

SOCIETY OF ETHNOBIOLOGY: 31st ANNUAL CONFERENCE ABSTRACTS
UNIVERSITY OF ARKANSAS–FAYETTEVILLE
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ANDERSON, E. N., (University of California, Riverside).
HERBAL MEDICINE AND THE MONGOL INFORMATION SUPERHIGHWAY. (Oral presentation).
The Mongol Empire created one of the greatest projects in information transfer in world history. Their most impressive known achievement in this regard was the Huihui Yaofang (HHYF), a huge encyclopedia of Near Eastern medicine, written in Chinese for Chinese use. Some of it survives in a later (15th century) edition. My colleague Paul Buell has translated this, and I am doing the ethnobiological analysis. Over 300 plant, animal and mineral substances are mentioned. The vast majority are plants. These are usually Near Eastern remedies, but often Indian or Chinese.

ANDERSON, Myrdene. (Purdue University).
WHICH CAME FIRST? FOOTPRINTS, HANDPRINTS, MINDPRINTS?
(Oral presentation). Lucy left evidence of bipedal trundling some 3.5 million years ago. Thirty thousand years ago, humans drew their (often left) hands on rockfaces. This cultural practice persisted on several continents, perhaps even by children. Before and throughout these eras and since, humans have celebrated mutual relationships with their significant surrounds, both 'natural' and 'cultural'. This relationship could be dubbed a 'mindprint'—the result of coevolution and codevelopment, imprinted in language, culture, and cognition. More recently, humans have approached mindprints from new angles, now conceptualizing, regarding sustainability, an 'ecological footprint'. This metaphor indexes, however, the habits of hands and minds, not feet.

BRANDON, Jordan. (University of Missouri).
TO FISH OR NOT TO FISH: ECOTOURISTS AND TROUT IN RURAL NEWFOUNDLAND,
CANADA. (Oral presentation). In response to the collapse of the lucrative cod fishery in 1992, many Newfoundlanders have invested in various forms of ecotourism while others have not. This study examines two areas where native trout species are fished by local residents, and will analyze why trout fishing has been promoted as a form of ecotourism in one of the areas, but not in the other. Ethnographic interviews in both areas reveal that this difference reflects fundamental contrasts in the relationships between tourists and natural resources in the two areas.

BUSSMANN, Rainer (Missouri Botanical Garden, Center for Plant Genetic Resources) and Zaxhary REVENE. (San Diego Museum of Man).
FROM SIERRA TO COAST: TRACING THE SUPPLY OF MEDICINAL PLANTS IN NORTHERN PERU – A PLANT COLLECTOR'S TALE. (Oral presentation). Local healers and patients in Northern Peru buy a large part of their plant supply in local markets. While limited data exist on market inventories, no information was available on how the plants get to the larger market, if they are cultivated or wild collected, and what kind of income the collectors receive. The presented paper reports on the complete market flow from collection to sale to middlemen from the perspective of a herb collector/vendor. Herbs were mostly wild collected in the highlands around Cajamarca; collection as well as transport to the coastal markets required long distance travel.

CAIN, Roger. (University of Arkansas, Western Cherokee, and Keetoowah Cherokee).
THE ETHNOECOLOGY OF CHEROKEE BOTANICAL DYES: A PARADOX OF PROPERTIES AND POTENCIES. (Oral presentation). This paper explores the usage of roots and trees and their properties as dyes in Cherokee material culture. The use of natural dyes by Cherokee people with roots (e.g., bloodroot) and wood dyes (e.g., black walnut) constitutes an ethnobotanical paradox, because the botanical dyes are themselves associated with medicinal use and practice. The collection and processing

of plant-based dyes are often quite different from plant-based medicines, yet similar in that the strength of a plant's properties is frequently dependent upon the position of the celestial skies. When a Cherokee traditionalist goes collecting in the woods, certain species are generally targeted with a specific purpose in mind. Inevitably, when various flora are encountered, the forager will generally remember and encode the habitats and locations with precision, and will later return when the season is right for gathering again, or when the materials for a specific cultural context are required.

CAMPBELL, Brian. (University of Central Arkansas).

THE OZARK SEED SWAP: AGRARIAN TRADITION AS MODEL FOR AGROBIODIVERSITY CONSERVATION. (Oral presentation). In the recent past, when many Ozarkers engaged in subsistence farming and foraging, the saving, trading, and passing on of local varieties of cultivars was commonplace. Today, the only locals still engaging in such agrarian traditions are old-timers in remote Ozark hollers, and they lament the loss of these traditions. Youth only one or two generations removed, who might be interested in preserving agrarian knowledge, have lost connection to their roots. And local NGOs, environmental activists, and advocates of civic agriculture, who do express a great deal of interest, are non-kin outsiders. This article addresses the ideological obstacles to agrobiodiversity conservation and the potential of modern-day Seed Swaps to overcome them.

CHANDLER-EZELL, Karol. (Stephen F. Austin State University).

UNDERSTANDING AND CHANGING PERCEPTIONS OF CHIMPANZEES: FROM MONKEY CLOWNS TO APE CULTURE. (Oral presentation). How the public thinks about chimpanzees has great impact on conservation efforts, education, tourism, and policy. This study focuses on two major dimensions of how chimpanzees are perceived: 1) preconceptions and 2) how an hour-long lecture/film changes perceptions. The sample of 172 Cultural Anthropology students answered pre- and post-lecture questions including: freelists of contexts in which they had seen chimps, perceptions, and changes in perception and questions on chimp culture, nature, and relationship to humans. Common misconceptions centered on ape size, social complexity, culture, and emotion/violence. Perception of person-hood and mental/cultural complexity among chimps changed, increasing the desire for conservation.

COLLINS, Shawn (Sandstone Archaeology, LLC), Deborah M. PEARSALL (University of Missouri), and John G. JONES (Washington State University). COLLAPSING ASSUMPTIONS: CLIMATE AND AGRICULTURE IN PREHISPANIC COASTAL GUATEMALA. (Oral presentation). Some scholars have argued that the "Maya Collapse" was a phenomenon caused by widespread drought and the decline of agriculture, resulting in the demise of Maya civilization in Mexico and Guatemala between AD 700 and 1000. Paleoenvironmental and paleoclimatic data from along the Pacific Coast of Guatemala show that not only was the climate locally favorable at that time, but that agricultural signatures persist well after the period of population decline on the coast. This evidence, taken together with archaeological data, questions the nature of the relationship between climate, agriculture, and "civilization."

CORBIN, Cara. (University of Arkansas). OZARK MOUNTAIN FOODWAYS:

A CONTEMPORARY STUDY OF AGE-OLD TRADITIONS. (Oral Presentation).

