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Abstracts

Aguilar-Melendez, Araceli (Department of Botany and Plant Sciences, University of California, Riverside), Seung-Chul Kim and Mikeal L. Roose (oral presentation)

ETHNOBOTANICAL AND MOLECULAR DATA REVEAL THE COMPLEXITY OF THE DOMESTICATION OF CHILES IN MEXICO.

Crop genetic diversity results from various evolutionary forces including human selection. Domestication usually reduces genetic diversity of crops compared to their wild progenitors. Little is known about genetic diversity of chiles in a complex cultural environment. Chiles (*Capsicum annuum* L.) and ethnobotanical data were collected from 20 localities (9 states) in Mexico including populations from home-gardens, *milpa*, tropical deciduous forest and markets. Molecular analysis of two genes indicates similar levels of genetic diversity among 21 domesticated and 54 wild accessions. As suggested for other crops, traditional farmers might maintain and protect the diversity of the populations of chiles.

Anderson, E.N. (Department of Anthropology, University of California, Riverside) (oral presentation)

YUCATEC MAYA AESTHETIC ETHNOBOTANY: WHY ORNAMENTALS?

When it comes to use-values, second only to medicine (ca. 350 species) in the ethnobotany of the Yucatec Maya of central Quintana Roo is ornamental gardening (almost 200 species used). Maya plant knowledge is heavily conditioned by aesthetics. Floral beauty was strongly linked to religion in ancient Maya cosmology. The Maya are not the only culture to link aesthetics, ethnobotany, and religion, and this linkage deserves more exploration.

Bauchspies, Wenda K. (Science, Technology, & Society and Women's Studies, The Pennsylvania State University) and Kabiné Oularé (Université de Kankan & Centre de Recherche et de Valorisation des Plantes Médicinales de Dubréka)

THE ROLE OF PLANTS AND WORDS IN THE WORK OF TRADITIONAL MANINKA HEALERS, GUINEA, WEST AFRICA. (oral presentation)

In 2003, I joined an ongoing ethnobiology research project in Guinea, West Africa. The orginial project was looking for new « medicines » via local plants that were identified and used by local healers. In the process of doing the study, the researchers developed strong relationships with some of the healers they interviewed. The conversations with the healers provoked many questions for the researchers about the social dimensions of the healer's work as well as the efficacy of their plants. It was at this point, that I began working with the Guinean researchers. In this paper we would like to share the beginnings of our work on the social aspects of traditional healing. We interviewed traditional healers, elders, herbalists and other experts. Here we will focus on incantations, their roles and purpose in the healing practices of Maninka healing. The

use of incantations by healers and the community is an very old practice for healing. Some users of medicinal plants question whether to use medicinal plants alone or with an incantation. We will describe several incantations, their use, how they were learned, and the implication of the incantation. As well as why incantations may still be utilized, when many acknowledge that the efficacy may be in the plant rather than the words.

Brandon, Jordan (University of Colorado), and Justin Nolan (Department of Anthropology, University of Arkansas) (poster display)

TIBETAN SOCIAL ECOLOGY: THE SIGNIFICANCE OF NATURAL ENTITIES UTILIZED AS MEANINGFUL RELIGIOUS TOOLS IN TIBETAN BUDDHISM.

Tibetan Buddhism is filled with visual references to nature, which are meaningful to ethnoecologists on expressive and functional levels. Nature-based symbols assist in certain forms of meditations and are therefore represented frequently and elaborately in religious art. Tibetan Buddhism encourages ritual circumambulations, or *koras*, of sacred sites in order to acquire spiritual merit. The most sacred sites are perceptually salient physiographic features such as mountains and lakes, which figure prominently in Buddhist mythology. Drawing from various ethnographic accounts, this study illustrates how the natural landscape engages Tibetan Buddhists in a social ecological relationship that constitutes the backbone of Buddhist religious praxis. These findings highlight the importance of understanding human expressive behaviors in ethnoecological studies, particularly in regions where spirituality and ecology are historically intertwined.

