The 49th Annual Meeting of the Society For Economic Botany
Duke University, Durahm, NC: June 1-5, 2008

The 49th Annual SEB Meeting will be at Duke University in Durham, NC, June 1-5, 2008. The meeting is sponsored by the Sarah P. Duke Gardens, the North Carolina Botanical Garden, and the J. C. Raulston Arboretum. Members of the local arrangements committee are Mary Eubanks (chair), Richard A. White, Peter White, Denny Werner, and Robert Healy.

Regional Description
Durham, Chapel Hill, and Raleigh are located in the Piedmont region of North Carolina at three corners of an area known as the Triangle. The Triangle is world-renowned as a home of higher education, extraordinary hospitals, medical research, and technology. The unique flavor and pace of life of this area contributes to its ranking as one of the best places to live in the United States. The meeting will be hosted by three botanical gardens at the Triangle’s major universities—Duke University, the University of North Carolina at Chapel Hill, and North Carolina State University.

The lead host institution will be Duke University, where most of the activities will be held. Duke University currently enrolls 6,300 undergraduate and 4,500 graduate students representing almost every state and 75 foreign countries. A premier public garden on 55 acres in the heart of the Duke University campus, the Sarah P. Duke Gardens is renowned for landscape design. Ellen Shipman, a pioneer in American landscape design, planned and directed the garden’s construction. It is considered Shipman’s greatest work and is recognized as a national architectural treasure. The Sarah P. Duke Gardens include the Terrace Gardens, H. L. Blomquist Garden of Native Plants representing the flora of the southeastern United States, and the Culberson Asiatic Arboretum. Sunday night’s opening reception for SEB’s meeting as well as the Distinguished Economic Botanist dinner will be held in the Sarah Duke Gardens.

The North Carolina Botanical Garden at the University of North Carolina at Chapel Hill is a leader in southeastern native plant conservation and education. Included in its collections and displays of 7,000 accessions (2,200 species) are natural habitat gardens, a Native American garden, and an acclaimed collection of carnivorous plants, as well as culinary, economic, medicinal, and poisonous plants. Peter White, Director of the North Carolina Botanical Garden, will host an evening event in the garden and lead a field trip to the Green Swamp.

The J. C. Raulston Arboretum at North Carolina State University in Raleigh is a nationally acclaimed garden with the most diverse collection of cold hardy temperate zone plants in the southeastern United States. The eight-acre arboretum is a research and teaching garden with over 5,000 taxa from 50 countries. Denny Werner, Director of the Raulston Arboretum will host the barbecue in the arboretum and lead a field trip to White Pines Nature Preserve in Chatham County.

Registration
On-line conference registration and payment over a secure web site is through Duke University Conference Services, which also will process mailed or faxed registrations. We can accept American Express, Discover Card, Master Card, Visa, cash, check, IRI, and institutional purchase orders. Contact Conference Services for questions regarding events and/or registration (Phone 919-660-1760, Fax 919-660-1769, ConfServ@notes.duke.edu).

Accommodations
Dorm rooms in Randolph Residence Hall, one of the new, air-conditioned residence halls on Duke University’s East Campus, are $41.10 for a double and $48.30 for a single per night. This includes a linen pack with pillow, 2 sheets, a blanket, 4 towels and 4 washcloths, and a hot breakfast at

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Notes from the Field

We have seen many positive changes at SEB since the last issue of the Newsletter. Within these pages you will find the 2007 meeting Review with award announcements and the most enticing 2008 annual meeting announcement.

We have an introduction from our new office BSA Executive Director, and the new Charles B. Heiser, Jr. Mentor award announcement.

I hope your lives continue to be exciting and full of botany. Please send me your botanical news item as members really do enjoy armchair ethno and economic botany. See you in North Carolina!

Meetings

Community-University Partnerships: Connecting for Change
May 4-7, 2008, Victoria, BC, Canada
Call for Proposals due November 15, 2007
www.uvic.ca/research/oceb/cuexpo/call.html

Community-University Exposition 2008 (CU-expo 2008) will be held in the greater Victoria region on beautiful Vancouver Island May 4-7, 2008. CU-expo 2008 is jointly hosted by an extensive group of community organizations and the University of Victoria. Community-Campus Partnerships for Health is a conference supporting organization.

ICEB 2009, Sept. 21-24, 2009
We are pleased to announce the Vth International Congress of Ethnobotany (ICEB 2009), “Traditions and Transformations in Ethnobotany” to be held in the city of San Carlos de Bariloche, Patagonia, Argentina. San Carlos de Bariloche is a very nice city in northwestern Patagonia; this city, which is close to the lovely Los Andes Mountains, has many cultural places and an interesting intellectual and academic atmosphere. The city of Bariloche also is located at the heart of Nahuel Huapi National Park. At the ecotone between the Nothofagus forests to the west and the arid Patagonian steppe to the east, and the city is surrounded by spectacular views of glacial lakes and snow-capped peaks.