'Eating fresh and local' is an increasingly salient trend that resonates with the public sentiment toward sustainable living. The Ozarks are a region where industriousness and self-sufficiency—particularly regarding the procurement and preparation of local foods—characterize the beliefs and lifeways of native residents. In this paper, I examine the present-day manifestations of these sustainable systems, recently renewed in the rural Ozarks, and the historic processes that have led to them. I also discuss how and why local foodways survive in Madison, Washington, and Carroll counties. Interviews with local residents generated meaningful insights into folk knowledge systems; emerging patterns surrounding food production, procurement, and preparation provide compelling data for ethnobotanists and anthropologists working toward the cultural conservation of folk regions in the US.

COUNCIL, Sarah and Carl KELLER III (University of Arkansas).

THE FOOD-MEDICINE CONTINUUM IN HISPANIC HEALTH BELIEF SYSTEMS.

(Poster presentation). For Hispanic residents of Northwest Arkansas, folk medical wisdom often presents the front line of health care when illness strikes. This study examines the ethnobotanical component of Hispanic folk medicine and what it reveals about ethnic-specific beliefs about health and healing. Interviews with local healers from Mexico, El Salvador, and Guatemala revealed a core group of edible cultivars believed to allay symptoms, cure infections, and provide relief to the suffering patient. A number of dichotomous parallels are shown to exist between the properties of healing foods and the symptoms associated with specific illnesses. The interpenetration between food, medicine, and the body is discussed with relation to ethnomedical belief systems.

COZZO, David. (RTCAR/Western Carolina University).

CHEROKEE ETHNOMYCOLOGY. (Oral presentation).

The Eastern Band of the Cherokee Indians have a long, intricate history of interaction with their natural environment. Ethnographic accounts provide some aspects of their relationship to their local fungi, but it is sorely inadequate. By combining the ethnographic record with contemporary ethnomycological knowledge, a more complete picture arises of Cherokee ethnomycology and its relationship to a greater understanding of Cherokee ethnoecology.

DALTON, Zoe. (University of Toronto).

PROCESS AS METHODOLOGY: DEVELOPING JOINT FIRST NATIONS-UNIVERSITY RESTORATION INITIATIVES IN SOUTHERN ONTARIO'S ENDANGERED BLACK OAK SAVANNAH ECOSYSTEM (Oral presentation).

This session focuses on a collaborative First Nations-university research project aimed at restoring the endangered Black Oak savannah ecosystem in southern Ontario. The project is focused on developing a restoration approach for Walpole Island First Nation's savannahs that addresses some of the community's multi-level goals, including enhancing intergenerational knowledge transfer, working towards the survival and recovery of savannah-associated TEK, self-determination and recognized sovereignty, and the conservation, restoration and expansion of the endangered savannahs themselves. Topics covered include: addressing cross-cultural considerations in the restoration of endangered ecosystems, building positive working relationships, and developing projects that meet the needs of both collaborative partners.

DEATON, Kathleen. (University of Arkansas).

CULTIVATING PARADISE. (Oral presentation). This study explores the American yard as an important symbolic landscape. Being a veritable nexus of culture, nature, and society in our own country, the yard should not be overlooked by anthropologists. Focusing on one particular neighborhood in east Fayetteville, the study examines the attitudes that homeowners in Fayetteville hold towards their yards. There is a large range between the surveyed homeowners in terms of motivation, aesthetic preference, and, one could say, intimacy with their yards, but, there are also recurrent, common ideas between all the homeowners about what should not be grown in the yard and "keeping up with the Joneses." Another worthy point is that it is in their yards that homeowners have the ability to directly affect an ecosystem, whether they do so positively or negatively. As more and more Americans throughout the country become aware of environmental issues, what are homeowners in Fayetteville already doing to be more 'green'? What are they willing to do? Or, are they willing to do anything at all? Does the social pressure for weed-free turf override ecological and health concerns? These are several of the questions that this study, "Cultivating Paradise," investigates.

DOMIC, Alejandra (Saint Louis University) Jose CAPRILES (Washington University), Gerardo CAMILO (Saint Louis University). NICHE ECOLOGICAL MODELING OF WILD AND PLANTED SPECIES OF ANDEAN TREES (*Polylepis*, Rosaceae). (Poster presentation).

In this poster we model the ecological niche of five species of the Andean tree *Polylepis* (Rosaceae). Niche models were developed using Maxent by combining geo-referenced data with climate layers. The ecological niche of three wild species (*P. besseri*, *P. sericea*, and *P. racemosa*) and two known planted species (*P. incana*, *P. reticulata*) was modeled and compared. Results show differences between the five species. The modeled ecological niche of the two planted species suggests that *P. reticulata* has been planted in areas that correspond to its ecological niche whereas *P. incana* has been planted in a broader ecological space.

FAUMAN-FICHMAN, Ruth. (University of Pittsburgh).

HOUSEHOLD USE OF MEDICINAL AND ECONOMICALLY USEFUL PLANTS IN POSTCLASSIC PERIOD MORELOS, MEXICO. (Oral presentation).

It is at the heart of household archaeology to understand how behaviors related to plant use for ritual, economic and medicinal purposes are expressed materially. We presume that functional households in the Mesoamerican past met their subsistence and economic needs both independently and in conjunction with other households on a reciprocal or trading basis. Ethnographic data gathered on traditional households in many areas of Mexico supports this presumption. Ethnohistoric data compiled in the early Colonial period provides at times stunningly detailed data and time depth to our understanding of the use of plants. Analysis of archaeobotanical remains and their contexts from household excavations and checkdam sediments provides direct evidence of particular behavior of great time depth related to ritual, economic and medicinal plant use by provincial Postclassic Aztec period inhabitants.

FERGUSON, Holly (University of Arkansas) and Jasmine SWANIKER (Duke University). GIVING TO THE LIGHT: A STUDY OF MIDWIFERY PRACTICES AMONGST THE BRIBRI, BORUCA, GUAYMI, AND LA GAMBA COMMUNITIES OF COSTA RICA.

(Poster presentation). This project examines childbirth practices and medicinal plant usage among the midwives of the Guaymí, Boruca, Bribri and La Gamba communities in order to gain an understanding of changing cultural traditions. Although there is still a wealth of knowledge regarding childbirth amongst these experts, many women are choosing hospital births. Thus, midwifery and its use of traditional herbal medicine, is rapidly becoming marginalized due to the modernization of Costa Rica's healthcare industry. This examination of these traditional practices explores the significance of each culture's birthing rituals, the phytochemical potentials of the plants used therewith, and the marked decrease in the utilization of midwifery in general.

FOWLER, Catherine S. (University of Nevada-Reno).

SOUTHERN PAIUTE GARDENING RECONSIDERED. (Oral presentation).