Brown, Cecil H. (Department of Anthropology, Northern Illinois University) (oral presentation) **PREHISTORIC CHRONOLOGY OF THE COMMON BEAN IN THE AMERICAS: THE LINGUISTIC EVIDENCE.**

Glottochronology and the comparative method of historical linguistics provide a linguistic approach for dating the common bean (*Phaseolus vulgaris* L.) that both complements and supplements archaeological dating techniques such as accelerator mass spectrometry (AMS). The comparative approach reveals that prehistoric languages of eastern North America having glottochronological dates earlier than 700 B.P. (before present) lacked words for bean and that those with glottochronological dates younger than 700 B.P. had terms for bean, this according with the AMS-finding that beans are not present in the region until around A.D. 1300. Linguistic findings for prehistoric languages of Mesoamerica suggest that the regional bean chronology is considerably older than that indicated through archaeological dating. A recently revealed AMS-dated archaeological bean from the region bears out the latter suggestion.

Burch, Carmen (Sciences and Conservation Studies, College of Santa Fe, New Mexico) (oral presentation)

REIMAGINING A TROPICAL LANDSCAPE: RESTORING ATLANTIC FOREST IN BRAZIL.

Restoration of landscapes invites us to go against history: to shift cultural perception in reimagining an earlier place, to see an environment that once was spurned as now preferred, and then to move to recreate it. Based on fieldwork at the *Instituto Terra* in the southeastern coastal region of Brazil, this paper looks at efforts to bring back an ecosystem -- to replace cattle pasture

with Atlantic tropical forest. This feat draws on wild imagination as much as good science. Will they succeed? This is a report from five years into the process.

Burkhart, E.P. (School of Forest Resources, The Pennsylvania State University) (oral presentation)

"WILD" AMERICAN GINSENG IN PENNSYLVANIA (USA): PATHWAYS AND PROCESSES ASSOCIATED WITH HUSBANDRY OF A NON-TIMBER FOREST PRODUCT.

The collection and husbandry of wild American ginseng (*Panax quinquefolius* L.) in the middle-Atlantic region of the eastern United States has roots that stretch back three centuries. My research continues to examine the cultural role of ginseng in the region and is articulating the mechanisms by which people continue to manage and manipulate this "wild" species. Research findings to date suggest that a complex suite of historical and contemporary husbandry practices are involved in modern "wild" ginseng occurrence and that these practices continue to obscure and complicate any distinction between "wild" and "domesticated." The consequences of this situation for wild plant policy and management, as well as domestication theory, are profound and will be discussed.

Cain, Shawna (Department of Anthropology, University of Arkansas, and Cherokee Nation) and Roger Cain (Cherokee Nation/United Keetoowah Band) (oral presentation)

ENDURING TRADITIONS: LIVING HISTORY IN CHEROKEE MATERIAL CULTURE.

In this presentation we demonstrate the material basis of representative Cherokee traditions and art forms. Specifically, we describe the creation and use of baskets, ballsticks, effigy masks, booger masks, and kanuchi (hickory nut soup). These traditions are presented with emphasis on their constituent materials, namely local botanicals including river cane (*Arundinaria gigantean*), bloodroot (*Sanguinaria canadensis*), and hickory (*Carya* spp.). Ethnobotanical traditions represent ecological adaptations of our collective past and the recent revival of Cherokee heritage and culture in the present. For the Western Cherokee of Oklahoma, the continuity of traditional culture rests on efforts to promote accessibility to natural resources on tribal lands through sensible, community-centered conservation strategies.

Cullis-Suzuki, Severn (School of Environmental Studies, University of Victoria, British Columbia, Canada), Chief Adam Dick (Kwaxsistala) and Daisy Sewid-Smith (Mayanilth) of the Kwakwaka'wakw Nation, Dr. Nancy Turner (School of Environmental Studies, University of Victoria), and Dr. Sandy Wyllie-Echeverria (Center for Urban Horticulture, University of Washington) (oral presentation)

AN ETHNOBOTANICAL STUDY OF THE KWAKWAKA'WAKW TRADITIONAL HARVESTING OF *TS'ATS'AYEM*, THE EELGRASS *ZOSTERA MARINA* L.; ZOSTERACEAE.