We hope to have several special events in the fields of ethnobotany and economic botany, including a scientific program of plenary lectures, posters, round tables and symposiums. Designed to be an international forum to discuss the current state of research in the relationship of humans and plants, this ICEB is open to botanists, anthropologists, ethno linguists, historians, archaeologists, and everybody wishing to participate. All interested parties are invited to attend; please feel free to share the call for this meeting with interested friends, colleagues, students, and young professionals.

Please, contact the organisation committee at:
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aladio@crub.uncoma.edu.ar

Registration for the SEB annual meeting begins September 28, 2007.
Do not delay!
2007 Annual Council Meeting

Current Council Members


Awards

We are proud to have in our society many life partners whose works are exemplary, so for the DEB award for 2008 we have chosen Drs. Brent and Elois Ann Berlin.

A new award—Charles B. Heiser, Jr. Mentor Award—will begin at the start of 2008 meeting. The details of this award are on page 16.

The Julia F. Morton Award and the Edmund H. Fulling Award were enhanced by increasing the monetary portion of both awards to $500. See the Website for more details of these awards (www.econbot.org/about/index.php?sm=06).

The winner of the Edmund H. Fulling Award for 2007 is Cassandra Quave, Florida International University, “The Search for New Anti-Staphylococcal Leads: Comparing the Antibacterial Efficiency of Italian Plants Based on Ethnobotanical Use Categories.”

The winner of the Julia F. Morton Award for 2007 is Brian Doyle, “Pimenta dioica (L.) Merr.: An Herbal Therapeutic from Costa Rica for Women’s Health.”

The winner of this year’s Richard Evans Schulsteres Research Award is Nanci J. Ross, University of Connecticut, “Impact Assessment of Ancient Maya forest gardens,” for her on-going research on Maya forest gardens.

New relationship with Botanical Society of America (BSA)

We began our independence almost two years ago to find that the office was a good step for us to take, but maybe a little more than we wanted to do on our own. There are many advantages of working within a team of people who represent botanical interests. So it was a natural step for us to work with BSA in St. Louis. They will be able to manage our web, membership, and more easily to expand our membership benefits. Bill Dahl at BSA is our contact and Walter Lewis, 1990 Past President, will be our local liaison. We will be hearing more in the near future (See BSA, p. 3).

New Members

If you attended the 2007 meeting in Chicago you would have seen many new faces especially from abroad. Besides our active EU International chapter, there is increased interest in expanding international chapters. Our new members from

Botanical Society of America—BSA

In June at the meeting Will McClatchey, President in 2007 began his address by listing some of the immediate changes. Here are his remarks:

“First, we now have a stable business office managed by an executive director with a full-time staff located in St. Louis adjacent to the Missouri Botanical Garden. We are sharing staff with the Botanical Society of America, which has developed an on-line system for management of membership records that makes the work of the secretary easy, transparent financial record keeping that makes the work of the treasurer easy, and a suite of other staff including conference planners, support for publications, education, and other priority missions. I think that we will be very, very happy working with the new business office, which will free the council and the society to get on with the tasks of being a scientific society.”

Introduction from BSA Executive Director, Bill Dahl

Good day. You may have already heard that the Society for Economic Botany (SEB) is in the process of moving its business functions to St. Louis, Missouri. Botanical Society of America (BSA) staff will be providing business, communications, and membership support services to SEB and its members. I’d like to take a minute of your time to introduce the people who will be assisting you. I’d also like to extend a warm welcome from the BSA staff team.

My name is Bill Dahl and I’m the Executive Director of the Botanical Society of America. I started in this position in late 2002. Over the past five years, I’ve had the pleasure of putting together a fantastic team to support the mission, members, and activities of the BSA. I will be working with the BSA team to coordinate membership, financial and communication services for your Society.

A wee bit of history—As we began establishing the BSA business office in 2002, the executive committee made it clear that to better serve our mission, and the botanical community, we needed to evolve to allow for collaboration across societies. Thus, when we started developing our membership & financial systems, the ability to share our infrastructure became major design criteria. We are pleased that SEB will be the third organization to take advantage of the management tools we have created.

However, the real strength of what we do comes from people power.

Papua New Guinea and Ghana have made inquiries for greater involvement by possibly initiating chapters. Please encourage your colleagues to contact the Council or me for assistance with this process. I will report more as we learn more.

Wanda Lovan, Administration and Finance Director—Wanda joined the BSA in 2003 and has assisted in the development of our membership and accounting systems. She will assist the SEB treasurer and provide bookkeeping and administrative support for the Society.

Heather Cacanindin, Membership and Subscriptions Director—Heather joined the BSA in July 2007. She will be your contact person for membership and SEB-related subscriptions. She will assist in growing these areas for the Society. If you have ideas on how we might assist, please take the time to talk with her.

BSA has four additional staff members who will provide support from time to time. Amy McPherson is the Managing Editor of the American Journal of Botany, Beth Hazen is Production Manager for the journal, Johanne Stogran is our Conference Manager, Claire Hemingway is Education Director and Rob Brandt is the Manager—Technology Development.