The origin and antiquity of gardening among the Southern Paiute people has been the topic of considerable debate through the years, with some seeing the practices directly linked to Ancestral Puebloan activities in the region (900-1200 CE), others arguing for shallower time depths, including even the introduction by early Mormon settlers (post 1855), and yet others favoring times of development and sources in between these two. The archaeological record has not been particularly informative on the matter, but holds promise. This paper reviews Isabel Kelly's ethnobotanical, linguistic and technical evidence and suggests additional links for Southern Paiute gardening to that of surrounding groups.

FRITZ, Gayle (Washington University in St. Louis). HISTORICAL OVERVIEW OF OZARK ETHNOBIOLOGY: PARADIGM-SHIFTING RESEARCH FROM A SHELTERED REGION.

(Oral presentation). The rugged, isolated Ozarks are stereotyped as marginal or backwards, but they inspire pivotal research into interactions between people, plants, and animals. Perishable remains from dry rockshelters drew early twentieth century archaeologists, and due to outstanding curation these

materials are still used by ethnobiologists applying twenty-first century methods. Ancient rockshelter cultigens were important for recognizing the Eastern North American center of domestication, and the textiles allow us to unravel identities and interactions among indigenous peoples. Agricultural, medicinal, and landscape management practices that evolved after Euro-American settlement and tribal relocations are additional sources of traditional ecological knowledge. These themes and more are covered in this symposium devoted to Ozark Ethnobiology.

GHUFRAN, Muhammad Asad and R. A. QUERESHI (Quaid-i-Azam University, Islamabad, Pakistan), A. BATOOL, (Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Pakistan), T.P.

KONDRATYUK, J. GUILFORD, L. MARLER, L.C. CHANG, and J.M. PEZZUTO (University of Hawaii at Hilo). EVALUATION OF INDIGENOUS MEDICINAL PLANTS FROM WESTERN HIMALAYAS AS POTENTIAL CANCER CHEMOPREVENTIVE AGENTS.

(Oral Presentation). The Western Himalayas in Northern Areas of Pakistan have great potential for ethnomedicine due to its cultural rich diversity and flora. The aim of this study was to evaluate the potential of indigenous medicinal plants as cancer chemopreventive agents. *Ajuga bractiosa*, *Figonía cretica*, *Mellia azedarach*, *Rumex dentatus*, *Rumex hastaus*, *Swertia chirata* and *Silybum merianum* were selected in this study. The plants were extracted with methanol and evaluated in a panel of in vitro assays [a Nuclear Factor-KappaB (NFκB), a TR-FRET retinoic X Receptor alpha co-activator (RXR), and an aromatase assays]. *M. azedarach*, *A. bractiosa*, *F. cretica* and *S. chirata* were active in inhibiting both tetradecanoylphorbol-13-acetate (TPA) and tumor necrosis factor (TNF) activated NFκB activity. *A. bractiosa* and *S. chirata* exhibited the lowest IC50 values 0.41 and 0.44 µg/mL, respectively. Most of the plant extracts were not cytotoxic when tested at concentration of 20 µg/mL with MCF-7, LNCap. and Hep-G2 cell lines. Nevertheless, the positive responses illustrate the potential of local plants as cancer chemopreventive agents and the value of working with indigenous communities.

GHUFRAN, Muhammad Asad and R. A. QUERESHI (Quaid-i-Azam University, Islamabad, Pakistan), A. BATOOL, (Pir Mehr Ali Shah Arid Agriculture University Rawalpindi, Pakistan), Mir Ajab KHAN (Quaid-i-Azam University Islamabad, Pakistan) L. C. CHANG and J.M. PEZZUTO (University of Hawaii at Hilo). USE OF MEDICINAL FLORA BY DIFFERENT AGE, GENDER AND COMMUNITY BASED GROUPS OF A WESTERN HIMALAYAN INDIGENOUS POPULATION.

(Poster presentation). Different age and ethnic groups of Western Himalayas showed different knowledge in traditional use of medicinal plants. A field survey was conducted in 11 localities, and resulted in the collection of a total 135 species based on their usefulness as medicinal plants, as relayed by the local communities. The indigenous informants from four different tribes, Balti, Broush, Shein, and Wakhi, were interviewed using open ended questionnaires for free listing medicinal plants. The sample included 247 men and 118 women. Comprehensive information was offered by mostly elderly men from these tribes. Younger men working in cities showed less interest and skill in the practice of using medicinal plants. The older men are not only knowledgeable about plants, but also in describing their medicinal preparations. Women knew more about daily use of plants used for common diseases such as colds, diarrhea, fever, flu, injuries, nausea, and pains such as arthritis and migraine. Although a significant difference was found for traditional knowledge of medicinal plants between old and young men, this was not the case with women. This finding was observed with different ethnic groups as well.

GILMORE, Michael. (University of Oklahoma).

THE MAIJUNA PARTICIPATORY MAPPING PROJECT: MAPPING THE PAST AND THE PRESENT FOR THE FUTURE (Oral presentation).

Due to a number of reasons, the biocultural resources of the Maijuna of the Peruvian Amazon are currently threatened. A community based conservation project using participatory mapping techniques as a tool to help conserve Maijuna biological and cultural resources has been implemented and will be discussed in detail. It is envisioned that the maps produced during this project will ultimately be used by the Maijuna to push for the formal protection of their traditional lands, an area of immense biological and

cultural significance. Lessons learned from this project will also be explored providing insights into participatory mapping projects in general.

GOSFORD, Robert. (Australian National University).

DEVELOPMENTS AND PROSPECTS IN ETHNOORNITHOLOGY. (Oral presentation).

In this paper I will examine recent developments and future prospects for ethnoornithology, particularly in relation to the activities of members of the Ethnoornithology Research & Study Group, a web-based group established in early 2006. I will discuss recent ethnoornithological research and the 1st Ethnoornithology Conference held at Nairobi, Kenya in late 2007. I will also discuss future prospects and opportunities for research and the application of ethnoornithology, particularly in the fields of small tourist ventures and land and species management.

HANSELKA, J. Kevin. (Washington University in St. Louis).

CASUAL CULTIVATION AMONG CONTEMPORARY SMALL SCALE FARMERS IN SOUTHWESTERN TAMAULIPAS, MEXICO, AND IMPLICATIONS FOR PREHISTORIC LOW-LEVEL FOOD PRODUCTION. (Oral presentation). Contemporary small-scale farmers near Ocampo, Tamaulipas, Mexico demonstrate behaviors that have broader implications for prehistoric human ecology. Common incidences of casual, informal cultivation of squashes and gourds take place around routine seasonal activities, often miles away from homes and conventional agricultural plots. These observations elucidate prehistoric subsistence behaviors in a region historically known for archaeological data concerning low-level food production. Such activities may serve as analogies for behaviors characterizing the extended period following the arrival of cultigens in Ocampo about 6,500 years ago, until the establishment of the first settled agricultural villages around 3,500 years ago.