The Kwakwaka'wakw of the Pacific Northwest once gathered ts'ats'ayem, Zostera marina L., Zosteraceae (eelgrass), rhizomes for food. Z. marina is a foundation species of estuarine regions, providing substrate and habitat for a diversity of organisms crucial to the marine food web. Currently, this angiosperm is in a worldwide decline. Contemporary elders recall harvesting considerable quantities of the plants every spring, and have suggested that ts'ats'ayem rhizomes

grow thicker and the meadows more productive when sites are routinely harvested. This study examines *ts'ats'ayem* ethnoecology through interviews, harvesting expeditions and an in situ experiment to determine traditional methodology and inquire into the positive growth response to harvest.

Damon, Frederick H. (Department of Anthropology, University of Virginia) (oral presentation) FROM ECOLOGICAL PATCHES TO CYBERNETIC RELATONS: OUTRIGGER SAILING CRAFT IN THE KULA RING, PAPUA NEW GUINEA.

Concentrating on the use of different tree species from the genus *Calophyllum*, this paper describes ecological and technical knowledge used to construct the highest class of outrigger canoes plying the eastern Kula Ring. The paper shows how this information makes explicit a complex structure, a representation of a chaotic system. This cybernetic imagery, it is hypothesized, is a model conforming to the conceptual needs of a social system that must be organized to manage sustainable island life governed by *el niño* events.

Evans, Susan Toby (Department of Anthropology, The Pennsylvania State University) (oral presentation)

AZTEC PLANT CLASSIFICATION (AND WHAT'S SEX GOT TO DO WITH IT?).

Modern plant classification is based upon Linnaean determinants such as plant structure and sexual characteristics, which begs the question: to what extent did non-Western systems of plant classification use sexual characteristics of plants in their categorizations? Was plant fertilization understood as a sexual process, or was the concept of sexuality incorporated in other ways, for example, were certain plants dedicated to fertility deities? These questions were posed to me as an Aztec specialist, and this paper describes my efforts to recreate the Aztec system of plant classification in order to determine whether the concept of sexuality was applied by the Aztecs to the plant world. In order to understand Aztec plant classification as a system of knowledge, I used several sixteenth century Mexican herbals, trying to disentangle indigenous categories from the influence of contemporaneous European thinking upon native understanding of plant relationships. The results of my analysis reveal some interesting parallels between the Aztec and Linnaean plant classification systems, and that sex is but one of many and various criteria by which the Aztecs characterized the plants in their world.

Gilmore, Michael (Department of Botany, Miami University, Ohio), W. Hardy Eshbaugh (Department of Botany, Miami University, Ohio), and Adolph M. Greenberg (Department of Anthropology, Miami University, Ohio) (oral presentation)

THE CULTURAL SIGNIGICANCE OF THE HABITAT MAÑACO TACO TO THE MAIJUNA OF THE PERUVIAN AMAZON.

The cultural significance of a habitat that the Maijuna of the Peruvian Amazon call **mañaco taco** will be discussed in detail. **Mañaco taco** are anomalous open areas dominated by the small myrmecophytic tree *Durioa hirsuta* (Rubiaceae) in the normally dense and diverse Western Amazonian forest. The Maijuna have well-defined and constructed supernatural beliefs associated with these forests, believing that they are the home of malevolent supernatural beings called **Mabaji**. Understanding the significance and importance of habitat types to the Maijuna and other

indigenous peoples is critical in discerning how they ultimately perceive and interact with these areas.

Gonella, Michael (Department of Botany, Miami University, Ohio) (oral presentation) **ETHNOECOLOGY FOR CONSERVATION: CASE STUDIES.**

Methods assessing the value of traditional ecological practices as contemporary conservation tools were developed in collaboration with two indigenous groups: the Q'eqchi' Maya of Guatemala and the Miami Nation of the southern Great Lakes region of North America. Essential elements utilized in this assessment were ethnographies documenting traditional ecological practices and ethnoecological experiments quantifying effects of traditional practices on culturally important plant species. Qualitative and quantitative experimental results indicating positive autecological and synecological effects from traditional practices were used to identify culturally relevant conservation strategies.

Gosford, Robert (Centre for Resource and Environmental Studies, Australian National University) (oral presentation)

A WARLPIRI ORNITHORIUM: BIRDS, CULTURE AND LANGUAGE IN A CENTRAL AUSTRALIAN DESERT.