We hope this shift allows the Society for Economic Botany governing body to focus on the bigger picture and frees the members serving the organization to do the same. Using the systems we have developed will provide SEB with up-to-the-minute membership and financial information. It will also dramatically reduce the time and effort currently required to be an officer. The Board will have instant access to information and receive monthly reports on all activities. As part of the SEB team, we will also provide industry and public policy information on a regular basis. This will assist in ensuring all members have access to information that may be of importance to SEB or its broader interests.

Please contact us at any time if you have any questions or if we can be of any assistance. To contact the office and talk to a live person call 314-577-9566 or write SEB@botany.org. More information about BSA can be found at www.botany.org/about_bsa/contact.php. Hopefully, we can place the same information on the SEB website in the very near future.

Sincerely,

Bill Dahl, Executive Director, BSA
4475 Castleman Avenue, St. Louis, MO 63110
(314-577-9566, SEB@botany.org)
48th Annual Meeting—2007 Symposium Review

The 48th Annual Meeting of the Society for Economic Botany in Chicago (June 4–9, 2007) was one of our largest. There were 210 registrants, 127 abstracts, including 84 oral presentations and 43 posters, 9 invited speakers at the Symposium, and 4 workshops (See Student Committee Report, page 18). The Symposium was sponsored by a grant from the National Institutes of Health awarded to Doel Soejarto, Charlotte Gyllenhaal, and Gail Mahady.

A Symposium—“In the Service of Human Health: Continuing Search for New Plant-based Therapies”

On June 4, 2007, a state-of-the-art scientific symposium entitled “In the Service of Human Health: Continuing Search for New Plant-based Therapies” was convened by the SEB Symposium Committee chaired by Dr. Dijia Doel Soejarto, University of Illinois at Chicago, with Dr. Gail Mahady, Dr. Charlotte Gyllenhaal, and Dr. Scott Franzblau serving as members of the Committee. The symposium brought together two NIH-funded programs, the NCCAM Botanical Research Centers, and the plant-based ICBG/Fogarty International Center projects, with a goal to highlight the achievements of these programs, while promoting a unique scientific exchange that would bring about advances in both programs. The symposium was convened in the chapel of the Lake Forest College at Lake Forest, and was supported by a grant (Grant 1R13AT004364-01; D. D. Soejarto, Principal Investigator) from the National Center for Complementary and Alternative Medicine (NCCAM). The Society for Economic Botany and the University of Illinois at Chicago co-sponsored the symposium. Four speakers of the Botanical Centers made the morning presentations: Dr. Norman R. Farnsworth (Keynote Speaker; Director, UIC/NIH Center for Botanical Dietary Supplements Research in Women’s Health, College of Pharmacy, University of Illinois at Chicago, 833 S. Wood St., Chicago, Illinois 60612), Dr. Barrie Cassileth (Laurence S. Rockefeller Chair in Integrative Medicine, Chief, Integrative Medicine Service, Memorial Sloan-Kettering Cancer Center, 1429 First Avenue at 74th Street, New York, New York 10021), Dr. Connie Weaver (Head, Department of Foods and Nutrition, Purdue University, 700 West State Street, West Lafayette, Indiana 47907), and Dr. Diane F. Birt (Director, Iowa Center for Research on Botanical Dietary Supplements, Iowa State University, 215 MacKay Hall, 2312 Food Science Building, Ames, Iowa 50011-1061). In the afternoon session, four ICBG investigators made their presentations: Dr. Ilya Raskin (Principal Investigator, Uzbekistan and Kyrgyzstan ICBG; Rutgers University, Cook College, Foran Hall, 59 Dudley Road, New Brunswick, New Jersey 08901-8520), Dr. Louis Barrows (Principal Investigator, Papua New Guinea ICBG; Department of Pharmacology & Toxicology, College of Pharmacy, University of Utah Health Sciences Center, 30 S. 2000 E., Rm 201, Salt Lake City, Utah 84112), Dr. Todd Capson (Co-Investigator, Panama ICBG; Smithsonian Tropical Research Institute, Apartado Postal 0843-03092, Panama, República de Panamá), and Dr. Shugeng Cao (Co-Investigator, Madagascar ICBG; Department of Chemistry, Virginia Polytechnic Institute and State University, 107 Davidson Hall, Blacksburg, Virginia 24061-0001). At the beginning of the afternoon session, an overview of the ICBG Program was presented by Dr. Joshua Rosenthal (Deputy Director, Division of International Training and Research, and Director, ICBG Program, Fogarty International Center, NIH, 31 Center Drive, Bethesda, Maryland 20892-2220). The following are summaries of the presentations.