HERRON, Scott. (Ferris State University).

THE ROLE OF TRADITIONAL DRUMS IN THE BRIDGING OF TRADITIONAL ECOLOGICAL KNOWLEDGE FROM THE PAST TO THE FUTURE IN NORTH AMERICA. (Oral presentation). Songs, ceremonies and the way of the traditional drum is a critical mechanism for cultural transmission of knowledge about values, stories, language, oral history and spirituality of American Indians in North America. A case study of an Anishinaabe drum group from Michigan will be discussed from the perspectives of knowledge transmission across generations and the personal knowledge acquisition an individual gains over time. In addition to the knowledge of how to build the drum and the tools utilized with the drum, seasonal gatherings facilitated by the drum will be highlighted.

HORTON, Elizabeth. (Washington University in St. Louis).

A NEW LOOK AT PERISHABLE TECHNOLOGIES FROM THE OZARK PLATEAU: FOCUS ON FIBER. (Oral presentation). The Ozark Rockshelters have yielded an extraordinarily well-preserved archaeological record of fabric artifacts and associated fiber materials unusual for the southeastern United States. These assemblages provide a unique opportunity to understand variability in fabric traditions, technological stability or change, and fiber taxa use. Preliminary identifications of fiber plant taxa from a sub-sample of the Ozark Rockshelters raises potential questions concerning broader social processes and the role of "wild" resources among Eastern North American farming societies in the late prehistoric period.

HUMEL, Eric. (University of California-Santa Barbara).

THE SUCCESSION OF TRADITION: THE TRANSITION OF TRADITIONAL AGRICULTURAL KNOWLEDGE. (Oral presentation). Many immigrants from rural, agriculture-based communities in Mesoamerica have found an outlet for their agricultural knowledge in suburban landscaping work in California. Considering how agricultural knowledge is transformed through emigration processes, my project builds a picture of this knowledge expressed in the words of farmers transplanted into suburbia and forced to adapt their knowledge into the framework of the suburban economic and (human)

ecological reality. Facilitating opportunities for people to maintain and pass on traditional knowledge is critically important, in this case through outlets in the ecological landscaping niche market.

HUNN, Eugene. (University of Washington).

A COMPARATIVE ANALYSIS OF ETHNO-ORNITHOLOGICAL INVENTORIES

(Oral presentation). I consider procedures for the systematic comparative analysis of ethno-ornithological systems and apply them to several systems that have been documented for a range of indigenous communities. Statistical comparisons include numbers of folk generic and terminal taxa recognized, proportions of total Western scientific species recognized, and patterns of such recognition by bird family and by size. I also compare nomenclatural patterns to assess the generality of the universalist claims of Berlin and others with regard to life-form names, binomial terminology, and the role of onomatopoeia. I discuss methodological difficulties that make such comparisons problematic.

IRION, Lindsay. (University of Arkansas).

PUBLIC PERCEPTIONS OF TRADITIONAL MEDICINE AND ITS SAFETY IN JARABACOA, DOMINICAN REPUBLIC. (Oral presentation).

This study explores intra-cultural variation in patterns of traditional medicine and public perceptions of its safety among residents of Jarabacoa, Dominican Republic. Forty respondents were interviewed using a structured questionnaire. Eighty-five percent of the participants reported use of home remedies for illness. Sixty-one percent of the participants believe that some home remedies were safe to use, while twenty-five percent reported that most were safe. Socio-demographic factors including age, formal education, economic status, and geographic residence are shown to relate meaningfully to the variation observed in traditional medical beliefs. The findings of this study are believed to provide insights for policy makers interested in advancing health care initiatives among residents of Dominican Republic and elsewhere in the Caribbean.

JOHNSON, Leslie Main. (Athabasca University).

DENE UNDERSTANDING OF THE LAND: ON HABITATS AND RELATIONSHIPS, AND REFLECTIONS ON CHANGE (Oral presentation).

Northern Athapaskan speakers experience shifting ecological conditions over the seasons, and over longer periods of time. People travel, animals travel, caribou migration routes shift. Traditional knowledge of Dene is flexible, relational and responsive, emphasizing observation, adaptation and resilience. With climate change, ranges of plant species, migrations of animal species, and weather patterns shift. Political and economic factors impinging on people and land are also changing. The nature, transmission and relevance of traditional knowledge of land is impacted by all of these factors. I describe aspects of Dene knowledge of landscape and reflect on the adaptive responsiveness of traditional understandings.

JURNEY, David. (US Forest Service).

HISTORICAL PHOTOGRAPHY OF THE OZARK NATIONAL FOREST, ARKANSAS: NATIVE AMERICAN AND EUROPEAN FIRE USE FOR VEGETATION MANAGEMENT. (Oral presentation).

Photographic documentation of conditions, land uses, and forest management activities was and is an integral part of the USDA Forest Service's activities in Arkansas (1908-2008). The Ozark-St. Francis National Forests have just completed digitization of over 2000 photographs illustrating conditions at the time of federal acquisition from 1948-present. Of particular interest are early 20th C. fire scarred trees that recorded late Prehistoric fire frequencies, and points on the landscape that frequently burned due to natural and cultural processes. Fire lookout towers provide panoramas of the landscape, and some were replicated in 2004 to provide visual comparison of vegetation and human land use changes during the 20thC. The combined use of repeat photography, dendrochronology, and General Land Office (1815-1840) records provides firm evidence for fire return intervals, culturally-induced changes in species distribution, and historical landscape mosaics for the Ozarks and Arkansas River valley.

KELLER, Carl. (University of Arkansas).

WILDCRAFTING TEK: EXPLORING AND CULTIVATING NEO-TRADITIONAL ECOLOGICAL KNOWLEDGE THROUGH EXPERIENTIAL NATURE EDUCATION.

(Oral presentation). Applied ethnobiologists are deeply invested in the acquisition, conservation, and perpetuation of traditional ecological knowledge systems. Research among indigenous societies has illuminated productive, grass-roots pathways for ethnobiological research among industrialized populations, which remain relatively underrepresented in the field. This paper examines the synergy between experiential knowledge and emotional appreciation of living resources and the environments that sustain them, and the didactic methods necessary to engender ecological stewardship among members of contemporary societies. It is suggested that human emotional, psychological, and spiritual development are commensurate with holistic ecological learning experiences, which in turn can promote and maintain ecological and cultural diversity by way of innovative educational models

KINDSCHER, Kelly. (University of Kansas).