The Warlpiri Aboriginal people are the traditional Aboriginal owners of a large semi-arid and arid part of the Northern Territory known as the Tanami Desert. I will examine publicly available information that includes references to Warlpiri ornithological knowledge. That information includes transcripts of evidence and claim books from claims made by the Warlpiri for the return of their lands under the Aboriginal Land Rights (Northern Territory) Act 1978, material from anthropological texts, dissertations and theses and dictionary and linguistic material produced for use in schools, among other sources. This data will be assessed for is utility in further fieldwork.

Hunn, Eugene S. (Department of Anthropology, University of Washington) (oral presentation) **HERBAL REMEDIES FOR SUSTO IN A ZAPOTEC COMMUNITY**.

In San Juan Gbëë, a Zapotec community in Oaxaca's Sierra Sur, some 220 species of plants are reported to be in use to treat over 100 named illnesses. A significant element of the local pharmacopoeia are treatments for emotional or characterological disorders. Best known of these conditions is **dzèb** 'fright', related to syndromes recognized widely in Latin America as susto or espanto. Common symptoms include nightmares and loss of appetite as well as white blotches on the skin. A range of plants is prescribed, mostly as teas, to treat several distinct varieties of **dzèb**. Several are weeds of European origin while a number of others are native ferns.

Johnson, Leslie (Anthropology, Athabasca University & Anthropology and Native Studies, University of Alberta), Camilla Tutcho and Bernice Neyelle (Plants for Life Project, Deline, NWT), Christopher Fletcher and Marni Amirault (Anthropology Department, University of Alberta) (oral presentation)

EXPLORING AND TEACHING CONNECTIONS OF LAND AND HEALTH THROUGH A PLANT MEDICINE CAMP ON GREAT BEAR LAKE, NWT, CANADA.

We report on a collaborative research project in Deline, Northwest Territories, Canada, which seeks to record and revitalize local plant knowledge for community healing. The Plants for Life camp at Russell Bay, Great Bear Lake, in summer 2005 was a major data collection trip, an opportunity for youth and elders to interact on the land, and a place for community fieldworkers to hone their skills. Youth were full participants in the collection of medicinal plants, and were given an opportunity to practice a variety of traditional skills and other aspects of traditional life on the land.

Kelso, Anna (School of Forest Resources, The Pennsylvania State University) and Mike Jacobson (School of Forest Resources, The Pennsylvania State University) (oral presentation)

COMMUNITY ASSESSMENT OF AGROFORESTRY AND NATURAL RESOURCE

MANAGEMENT: GAMOTHIBA, SOUTH AFRICA.

Evaluating environmentally sustainable and culturally sensitive approaches to natural resource management issues is a necessary step towards improving livelihoods in rural South Africa. As part of a larger project initiated by the Centre for Rural Community Empowerment (University of Limpopo), this study assessed the applicability of various agroforestry practices to natural resource management issues in the village of GaMothiba located in the northwestern region of South Africa. Agroforestry assessments were carried out using a community-based approach through the application of rapid rural appraisal (RRA) and participatory rural appraisal (PRA) methods. These methods were chosen in order to assess the acceptability of agroforestry practices according to the perspective of the local people. The assessment process culminated in a variety of community designed agroforestry interventions, through which we found that acceptability of agroforestry practices is largely influenced by community cohesion, acceptance of indigenous species, land rights, and cooperation between traditional and municipal authorities. Understanding the opportunities and constraints of agroforestry adoption in rural sub-Saharan Africa furthers the movement towards community based natural resource management and ultimately a more sustainable approach to rural development.

*Law, Wayne (Missouri Botanical Garden, Saint Louis) and Jan Salick (Missouri Botanical Garden, Saint Louis) (oral presentation)

HUMAN INDUCED DWARFING OF HIMALAYAN SNOW LOTUS (SAUSSUREA LANICEPS [ASTERACEAE]).