Dr. Farnsworth presented work and progress at the UIC/NIH Center for Botanical Dietary Supplements Research in Women’s Health under the support NCCAM since 1999. Of several plants selected for study based on literature reports suggesting beneficial effects to reduce the symptoms of menopause, Black Cohosh (Cimicifuga racemosa; syn.: Actaea racemosa) and Red Clover (Trifolium pretense) have advanced to a four-arm Phase 2 clinical study. Women took the preparations for 12 months with the usual tests being conducted routinely, especially monitoring of liver enzymes. As of November 2006, all subjects had entered in the trial, with about half of them finished with the 12-month treatment. This clinical trial is planned for completion by November 2007. No evidence of liver toxicity or other major adverse effects have been seen.

Dr. Cassileth presented work and progress at the Center for Botanical Immunomodulators established in the spring of 2005. The goal of the research is to systematically investigate immunomodulating botanical supplements and translate findings into clinical applications. One pilot research project has produced data showing specific suppression by Echinacea extract of T-cell mediated responses to viral antigen. In another project that investigates the regulation of the immune response to vaccines by botanicals, several botanicals have been tested and shown to have immuno-adjuvant activity. The impact of botanicals on the immune response to infectious microorganisms were investigated and found that turmeric preparations enhanced murine resistance against systemic infection with Mycobacterium bovis BCG and Listeria monocytogenes. Turmeric also has been shown to suppress human dendritic cell maturation.

Dr. Birt presented the Center’s study and progress on the use of diversity among species of Echinacea and Hypericum to identify metabolomic profiles of bioactivity. The results of the study to date clearly point to species- and population-level differences in anti-viral and anti-inflammatory activities in Echinacea and Hypericum. Bioactivity-guided fractionation has been used with these supplements to identify bioactive constituents and probe interactions of constituents. Anti-HIV activity in Echinacea was associated with polyphenolic compounds, coupled with the well-described effects of cichoric acid and potentially the contribution of alkamides. Anti-inflammatory activity was associated with alkalamides and flavonoids. Light-independent anti-viral activity was identified in H. perforatum.

Dr. Weaver presented results of study of the Purdue-UAB (University of Alabama at Birmingham) Botanical Research Center on polyphenolic bioactive compounds from botanicals and their metabolism and relationship to age-related diseases. The results presented include role of isoflavones on suppression of bone resorption, role of isoflavones and other polyphenolics on cardiovascular health and on cognitive function, role of green tea in cancer prevention, and role of polyphenolics in the protection against eye lens protein degeneration with aging. Special Continued on page 10
Professor John Gregory Hawkes, known to everyone simply as Jack, died peacefully on the evening of September 6, 2007; he was 92 years old. With his passing, another chapter in the story of plant genetic resources conservation comes to an end, one that began with Jack’s first association with potatoes in 1938.

After joining the Imperial Bureau of Plant Breeding and Genetics in Cambridge, UK, as a botanist, Jack traveled to Leningrad to meet with Russian scientists working on potatoes and their taxonomy. He was scheduled to join the British Empire Potato Collecting Expedition during 1938-39 to collect potatoes in the Americas. While in Leningrad, he met NI Vavilov and began a life-long interest in potatoes in the Americas. He also was involved in establishing the genetic resources program at the International Potato Center in Lima, Peru. With his Danish colleague, J. P. Hjerting, he published important monographs on the potatoes of Argentina, Brazil, Paraguay, and Uruguay (in 1969) and Bolivia (in 1989). He established crop plant evolution and taxonomy studies as important disciplines at Birmingham. He led a major project that culminated in the publication of a computer-mapped flora of the English county of Warwickshire, the very first venture of this type. With colleagues in the university's medical school, he applied serology to understand species relationships among potato species, another pioneering approach.

Jack’s contribution to genetic resources conservation and use was outstanding. He was a key member of the genetic resources movement founded by Sir Otto Frankel that also included Jack Harlan and Erna Bennett. He worked with Frankel at various Food and Agriculture Organization (FAO) conferences, the first being in 1967. Jack then joined a newly formed Panel of Experts to organize a world network of genetic resources institutions. He soon realized that to implement such a network needed trained personnel, but where were they to come from? In 1969, he established in his department at Birmingham a Master’s course in Conservation and Utilization of Plant Genetic Resources. Jack invited many of the leading lights of the genetic resources conservation movement, among them Erna Bennett and Jack Harlan to interact with his students. About 1,000 students have passed through this course since its inception, most coming from developing countries. Today, many of these former students occupy important positions in national and international programmes, both as administrators and researchers. Jack’s dream of a cadre of trained scientists who understand the technical issues and challenges of genetic conservation became a reality.