RE-SPROUTING OF *ECHINACEA ANGUSTIFOLIA* AUGMENTS SUSTAINABILITY OF WILD MEDICINAL PLANT POPULATIONS. (Oral presentation). Conservationists expressed concern in the late 1990s that wild Echinacea species were being over-harvested for their medicinal roots. Harvesters of wild Echinacea angustifolia in Kansas showed us that even after harvesting the top 20 cm of root, some plants re-sprout. We marked harvested plants at sites in Kansas and Montana and re-examined them two years later. Approximately 50 percent of the roots re-sprouted from root reserves at both Kansas and Montana sampling sites. Shallowly-harvested plants were the most likely to re-sprout. These data indicate that Echinacea angustifolia stands can recover over time from intensive harvest if periods of non-harvest occur.

KUTTRUFF, Jenna Tedrick. (Louisiana State University).

AN OVERVIEW OF FOOTWEAR AND BAGS RECOVERED FROM OZARK ROCKSHELTERS. (Oral presentation). Research focuses on footwear and bags from Ozark rockshelters in Arkansas and Missouri. These artifact types are more easily identifiable as to their intended end use than many other types of fragmentary organic fibrous remains. Many are nearly complete and some have been replicated using the original fiber sources and processing techniques. I briefly present findings from the technical analysis of the artifacts and information gained from their replication. Experimental archaeology, including the replications of prehistoric artifacts, provides insights into production and use of these artifacts. Questions concerning materials, tools, construction techniques, and labor input were answered through this research.

LEE, Sang, Umadevi GARIMELLA, John CHOINSKI (University of Central Arkansas), Rajesh NAYAK (National Center for Toxicology Research). NATIVE SPECIES OF MEDICINAL PLANTS HAVE HIGHER POTENCY THAN INTRODUCED SPECIES. (Oral presentation). In this project, we compared the relative anti-microbial activities of honeysuckles found in Arkansas: two introduced species—*Lonicera japonica* (a well known plant used in Chinese herbal medicine) and *L. fragrantissima*; and two native species—*L. sempervirens* and *L. flava*. Results show that the extracts of the native plants studied (adjusted to dry weight/ml solvent) had higher bioactivity than the non-natives. We hypothesize that the native species of *Lonicera* have higher anti-microbial potency than the introduced species because of “Enemy Release”: that is, plants introduced to new areas have fewer associated pathogens; consequently they produce fewer chemical defenses.

LOHANI, Usha. (Tribhuvan University, Kathmandu, Nepal).

MEDICINAL USES OF ANIMALS AMONG THE TWO ETHNIC GROUPS (PAHARI AND

DANUWAR) OF NEPAL. (Oral presentation). Nepal’s topographical personality is unique, emerging from the flat land of slightly over 150m from the sea level to 8848m highest mountain of the world. For a

country of 147181sq. km, this diversity is thus amazing which, in turn, has given rise to biological diversity in the country. The incommunicable rugged terrain and centuries of isolation have made the different ethnic groups adapt to their surroundings and learn to survive. This is how the experience gained over the years of historical development in relation to animal uses and the surroundings forms the main stock of indigenous knowledge in these areas. The central mountain region is one such diverse area where the study was carried out in two selected villages among the two ethnic groups, namely Pahari and Danuwar. Both qualitative and quantitative techniques were used to obtain data on medicinal uses of animals together with the status of the ethnozoological knowledge among different age groups. Eleven genera of ethnomedicinal animals were found in each group with some commonality. Degradation of ethnozoological knowledge was observed only in the first group. Further study needs to be carried out on these animals to find out the active ingredients responsible for healing. There is an urgent need to carry out such study as other ethnic groups are vanishing from the country.

LOPINOT, Neal H. (Missouri State University).

LATE PREHISTORIC SUBSISTENCE ALONG THE WESTERN FLANKS OF THE OZARKS. (Oral presentation). Archaeological research during the past 15 years at sites along the western edge of the Ozarks and dating to ca. A.D. 1300-1500 has resulted in the recovery of much new subsistence information. Plant and animal remains from excavations at a large village, a civic-ceremonial center, a rockshelter, and a cave, all dating to the so-called Neosho phase, will be described. Maize cultivation and large-mammal hunting played prominent roles in the economies of groups living in this spatiotemoral context, but the evidence also indicates significant local and seasonal, opportunistic adaptive flexibility.

MANCABELLI, Andrew. (University of Arkansas).

DECIPHERING JAPANESE HEALTH BELIEFS THROUGH EXPRESSIVE CULTURE: A MODEL FOR TRADITIONAL ETHNOMEDICAL CONSERVATION. (Oral presentation). Western biomedicine has witnessed considerable profit from countless indigenous peoples. Yet globalization and delocalization are presently fragmenting if not erasing traditional ethnomedicinal knowledge. Health belief systems frequently encompass elaborate models structuring the cultural conceptions of illness and the expected outcomes of various treatment strategies. Japan is a social paradox where tradition and modernity collide, and recent shifts in economic geography are now threatening ethnobotanical knowledge and its role in preventative health maintenance. Japan's folk history boasts a myriad of medicinal plants, represented extensively through various arts and iconographic customs. In this paper, ethnohistorical methods are shown to reveal traditional beliefs about medicinal plants and how they are rendered powerful in the context of illness. The urgency to safeguard Japanese ethnomedicinal wisdom is also emphasized in the wake of sociodemographic change. Ethnomedicinal conservation is believed to be possible by illuminating new pathways for deciphering existing symbols of healing plants along with their expressive meanings, social histories, and traditional use patterns.

NEWSOM, Lee. (The Pennsylvania State University).

ANCIENT ETHNOBIOLOGY: INSIGHTS FROM FLORIDA'S ARCHAIC POND CEMETERIES. (Oral presentation). A unique mortuary program practiced by Native American groups in Florida during the Archaic Period (9,000-7,000 years ago) entailed burial of the dead in wetland settings, specifically underwater in the bottom sediments of ponds and similar bodies of water. These venues afford exceptional organic preservation, providing rare insights into this ancient burial practice and the daily lives of these ancient Floridians. This presentation will focus on two of these ancient cemeteries: Windover (8BR246), as the oldest example of this behavior (Early Archaic), and Little Salt Springs (8SO18), which includes an earlier Paleoindian component and a Middle Archaic cemetery.

NGUGI, Grace. (National Museums of Africa, Nairobi, Kenya).

ETHNOBOTANICAL SURVEY OF KIANG'OMBE FOREST, KENYA: FLORISTIC INVENTORY, UTILISATION AND CONSERVATION STATUS. (Oral presentation). An integrated approach of

ethnobotanical, vegetation and plant diversity survey was used to study Kiang'ombe forest in Kenya. A total of 569 plant species are documented among which one is new, 27 endemic and 8 IUCN-red-listed. Nineteen first records for the floral region are described. Local people use about 376 species, with Malvaceae and Combretaceae families having the highest use-values. Household forest dependency, with an annual income at 55.4%, is weighted more on construction and traditional medicine both above 80%. Value of forest resources is positively correlated with knowledge about them. Indigenous knowledge of local people on plant biodiversity use and management is important, hence conservation based on it is recommended.