Harvesting select individuals in natural plant populations can bring about unforeseen impacts that may negatively affect fitness. We analyzed how human induced harvesting effects on two congeners known as Snow Lotus. Over a period of one hundred years, there was a negative trend in plant height ($r^2 = 0.4361$, p < 0.001) for the in for the intensely collected and rare species, *Saussurea laniceps*, but not in the less intensely collected species, *S. medusa*. Additionally, *S. laniceps* were significantly smaller in areas of high harvest than in areas with low harvest (Z= 4.91, p < 0.0001) but not so for *S. medusa*.

Mancabelli, Andrew (Department of Anthropology, University of Arkansas) and Justin M. Nolan (Department of Anthropology, University of Arkansas) (oral presentation)

MEDICAL ETHNOBOTANY IN JAPAN: THE CONSERVATION OF TRADITIONAL HEALTH BELIEFS.

This paper reports the results of an ethnomedical study conducted in 2005 in Yamaguchi prefecture, Japan. Successive free lists revealed a broad range of ethnomedical knowledge about indigenous plants, including the ailment for which they are used, their mode of application, and preparation procedure. Supplemental ethnographic and ethnohistoric data revealed that proximity to modern health care facilities was a factor in the retention of knowledge and folk medical praxis. A strong correlation between age and ethnomedicinal knowledge was also found. A majority of the most commonly reported remedies are used to ease digestion and gastrointestinal pain, which is evidence of a persisting medical problem in Japanese society.

Manning, Jane (Winthrop University), and Janice Chism (poster display)

MEDICAL ETHNOBOTANY OF THREE PRACTITIONER LEVELS IN THE

NORTHEASTERN PERÚVIAN AMAZON.

I examined socio- and biocultural influences on *ribereño* householders' use of medicinal plants for healing, and compared this use by practitioner level. Despite long contact with acculturating forces in this area of Amazonian Perú, *ribereños* continue to utilize a traditional form of healthcare. Religious affiliation and economic status influenced householders' use of medicinal plants. The three levels of practitioners, householders, traditional healers, and *herbalístas*, differed in their knowledge and use of medicinal plant species. Householders and *herbalístas* employed about half as many plant species as traditional healers, whereas *herbalístas* treated more categories of illness than the other two practitioner levels.

Mazzatenta, Claudio (Bronx Community College, The City University of New York) (oral presentation)

A CASE STUDY AMONG IQUITOS INDIGENOUS HEALERS: 'BREBAJE PALO' COMPARED TO 'AYAHUASCA'.

The hallucinogenic drink 'ayahuasca' taken by natives in the Peruvian Amazon owns its powerful effect mainly to the two plant species *Banisteriopsis caapi* and *Psychotria viridis* when they are combined together. Brebaje palo is an alternative drink with similar hallucinogenic effect prepared with plants other than *Banisteriopsis caapi* and *Psychotria viridis*. Research study has been conducted with Iquitos shamans who either use ayahuasca (ayahuasqeros) or brebaje palo (paleros) to understand the difference between the composition of the two drinks and the impact on the patients who take them.

Mellott, Carla Rae (School of Environmental Studies, University of Victoria, British Columbia, Canada) (oral presentation)

DEFINING THE ROLE OF RESEARCH IN COMPLEX COMMUNITIES: WHO DEFINES COMMUNITY OBJECTIVES?

Ideally, ethnobotanical research will be directed by the concerns and objectives of the researched communities. In practice, however, it is not always straightforward to determine who constitutes a so-called community, what the objectives of a defined community are and whose interests are served by community representatives such as band councils. In this presentation, I will explore the role of research in communities where there are complex and potentially conflicting objectives using hypothetical examples from First Nations ethnobiological research in British Columbia, Canada.

Nolan, Justin M. (Department of Anthropology, University of Arkansas), Shawna Cain (Department of Anthropology, University of Arkansas, and Cherokee Nation), Roger Cain (Cherokee Nation/United Keetoowah Band), and Carl F. Keller III (Department of Anthropology, University of Arkansas) (oral presentation)

RECONNECTING COMMUNITY, CULTURE, AND LANDSCAPE AMONG THE WESTERN CHEROKEE: APPLIED ETHNOECOLOGY IN THE OKLAHOMA OZARKS.