Throughout his academic career, Jack was a close collaborator with several centres of the CGIAR, in particular with CIP (in Lima) and Bioversity (in Rome). He served on a number of committees and was a personal advisor to a number of plant genetic resources programmes. Among the many awards that Jack received were the Frank N. Meyer Memorial Award of the American Genetic Association (1973), the congress medal from the XII International Botanical Congress in Leningrad (1975), and the Linnean Society Gold Medal (1984). He was President of the Linnean Society of London from 1991-1994. In 1994, Her Majesty Queen Elizabeth invested Jack with the OBE (Officer of the Order of the British Empire). His wife Barbara predeceased Jack; he is survived by his daughters Phillada and Stephanie, sons Anthony and Peter, and their families.
SEB’s Annual Meeting: 2008

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the Marketplace. Brodie Gym on East Campus has an indoor swimming pool, indoor track, basketball courts, aerobics studio, weight training, and ping-pong areas, plus a multi-purpose room. Access to these recreational facilities is available for a weekly charge of $35 at the gym. There are many excellent eateries and shops in the 9th Street district within two blocks walking distance, and a Whole Foods Market is across the street. A pedestrian-friendly shopping neighborhood, 9th Street offers an exceptional blend of locally owned specialty shops (www.ninthst.com).

The Millennium Hotel (on Campus Walk in Durham) is a full-service hotel that is relatively convenient to the Duke campus and offers shuttle service to and from campus and other places within five miles of the hotel for a one-time auxiliary fee. Room rates at the Millennium Hotel are available at a special conference rate of $119/night (Phone: 919-383-8575, www.millenniumhotels.com).

Transportation
Durham is easily accessible by car from the north and south by Interstate 85, and from the east and west by Interstate 40. All major airlines fly into the Raleigh-Durham International Airport (RDU). There is also an Amtrak station in Durham.

Parking
Parking passes for the Duke University East Campus are $10/wk.

Exhibitors
Exhibit booth space, which includes a six-foot long table, will be available in the foyer and downstairs area of the East Union where attendees will eat lunch and the poster sessions will be held. The corporate rate for the three-day conference is $1,000.00 and the non-profit rate is $300. Space rental includes a parking pass for East Campus. Setup begins at 8:30AM Monday June 2 and takedown is by5 PM on Wednesday June 4. Exhibitors/vendors are encouraged to make reservations early because space is limited. Spaces will be assigned on a first-come, first-serve basis beginning with the prime foyer area. Reservations can be made through Duke Conference Services via the link on the registration web page.

Featured Symposium: Building a Legacy of Botanical Education & Traditional Knowledge
This symposium will bring together scientists and educators to reflect on the current era when the teaching of basic botany and plant sciences is rapidly declining in U.S. universities. We will consider this in the context of economic botany, which encompasses all dimensions of human uses of plants in the past, present, and future, and by its very nature, intersects the intellectual boundaries of a myriad of disciplines in the natural and social sciences. Many universities have associated botanical gardens that can serve as living laboratories where people can connect with nature and learn to appreciate the power and importance of plants in their lives—for their physical, mental, and spiritual well-being, as well as for the health and survival of our planet. One focus of this symposium will be to recognize botanical gardens as a valuable educational resource where plant collections, botanical education, plant exploration, and traditional knowledge can be interwoven to create new, relevant, and exciting interdisciplinary undergraduate programs.

Symposium speakers will put the role of gardens in botanical education and conservation into historical perspective. They also will focus on the diverse roles gardens currently play in botanical education, propose ways gardens can become more involved in classes and programs to preserve the future of botanical knowledge, and discuss ways to improve communication about the importance of plants in all aspects of human activities to audiences ranging from university and K-12 students to life-long learners. Economic botany and ethnobotany underscore the relevance and vital nature of plants in the full scope of past, present, and future human activities. Thus, the subject is a good fit for innovative curricula and programs in 21st-century education that emphasize interdisciplinary approaches to education; speakers will highlight how economic botany at the interface of human-plant interactions offers opportunity for new directions and greater versatility in botanical teaching and research.

The morning format will include a keynote talk by Dr. Peter Raven, President of the Missouri Botanical Garden (MBG) and Engelmaan Professor of Botany at Washington University. Dr. Raven is a renowned botanist and conservationist whose leadership has made the MBG one of the world’s leading centers of plant conservation. Dr. Raven has authored over 400 articles and 16 books, including the leading botany textbook Biology of Plants, which has been published in five languages. Dr. Raven, who has served as president of the American Association for the Advancement of Science, is a member of the National Academy of Sciences, a member of the President’s Committee of Advisors on Science and Technology, and Chairman of the National Geographic Society’s Committee for Research and Exploration. In 1999, Time magazine recognized Dr. Raven as one of its “Heroes of the Planet” who has done extraordinary things to preserve and protect the environment. Dr. Raven’s address will be followed by Dr. Michael Balick, New York Botanical Garden Vice President and Chair of Botanical Science Research and Training. Dr. Balick explain how he has used urban ethnobotany to develop innovative teaching methods that give students first-hand ethnobotanical field experience in New York City. Dr. Robert Bye, Director Emeritus of the Botanical Garden of the Institute of Biology of the National Autonomous University of Mexico, and his collaborator, Dr. Edelmira Linares, will then provide an international perspective on botanical education. Their educational programs and work with indigenous communities are an exemplar of how botanical gardens can use their academic resources and conservation commitments to combine education, research, and community outreach to enhance in situ conservation and revitalize the indigenous knowledge base of native plant use. The morning session will conclude with a presentation by University of Hawai‘i Professor of Botany Will McClatchey, who has been instrumental in establishing the first BS degree offered in Ethnobotany in the United States. Dr. McClatchey will elaborate on the University of Hawai‘i’s NSF-sponsored innovative “Segues to Science” initiative for enhancing undergraduate science education.