NJERI, Mercy. (National Museums of Africa, Nairobi, Kenya). BELIEF SYSTEMS, FOLKLORE, AND CONSERVATION CONCERNS IN THE USE OF BIRDS IN CULTURAL CEREMONIES AMONG THE MAASAI OF KENYA (Oral presentation). Ethno-ornithology is the study of birds in the relation to people's traditional cultural beliefs and practices. Communities in Kenya interact with birds and continue to use them in various ways. The goal of this paper is to document indigenous knowledge, beliefs, and practices related to birds among the Maasai in Kenya, and to promote sustainable strategies for understanding birds and their uses in cultural ceremonies. Different communities have developed specialized technologies and skills for hunting and trapping birds, based on culturally relevant attributes of birds themselves. Birds of beauty are highly preferred in cultural ceremonies. The distinctions between farming communities and pastoralists are also discussed with relation to how birds are used ceremonially.

NOLAN, Justin M. (University of Arkansas) Shawna M. CAIN (University of Arkansas and Cherokee Nation), and Roger CAIN (Western Cherokee and Keetoowah Cherokee). A COMPARATIVE ETHNOBOTANY OF THE WESTERN CHEROKEE OZARKS AND THE CENTRAL ARKANSAS OZARKS (Oral presentation). We compare ethnobotanical data collected from Cherokee-speaking residents of the rural Western Ozarks of Cherokee Nation, and English-speaking residents of Euro-American communities in the Arkansas Ozarks. Despite the relative uniformity in forests and herbaceous flora types found across these areas, the constellation of plants known, named and used by Cherokee and Euroamerican residents differs substantially. Wild edibles and raw materials used for traditional arts are considerably more salient in Western Cherokee ethnobotany. By contrast, Arkansas Ozarkers share knowledge of a smaller base of mostly medicinal understory species. We discuss several social and ecological factors that guide how wild plant knowledge is collectively maintained, lost, and revised in different regions of the Ozark Highlands.

PARKER, Jonathan (University of North Texas) and Ricardo ROZZI (University of North Texas and Omora Ethnobotanical Park, Universidad de Magallanes & Institute of Ecology and Biodiversity, IEB, Cape Horn, Chile). INDIGENOUS AND COLONIZER'S TOPONYMIES IN SOUTH- AND NORTH-AMERICA: FROM BIOCULTURAL TO ANTHROPOCENTRIC RELATIONS BETWEEN HUMAN AND PLACES. (Oral presentation). Traditional ecological knowledge (TEK) is inextricably connected to specific places. Today, biological and cultural diversity are threatened worldwide leading to the extinction of TEK in many regions. As part of a collaborative biocultural conservation project between University of North Texas and the Omora Ethnobotanical Park (Chile), we address TEK extinction by focusing on the toponymy in Cape Horn archipelago inhabited by the indigenous Yahgan people at the southern end of the Americas, and in Denton County in North Texas. In both regions, places were previously named after birds, plants or landscape features. However, today they are prevailingly named after historically prominent colonizers. This expresses (and reinforces) the shift from biocultural toward anthropocentric relations between human and places.

PEARSALL, Deborah (University of Missouri). PHYTOLITHS IN THE FLORA OF ECUADOR: PHYTOLITH PRODUCTION AND INTERPRETING SOIL PHYTOLITH ASSEMBLAGES. (Oral presentation). The past 30 years of research have shown that analysis of phytoliths, plant silica bodies,

enhances our ability to interpret past human-plant interrelationships. Basic research into phytolith production in plant species, genera, and families underlies the diverse applications of phytolith analysis in archaeology, as does research into how plant phytolith production translates into the soil assemblages we interpret. This presentation describes results of the Phytoliths in the Flora of Ecuador project, which focused on investigating phytolith production in plants from lowland Ecuador and interpretation of soil phytolith assemblages from xerophytic, deciduous, and mixed deciduous/evergreen coastal forests, and the Amazon forest.

QUAVE, Cassandra. (Florida International University).

ZOOTHERAPEUTIC REMEDIES IN THE TRADITIONAL PHARMACOPOEIA OF SOUTHERN ITALY. (Oral presentation). Zootherapy is the treatment of human ailments with remedies made from animals and their products. Despite its prevalence in traditional medical practices worldwide, research on this phenomenon has often been neglected in comparison to medicinal plant research. Interviews were conducted with 112 informants from the Basilicata province of southern Italy. Remedies were ranked by consensus indices. Zootherapeutics represent an important component of the south Italian pharmacopoeia. Remedies come from humans, pigs, bees, chickens, and slugs. They are used to treat burns, furuncles, abscesses, bruises, conjunctivitis, bronchitis, warts, calluses, cradle-cap, and dermatitis.

QUEEN, Joel. (Eastern Cherokee Band).

TRADITIONAL EXPRESSIONS IN CHEROKEE ART. (Oral presentation).

The Cherokees have always lived in harmony with their natural environment. Their folklore remains instrumental in maintaining this balance. These myths were transmitted as tools that influenced tribal beliefs and behaviors of the tribe. Representing these myths was vital in teaching expected responsibilities to the next generations—the stewards of the Earth. In these legends, the Cherokees shared a kinship with plants, animals, the moon and sun, which explains the regard given to them. The designs I incorporate into my art are based upon these myths and legends. It is as important to depict these stories into my artwork as it is to relay them orally. It is equally important to maintain the purity and integrity of these traditions. Because Cherokee life has been understood through these forms, my goal is to carry those traditions that symbolize the meaning of natural symbols in stories and art.

QUINLAN, Marsha. (Washington State University).

USING ETHNOBOTANY FOR EPIDEMIOLOGICAL ANALYSIS: THE CASE OF “FRIGHT,” A CARIBBEAN ETHNOMEDICAL SYNDROME. (Oral presentation).

“Fright” is a Caribbean idiom for persistent distress blamed on an overload of fear, panic, anguish or worry surrounding a particular traumatic event. Regional ethnophysiology posits that fright causes blood to chill and coagulate into clots attributed with causing strokes and infarctions. Certain herbs are used to soothe the “frightened,” warm the blood, and “melt” fright-caused clots. While sufferers are often uncomfortable recalling and discussing personal fright experiences, it is less problematic to report use of medicinal plants used only to treat fright as a proxy measurement.

REYNOLDS, J. Matthew. (University of Arkansas).

A VIDEO DOCUMENTATION OF OZARK HERBAL MOUNTAIN MEDICINE.