In the paper we demonstrate the relationship between the conservation of marginal forest habitats and the revival of traditional knowledge of natural resources among the Western Cherokee. Interviews and participant-observation with key respondents in a three-county region of the Oklahoma Ozarks revealed an urgent need to protect delicate river bottom habitats, especially those adjacent to upland oak-hickory forests. These ecotones are shown to support river cane, bloodroot, shagbark hickory, and other species vital to the survival and continuity of Cherokee culture and craftsmanship. We suggest an applied longitudinal strategy that links community education with habitat restoration efforts to help safeguard threatened landscapes, native flora, and Cherokee expressive traditions for the benefit of present and future generations.

Plowden, Campbell (Center for Amazon Community Ecology, The Pennsylvania State University) (oral presentation)

CHALLENGES AND OPPORTUNITIES FOR AMAZON FOREST-BASED COMMUNITIES TO SUSTAINABLY HARVEST AND MARKET NON-TIMBER FOREST PRODUCTS.

Tembé Indians in the eastern Brazilian Amazon confront a variety of physiological, ecological, social and economic challenges to sustainably harvest and profitably sell non-timber forest products (NTFPs). Studies on copaiba (*Copaifera*) oleoresin, breu (*Protium*) resin, andiroba (*Carapa guianensis*) oil, titica (*Heteropsis*) roots and multi-species handicrafts reveal low density, fire damage, long processing and regeneration times, and low market prices are common impediments to achieving these goals. These studies and observations elsewhere in Brazil show that focused research, well-planned harvests, intentional planting, and increasing value-added processing and marketing could help some forest-based communities conserve forest resources and increase local income.

Plowden, Campbell (Center for Amazon Community Ecology, The Pennsylvania State University), Christopher Uhl (Department of Biology, The Pennsylvania State University), and Francisco de Assis Oliveria (Department of Soil Science, Federal Rural University of Amazonia (UFRA), Belém, Pará, Brazil (poster presentation)

THE COMMERCIAL HARVEST OF "BREU" RESIN FROM BURSERACEAE TREES IN THE EASTERN BRAZIALIAN AMAZON AND THE ROLE OF *STERNOCOELUS* WEEVILS IN ITS FORMATION.

Some Brazilian Amazon forest dwellers collect and sell resin from various Burseraceae species. A study with Tembé Indians showed trees yield an average of 0.7 kg. and up to 11 kg. Weevil larvae stimulate resin flow by chewing into inner bark and develop inside resin lumps that accumulate on the bark for over a year. Stingless bees also collect resin from trees and resin drying in villages. Sustainable resin harvest, therefore, needs to consider interactions between trees, insects and

people. Given local ecological and market conditions harvesters make just over half the minimum wage for collecting and selling this resin.

Plowden, Campbell (Center for Amazon Community Ecology, The Pennsylvania State University), Christopher Uhl (Department of Biology, The Pennsylvania State University), and Francisco de Assis Oliveria (Department of Soil Science, Federal Rural University of Amazonia (UFRA), Belém, Pará, Brazil (poster presentation)

THE HARVEST, PROCESSING, AND SALE OF TITICA VINE ROOTS (*HETEROPSIS* SPP.) IN THE EASTERN BRAZILIAN AMAZON.

Many Amazon forest dwellers collect titica vine (*Heteropsis spp.*- Araceae) aerial roots for the wicker furniture business. This study investigated titica ecology and Tembé Indian root harvesting, processing and marketing in the eastern Brazilian Amazon. Titica harvest was highest in intact terra firme forest and lowest in burned forest. Most harvested roots did not regenerate. Bark removal and drying reduced saleable weight to 19% of harvested weight. Harvesters made just over \$5 per day harvesting and processing titica. Furniture makers paid about \$10 for roots and \$24 for labor to produce a large wicker chair sold for \$100 to \$1000.

Powell, Bronwen (School of Dietetics and Human Nutrition, McGill University, Quebec, Canada) (oral presentation)

CULTURAL CONCEPTS AND CLASSIFICATION OF FOOD HELP EXPLAIN DIETARY PATTERNS IN MOROCCO.