At the conclusion of the morning presentations, the speakers will form a panel to address questions from the audience and facilitate discussion. There will be opportunity for members of the audience to further engage in small-group dialogue at luncheon round tables led by symposium participants. Dr. Gail Wagner will lead the afternoon session on teaching courses in economic botany and ethnobotany. Five to six people who teach courses will make a 15-minute presentation of their course syllabi as a backdrop for engaging the audience in feedback and discussion about teaching.

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Germlasm News and Views
David Theodoropoulos

European Union

The Initiative for the Confederation of Farmers’ Unions of Turkey issued a statement to Parliament (October 2006) opposing a proposed new seed law, which would require the registration of commercial plant varieties, restrict farmers’ rights to save and exchange seed, and allow the introduction of GMOs. The European Farmers’ Coordination (CPE) followed with a statement of support; the new seed law was passed.

The European Patent Office (EPO) is considering the validity of a patent on broccoli (EP 1069819 B1) that may open the door to allowing patents on conventional breeding methods of plants. Greenpeace and farmers’ unions from Italy, Argentina, and India have made a global appeal against this. “Validating the patent on broccoli would mean a total and final sellout of living nature.” –Christoph Then, Greenpeace. The global appeal has been signed by over 40 organizations worldwide.

Prince Charles has publicly criticized EU legislation that prohibits the sale of seeds of heirloom vegetable varieties, and pointed out the loss of hundreds of varieties that has resulted.

South America

In November 2006, the Andean Parliament passed a resolution urging Andean countries to prohibit field trials or commercialization of GMO potatoes, and a coalition of Andean farmers launched a protest against Syngenta’s patent on so-called “terminator” technology potatoes (genetic use restriction technologies, or GURT, which prevents sprouting without the application of a triggering chemical, much like so-called “terminator seeds”), out of fears that the GMO could contaminate the region’s thousands of varieties of indigenous potatoes, and threaten farmers’ traditional practices of replanting and exchange.

The Brazilian government has instituted a new streamlined system to get authorization for the collection of biological materials for research. In the past, permission took up to two years to obtain; but under the new system, it may be obtained in 7 to 45 days. “The new system represents a huge improvement due to its rapidity and the transparency offered...” –Marcos Tavares, University of Sao Paulo Zoological Museum.

Canada

A bill to prohibit field testing and commercialization of GURT (“terminator”) seed technology was introduced in the Canadian Parliament in May, though chance of passage is considered slim, as the Minister of Agriculture, Chuck Strahl, opposes it. India and Brazil have already banned GURT.

United States

In May, the EPO revoked Monsanto’s species-wide patent on all GMO soybeans (EP 0301749). Interestingly, the patent was originally vigorously opposed by Monsanto—until it acquired Agracetus, the original patent assignee. “It was particularly satisfying that Monsanto’s own blistering 1994 arguments against the patent were ultimately key in defeating it.” –Hope Shand, ETC Group, first challengers of the patent in 1994. In July, the U.S. Patent and Trademark Office rejected four key Monsanto patents relating to GMOs, which were challenged by the Public Patent Foundation because of their use to harass farmers. “Monsanto has used heavy-handed investigations and ruthless prosecutions that have fundamentally altered the way many American farmers farm.” The result has been nothing less than an assault on the foundations of farming practices and traditions that have endured for centuries in this country and millennia around the world, including one of the oldest, the right to save and replant crop seed.” –Center for Food Safety.

U.S. District Court Judge Breyer of the Northern District of California ruled that the USDA violated the law when it approved Roundup Ready alfalfa without conducting a full Environmental Impact Statement. The judge found that valid concerns about contamination of non-GMO alfalfa, economic risks to organic and conventional growers from contamination, and problems relating to the development of Roundup resistance in weeds, were not convincingly addressed by the USDA. “Nothing in NEPA (National Environmental Policy Act), the relevant regulations, or the caselaw supports such a cavalier response.” –Judge Charles R. Breyer.

In August, Monsanto announced it would acquire Delta and Pine Land, the original developer (with the USDA) of GURT, for $1,500 million. The U.S. Court of Appeals for the Federal Circuit reversed a finding of infringement under the PVP Act, because the seller did not know the seeds were protected (Syngenta vs. Delta Cotton). Delta resold seed of a soft winter wheat provided by local farmers, apparently without knowledge that the variety was protected. A detailed report predicting the “end of farm-saved seed” has been issued by GRAIN (www.grain.org/briefings/?id=202). The report documents the history of increasing intellectual property protection of plant varieties under the PPA, PVP Act, and UPOV, and details the next round of restrictions being proposed by industry lobbyists for the next UPOV revision. “This will be the final attack on the remaining ‘spaces’ (as seen by farmers and researchers) or ‘loopholes’ (as seen by the industry) in the PVP system, to make it indistinguishable from a patent. If successful, it will certainly spell the end of farm-saved seed, probably the end of free access to PVP-protected material for plant breeding, and a general tightening of the ropes with longer terms, stricter enforcement and wider scope of monopoly rights.”