(Video presentation). This video presents an ethnographic portrait of a rural Ozark Mountain healer and herbal knowledge of folk medicine. With wisdom, candor, and humor, the healer in focus reveals a wealth of information and experience told through stories in the woods of Arkansas’ rugged headwater country deep in the Boston Mountains. Today these healing practices are often overlooked or dismissed by practitioners of conventional biomedicine, and as such they are threatened by the slow encroachment of urbanization and modernization. By capturing the distinctive grass-roots wisdom of an herbal healer through the camera lens, this video conveys a fading knowledge system encoded in backcountry health beliefs so deeply woven into the fabric of Ozark expressive culture and storytelling.

REYNOLDS, Peter C. (Sally Glean Center, Costa Rica). THE MIXED-FLOCK HYPOTHESIS: THE SOURCE OF LINGUISTIC CATEGORIES. (Oral presentation). Even though the theory of “man the hunter” enjoys wide popularity, bipedal primates have small canine teeth and large, grinding molars—exactly the opposite of carnivores. Jolly’s seed-eater theory postulates that the first bipedal primates adapted to the savanna by eating grass seed. I extend this model by hypothesizing that prehuman seed-eaters foraged with songbirds and attended to their vocalizations. By incorporating mimicry of birdsong into social interaction, protohumans developed a system of social communication in which birdlike acoustics cured primate cognitive categories—that is to say, language.

RILEY, Timothy. (Texas A&M University). A MICROBOTANICAL INVESTIGATION OF GROUNDSTONE FROM THE FREMONT OCCUPATION OF THE BONNEVILLE ESTATES ROCKSHELTER, NEVADA. (Oral presentation). The role of agriculture among the Fremont has a long history of debate, particularly in the fringes of the territory occupied by these pottery-bearing cultures. This study presents a preliminary microbotanical investigation of the Fremont occupation of the Bonneville Estates Rockshelter. This rockshelter, located along the western boundary of the Great Salt Lake Desert, is beyond the margins traditionally ascribed to Fremont agriculture. The protected nature of this site provides an opportunity to recover starch, phytoliths, and pollen from a variety of contexts related to food preparation and consumption, including the groundstone implements that are the focus of this current research.

ROBERTS, Katherine. (Center for Archaeological Research, Missouri State University), FORAGING AND FARMING IN PREHISTORIC NORTHEAST LOUISIANA. (Oral presentation). This paper documents the emergence of farming, in the form of both horticulture and agriculture, in the Lower Mississippi Valley's Tensas Basin during Coles Creek (A.D. 700-1000) through early Mississippi periods (A.D. 1000-1400) and uses basic models and predictions from evolutionary ecology as the main interpretive framework. Assessment of archaeological plant remains using ranking (i.e., size) of food items offers testable hypotheses regarding Tensas subsistence patterns. As a result of testing these hypotheses, I provide some possible explanations of how and why Coles Creek fisher-hunter-collectors became farmers. Maize use is assessed vis-à-vis native starchy seed cultivation in the Tensas Basin, and possible ecological and historical explanations for Coles Creek and Mississippi subsistence patterns are formulated. An additional question is why inhabitants of the Tensas Basin did not rely heavily on particular seed crops like their contemporaries living in the mid-latitudes. Comparison of the Tensas' subsistence to those of more northern sites indicates that seasonality may play an important role in influencing these sorts of patterns.

ROGERS, Elizabeth (Natural Resources Department, Crandon, Wisconsin, USA) and Lawrence DANIELS (Potawatomi Tribal Member). GTE-GA-NĒS: A TRADITIONAL ECOLOGICAL KNOWLEDGE (TEK) PARADIGM FOR POTAWATOMI BIODIVERSITY CONSERVATION IN NORTHERN WISCONSIN. (Poster presentation). Using a TEK paradigm, the Forest County Potawatomi Natural Resources Department is restoring land management that relies on relationships between people and land. Descending from those who resisted removal by the federal government, tribal families settled on scattered homesteads connected by trails. They survived by traditional agriculture of Gte-Ga-Nēs (“little gardens”) planting species for foods, ceremonials, and medicines in homesites, trails, and clearings. By using technology such as GIS to map culturally significant plant species and by engaging tribal members in protection and restoration activities, Gte-Ga-Nēs may again prove vital to the survival of the Potawatomi people.

SABO, George. (Arkansas Archaeological Survey). ETHNOBIOLOGICAL SYMBOLISM IN OZARK ROCK ART. (Oral presentation). Rock art sites in the Arkansas Ozarks contain many naturalistic images depicting animals and plants, some of which are identifiable at the genus or species level. We examine this imagery from three perspectives. First, the

images offer glimpses of ancient environmental features as seen through the artist's eye. Second, comparison of rock art with other ethnobiological datasets—particularly animal and plant remains preserved in archeological contexts—enables us to identify cultural themes associated with ancient economic patterns. Finally, analysis of motif distributions across regional landscapes provides insights into the cosmologies associated with ancient human ecosystems.

SAULT, Nicole. (Santa Clara University).

VULTURE CULTURE: BIRDS OF MIGRATION AND TRANSFORMATION AMONG THE BRIBRI OF COSTA RICA. (Oral presentation). In the United States, vultures are often viewed with fear and loathing, as they are associated with death, filth, and decay—"fighting over the remains". However, some societies have positive associations with vultures. Not only do vultures "clean" the land of carcasses, they soar to the heavens and mediate between worlds, transforming death into rebirth. For the BriBri of Costa Rica, the vulture is also revered for its ability to migrate long distances and for its sacred role in the creation of the world.

SAVO, Valentina. ("Roma Tre" University, Rome, Italy).

A FIRST EVALUATION OF THE ETHNOBOTANICAL KNOWLEDGE IN THE AMALFI COAST (SOUTHERN ITALY). (Poster presentation). An ethnobotanical survey has been carried out in the Amalfi Coast (Unesco site), where there is still a close relationship between folks and territory. The information on ethnobotanical uses is based on interviews with inhabitants of the area. During the ethnobotanical survey, 84 plants, belonging to 48 families, were reported. A list of plant species along with their vernacular names, preparation and administration processes were given and compared with practices in other Italian and some Mediterranean areas in order to assess the spread of Traditional Knowledge (TK). The diffusion of TK has been also evaluated within the Amalfi Coast itself.

SINGH, Rani and N. S. TEKALE. (Nutritional Research Lab, B. N. Bandodkar College of Science, Maharashtra, India). CONSERVATION OF MEDICINAL PLANTS IN JHABUA DISTRICT, MADHYA PRADESH, INDIA. (Oral presentation). Central India is home to over thirty tribal groups living in close association with thousands of medicinal plant species. Each tribal group maintains traditional knowledge of medicinal plants for the selective treatment of a number of infectious diseases and metabolic disorders. However, biodiversity is seriously threatened by uncontrolled industrial growth, urbanization pressure, and illegal forest management in the Jhabua district. This paper discusses ethnomedical uses of several important plants found in this area, and the relevance of rapid ethnobotanical assessment in complex biocultural regions, where valuable species are either endangered or on the verge of extinction.