Non-directed successive Pile Sorting of 52 food items was used to explore the cultural domain of food in Morocco. Folk classification and folk taxonomies are often used to understand the ways that cultures conceptualize and classify cultural domains. In ethnobotany the cultural domains of wild, medicinal, and food plants are commonly explored. Pile Sorting is a simple method for studying cultural domains. Multi-dimensional-scaling and hierarchal cluster analysis revealed a high consensus among informants, and distinct clustering of food items based on culinary use of foods. These results help explain dietary patterns, and more specifically, change in dietary patterns in Morocco.

Ramirez-Sosa, Carlos R. (Department of Biology, Southern Connecticut State University) (oral presentation)

QUANTITATIVE URBAN ETHNOBOTANY IN EL SALVADOR: TEN YEARS LATER.

A quantitative urban ethnobotany study was done in El Salvador using *Brosimum alicastrum* (Moraceae) as a model to determine how the knowledge has changed. This culturally important tree to Mesoamericans is ideal because its use and range is well known. A revised questionnaire was used again in 2005 in the same schools plus a new sampling site. Interviews of 7th, 8th, and 9th, graders in both rural and urban schools show a significant (over 40%) decrease of ethnobotanical knowledge. Some anecdotal evidence indicates that some conservation programs may be affecting the maintenance of biocultural diversity in countries like El Salvador.

Scarry, C. Margaret (Research Labs of Archaeology, University of North Carolina, Chapel Hill) and Lynn Snyder (National Museum of Natural History, Smithsonian Institution)

(oral presentation)

FOODS IN CONTEXT: DOMESTIC AND PUBLIC PRODUCTION AND CONSUMPTION IN EAST CRETE DURING THE FIRST MILLENIUM B.C.

Archaeological investigations in East Crete indicate a shift from small villages in the Early Iron Age (1200-700 B.C.) to an urban center at Azoria in the Archaic period (ca. 700-600 B.C.). Food remains from several sites reveal concomitant shifts in farming and herding. In the Iron Age villages production and consumption were household activities. At Azoria, there is a shift to centralized storage and communal processing and consumption. Distribution of faunal and floral remains is locationally distinct and context specific. With the increasing social complexity of the Archaic polis, foodways became increasingly specialization and took on social-symbolic significance.

*Shebitz, Daniela (University of Washington, Seattle) (oral presentation)

CONSEQUENCES OF FIRE ON BEARGRASS (*XEROPHYLLUM TENAX*) GROWTH AND REPRODUCTION IN FORMER ANTHROPOGENICALLY-MAINTAINED SAVANNAS ON THE OLYMPIC PENINSULA LOWLANDS, WASHINGTON STATE: AN ETHNOBOTANICAL AND ECOLOGICAL ANALYSIS.

This study reintroduces fire as an indigenous land management technique in order to conserve beargrass (*Xerophyllum tenax*), a basketry plant used by Native Americans on the Olympic Peninsula, Washington. Beargrass is declining in many traditional gathering sites that were maintained as savannas through anthropogenic burning prior to European settlement. Skokomish Tribal Members were interviewed concerning beargrass and traditional fire management. Field experiments measure effects of high- and low-severity fire on beargrass growth, reproduction, flowering rates, and seedling establishment. Findings indicate fire may be an effective tool for enhancing beargrass. Incorporating indigenous management into restoration provides potential to reintroduce native biodiversity and strengthen cultural traditions.

YU Xiao (Jason), (Chinese Institute for Indigenous Knowledge and Cultural Property, Guizhou University, China) (oral presentation)

ETHNOBOTANY OF INDIGENOUS GLUTINOUS RICE VARIETIES AMONG THE KAM PEOPLE IN SOUTHEAST GUIZHOU, CHINA: A PRELIMINARY STUDY.

Based on an ethnobotanical investigation, the paper presents some preliminary findings about glutinous rice varieties among the Kam People in Guizhou, China. The paper discusses Kam taxonomy and nomenclature of rice varieties and Kam traditional knowledge of glutinous rice seed preservation. It also explicates how the forced extension of indica rice varieties as an "agricultural modernization" campaign has demonized Kam traditional glutinous rice culture and brought about endanger of the rice varieties and biodiversity. Relating traditional knowledge of glutinous seeds to its ethnographic context, the paper explores indigenous knowledge and cultural politics of glutinous rice seeds on China's southwest frontier.

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