New Zealand

Six Maori groups have taken a claim of ownership of the New Zealand flora and fauna to the Waitangi Tribunal, wanting “exclusive rights and undisturbed ownership of all biological resources in New Zealand.”

World-Wide News

In response to accusations of biopiracy, Naturex, a French firm holding patents on maca (Lepidium meyenii) is granting free patent licenses to 100% Peruvian-owned companies to manufacture and market maca extract, and has voluntarily increased the price it pays to Andean growers. “[The accusations] couldn’t be further from the truth.... What we want is to be fair with the Peruvians because they discovered the benefits of these plants hundreds of years ago.” –Antoine Dauby, Naturex.

The Bill and Melinda Gates Foundation has donated $37.5 million, the largest crop biodiversity preservation grant ever made, towards preserving the diversity of the world’s 21 most important food crops. The initiative will cover many “orphan crops” of importance to the world’s poor.

Citations on request. Dt@dtheo.org
Round Table Lunches

Two days of contributed papers and poster sessions on June 3 and 4 will follow the daylong symposium. Lunch is included with registration and will be served each day at the Marketplace, which serves fresh, seasonal produce and dairy products from local farmers with an emphasis on organic and sustainable farming practices. The dining room has 15 round tables that seat up to 8 people. If you would like to lead a round table discussion on a topic, please contact Mary Eubanks to make arrangements (eubanks@duke.edu).

Pre-Meeting Field Trips

**Biodiversity in the Land of the Cherokee; May 29-June 1**

Organizer: Dr. Karen C. Hall (Phone 864-656-4859, carlson@clemson.edu)

Enrollment limit: 14, Cost per Person: $375.00

Meet in Asheville, NC for a three-day field trip that starts with a drive to Joyce Kilmer Memorial Forest, an old growth 13,000-acre forest in the Southern Appalachians on May 30. This amazing forest has 450-year-old trees with a circumference greater than 20 feet. We’ll spend the day talking about the cultural influences that made this forest what it is along with the unique and diverse flora of the region. After the day in Joyce Kilmer, drive to Cherokee for a Cherokee foods picnic dinner followed by a visit to the casino in the evening. The second day of the field trip will take us to Oconaluftee Indian Village, a replica of life as a Cherokee person in the 18th century. The tour will be led by Cherokee people who will discuss and demonstrate various aspects of Cherokee life, including spirituality, medicine, basketry, hunting, and governance. After a brief picnic on the mountain, we’ll visit the Museum of the Cherokee Indian. Both exhibits have benefited recently from a cultural revitalization movement. In the evening, sit back and enjoy a Cherokee storyteller at dinner. On the third morning, visit ‘Talking Trees,’ part of a Cherokee language interpretive walk in the Oconaluftee Riverside Park, travel by van to the SEB conference at Duke University.

May 29: Participants arrive at Asheville Regional airport and catch a shuttle to the motel (group rates negotiated). A contact information sheet will be presented to each party arriving-participants will be asked to check in with Karen Hall upon arrival.

May 30: Vans will pick up participants at 8:30AM and drive to the Joyce Kilmer Memorial Forest. Lunch will be provided (Box lunches in vans) for this ~3 hour drive due to arrive around lunchtime. Dr. Hall will present a walking tour of the park covering the biological/cultural history including a theory of the big trees’ size related to Native American influence. After a tour of this area, we will drive back to Cherokee stay at the Pioneer motel. Dinner will be a collective cookout (included) in the picnic area associated with this motel on the banks of the Oconaluftee River. If folks wish, we’ll visit the casino this evening. In addition to the gambling, there is a fine exhibit of Cherokee arts and crafts distributed throughout the attached convention center.

May 31: Breakfast (on your own), then visit the Oconaluftee Indian Village (www.cherokee-nc.com/oconaluftee_intro.php). This replica 18th-century village is a guided walking tour through Cherokee history and culture led by Cherokee people. Following the tour, you can either walk back through the living exhibit and talk to Cherokee people or exit the tour and walk through the Cherokee Gardens above the exhibit, designed by landscape architect Doan Ogden, who has incorporated many of the plants in use by the Cherokee. Box lunches (included) will be provided at the picnic center slightly lower down this beautiful mountain. After lunch, visit the Museum of the Cherokee Indian, associated gift shop, and Qualla Arts and Crafts, an artists’ cooperative. In the evening, drive to dinner (included) at the Fryemont Inn and listen to a Cherokee storyteller.

