strait area of Chukotka, mycophagy is a fairly recent dietary innovation, which the Yupiit and Chukchi have learned from the Russians. This paper provides an historical overview of ethnomycology in Chukotka, discussing the beliefs and practices associated with wild mushrooms among the Native and settler populations. A comparison of descriptive narratives offered by the Yupik, Chukchi, and Russian residents suggests that ethnomycological knowledge plays a significant role in shaping the local perceptions of tundra landscape.

Session 1: Alaskan Cultural Landscapes

YARBOROUGH, LINDA FINN (Forest Archaeologist, Chugach National Forest, Anchorage, Alaska) and SUSAN MULHOLLAND (Duluth Archaeology Center, Duluth, Minnesota)

RESULTS OF PHYTOLITH ANALYSIS AT THE K’BEQ SITE, SEW-168, KENAI PENINSULA, ALASKA

The K’Beq site is a late prehistoric/early historic Athapaskan site near Cooper Landing in southcentral Alaska. In 2001, the Chugach National Forest, in partnership with the Kenaitze Indian Tribe, partially excavated three depressions which had been previously identified as cache pits, although no testing had taken place in or around them. As is usual for Athapaskan sites, and as expected here, no artifacts, fauna, or radiocarbon samples were recovered. Samples were collected for phytolith analysis by the Duluth Archaeology Center. The results show that phytoliths are present, and corroborate ethnohistoric information regarding cache pits for salmon storage.

To be presented by Sasha Lindgren (Kenaitze Indian Tribe, Cultural Programs Director)

Session 6B: TEK, Landscape Perceptions, and Resource Management