SMITH, Bruce D. (National Museum of Natural History, Smithsonian Institution).

REVISITING THE MARBLE BLUFF SUNFLOWER ASSEMBLAGE. (Oral presentation). This paper provides preliminary information on an ongoing study of the carbonized sunflower (*Helianthus annuus*) achenes recovered from the Marble Bluff shelter in the Arkansas Ozarks. Carefully curated at the University of Arkansas for more than seven decades, and initially sampled for analysis by Gayle Fritz in the 1980s, this remarkable assemblage of more than 250 intact achenes provides a rare opportunity to both characterize this eastern North American crop plant at an early stage of its domestication, and to compare it to achene assemblages recently collected from modern wild sunflower populations in the upper Midwest.

STEPP, John Richard, Christian RUSSELL, Hector CASTANEDA, Joanna REILLY-BROWN.

(University of Florida). BIOCULTURAL DIVERSITY MAPPING PROJECT. (Oral presentation). This paper will discuss the latest findings from the University of Florida Biocultural Diversity Mapping Project. The distribution of biocultural diversity will be presented both globally and regionally. Factors affecting the correlation between high biodiversity and high linguistic diversity will be discussed. The

paper will conclude with a presentation of a recent exhibit shown at the American Museum of Natural History in New York.

STORM, Linda. (University of Washington).

NATIVE ORAL HISTORY AND ORIGINS OF UPPER CHEHALIS PRAIRIES. (Oral presentation). Upper Chehalis traditions describe when animals and people were much the same. During that time, yawa'ltəm̓x• (earthquake woman) dug camas at Lequato prairie. She became pregnant by being struck in the stomach by a hot rock and gave birth to Moon, the transformer. Origin stories describe specific named prairie places and the role of fire in maintaining them. Traditions about great floods, battles with giant animals, and illusions to a tsunami shed light on the past in ways that western science is just beginning to understand. These traditions teach about the people, places and cultural significance of Upper Chehalis prairies.

TIMBROOK, Jan. (Santa Barbara Museum of Natural History).

CHUMASH BASKETRY THEN AND NOW. (Oral presentation). The Chumash people of coastal southern California have long been known for their versatile, strong and beautiful baskets, which they exported to other tribes even in pre-European times. Spanish explorers, later visitors and settlers bought Chumash baskets as souvenirs. The skilled, adaptable Chumash continued to produce baskets as late as 1915. The old-time weavers left a priceless legacy for their descendants today: the baskets themselves. Modern weavers have closely studied dozens of baskets, pored through documents, learned to work with wild plant materials, and gained strength from the knowledge that they are bringing ancient traditions back to life.

WAGGONER, Amanda, John CHOINSKI, and Umadevi GARIMELLA

(University of Central Arkansas). AN ASSESSMENT OF ARKANSAS' ANTIMICROBIAL FLORA: METHODOLOGICAL CONSIDERATIONS FOR MEDICAL ETHNOBOTANY.

(Oral presentation). This paper examines plants identified as having germicidal properties by expert herbalists of the Arkansas Ozarks. Modern methods of chemical extraction and bioassay reveal correlations between ethnomedical beliefs about plants and their levels of antimicrobial activity. Nolan (2001) identified a list of 45 species as having potential germicidal properties. An extensive literature search indicated that over sixty-six percent of these plants tested positively for anti-microbial activity. The remaining species will be collected, extracted and analyzed for anti-microbial activity, although the scarcity of certain species will necessitate a micro-extraction and bioassay protocol. These protocols are discussed as potentially effective and ecologically responsible analytic approaches to medical ethnobotany when very small amounts of dried botanical materials are available.

WAGNER, Gail E. (University of South Carolina).

BOTANICAL KNOWLEDGE OF COLLEGE STUDENTS. (Oral presentation).

Thirty-two college students aged 18-22 were asked to freelist garden flowers, grasses, local domesticated crops, and native/local trees, vines, and wildflowers/weeds. Answers were scored as correct, not native, or inappropriate. Whereas students could list an average of 9.4 crops and trees, and 6.8 garden flowers, they listed an average of fewer than 3 of the other categories or life forms. The fewest number of wrong or inappropriate answers were given for crop plants, and the highest for grasses and weeds. Both results and methodology are examined for this first stage of a multi-year project on botanical knowledge.

WOLVERTON, Steve. (University of North Texas).

WHITE-TAILED DEER AS "THE PREY" DURING THE LATE HOLOCENE ALONG THE PRAIRIE-FOREST BOUNDARY (Oral presentation). White-tailed deer (*Odocoileus virginianus*) are the most abundantly represented mammalian prey species in many (if not most) zooarchaeological assemblages in eastern North America, especially in assemblages that date to the late Holocene. Many studies document the high relative abundance of white-tailed deer remains, and explanations focus on

general subsistence implications for humans often relating abundance of remains to prey choice, diet breadth and/or habitat-driven prey availability. Hyperabundance of white-tailed deer as prey progressively later in the Holocene is ultimately, however, the result of a deeper cause related to the ecological implications of the terminal Pleistocene extinctions. Put into a deeper evolutionary context, it becomes evident that white-tailed deer should be "the prey" of choice with increasing temporal distance from the terminal Pleistocene for plain and simple ecological reasons.

YEAGER, Sydney. (University of Central Arkansas).

TRADITIONAL HEALTH AND HEALING IN THE OZARKS: IMPLICATIONS FOR MEDICAL FOLKLORE RESEARCH (Oral Presentation). Historically the Ozarks have been a remote section of the United States, and Ozarkers have not always had medical care readily available. Thus they needed to have knowledge of medicinal plants in order to adapt if not survive in this region. Using preliminary research into Ozarks folk medicine, this paper looks at how knowledge of home remedies has been affected by the changes following the Ozarks' move toward modernization. It addresses the issues surrounding the loss of folk medicinal wisdom and the trends in how knowledge is presently shared with the use of the "Ozarks Disclaimer," an implicit warning offered along with remedies as a caution to those who intend to use them.

ZARGER, Rebecca. (University of South Florida).

CHILDREN'S "EMERGENT BOTANIES" DURING MIDDLE CHILDHOOD.

(Oral presentation). Considering the ways children's situated, lived environments are connected to developmental patterns as they learn about the "natural" world may contribute to a better understanding of how botanical knowledge is acquired and how it flows between individuals, groups, and communities. A closer examination of several recent studies documenting children's and young adults' knowledge of local flora illustrates the significance of middle childhood (between the ages of 5 and 12) to the process of developing expertise in particular cultural landscapes. The possible significance of this pattern is discussed in relation to developmental patterns and efforts to sustain ethnobotanical knowledge and practice.