June 1: The morning will have a brief stop at the Oconaluftee River Park, which has a series of ‘talking trees.’ Names of trees can be heard spoken in Cherokee and in English. On the way to Duke University, we’ll stop for lunch (on your own).

Logistical Considerations: Hiking in Joyce Kilmer is easy to moderate. The trail is a two-mile loop that allows us to see the record popular and other old growth trees. Wheelchair accessibility is unknown. The museum is wheelchair accessible. The Oconaluftee Indian Village and Cherokee Garden have limited wheelchair accessibility. Participants should bring hiking gear (appropriate shoes, backpack), binoculars, hand lens, and camera if desired. Sunscreen and bug spray are recommended. Water will be provided.

**Land Use and Research History of the Duke Forest, Sunday June 1, 2:00-5:00 PM**

Organizer: Judson Edeburn, Duke Forest Resource Manager (919-613-8013, judeburn@duke.edu)

Enrollment limit: 25, Cost per Person: $15.00

The 7,000-acre Duke Forest has been managed for research and teaching purposes since 1931. The original focus on forestry education and research has since expanded to include a broad range of studies in the ecological and environmental sciences. In terms of size, diversity, accessibility, and accumulated long-term data, the Duke Forest is a resource for studies related to forest ecosystems and the environment that is unrivaled at few other locations. This field trip will focus on the forest’s history, agricultural legacy, and research topics throughout the years. Current research sites, including stream biogeochemistry, Forest Atmosphere Carbon dioxide Enrichment (FACE), and wireless measurement of environmental change will be visited. Sturdy shoes and raingear are recommended for short walks over gentle terrain.

**Post-Meeting Field Trips on Thurs., June 5**

**Tobacco: The Plant the Built Durham (and Duke), 9:00AM-1:00PM**

Organizer: Professor Robert Healy, Duke University Nicholas School of the Environment and Earth Sciences (919-416-4563, healy@duke.edu)

Enrollment limit: 22, Cost per Person: $20

During the last quarter of the 19th century, Durham was one of the fastest growing and most prosperous cities in the South. Its economy was based on the growing, selling, and manufacture of Carolina Gold, the mild, flue-cured tobacco characteristic of the North Carolina and Virginia Piedmont. The most powerful of all the families associated with the tobacco industry was the Dukes, who at one time controlled 90% of the U.S. cigarette market. This tour drives through Durham’s old downtown, where the now-closed tobacco factories show new life as apartments and offices. We will spend the morning at Duke Homestead, a North Carolina Historic Site, which includes the Duke’s 1870s tobacco farm and a museum on the history of tobacco and the tobacco industry. Finish with a picnic lunch at the Homestead. Short walk, golf cart available.

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**SEEDS, Inc.; 9:30AM-12:30PM**

Organizer: Brenda Brodie (919-683-1197, info@seedsnc.org)

Enrollment limit: 20, Cost per Person: $15

See how a local nonprofit teaches gardening and food practices. Since 1994, the mission of SEEDS (SouthEastern Efforts Developing Sustainable Spaces) is to teach people to care for the earth and each other through garden-based programs. See permaculture and slow food principles put into action. Meet staff, volunteers, and at-risk youth who grow flowers and vegetables that are sold at Durham’s Farmers’ Market; enjoy a lunch that is local and seasonal; be part of a place for people of all ages and backgrounds to gather, learn, and celebrate.

**White Pines Nature Preserve, 8:00AM-2:30 PM**

Organizers: Jesse Perry, Director of Public Programs for the North Carolina Museum of Natural Sciences (jesse.perry@ncmail.net), and Dennis Werner

Enrollment limit: 18, Cost per Person: $25

The 258-acre White Pines Nature Preserve is at the confluence of the Deep River and Rocky River in Chatham County, North Carolina. It is home to federally endangered plant and fish species and is the most biologically significant property

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**Continued on page 9**
of the Triangle Land Conservancy. The preserve has several stands of white pines, a tree normally found in the cooler climate of the mountains. Some are over 150 years old and more than 30 inches in diameter. The forest is also host to the Catawba rhododendron, 200-year-old beech trees, many wild flowers, and 55 species of birds. It is a one-hour drive from Duke. We will stop for lunch in Pittsboro and arrive back at Duke around 2:30. Hiking in moderately challenging terrain; bring cooler with bottled water; no restroom facilities on site, will make rest stops in Pittsboro.

Organic Farm Tour, 8:00 AM-5:00 PM
Organizers: Dr. Nancy Creamer, Director, North Carolina State University Center for Environmental Farming Systems (919-515-9447, nancy_creamer@ncsu.edu) and Debbie Roos, Chatham County Extension (919-542-8202, debbie_roos@ncsu.edu)
Enrollment limit: 50, Cost per Person: $40.00
The tour includes stops at two farms and a biofuels facility. The first stop will be at Peregrine Farms, a small five-acre farm that grows a wide variety of vegetables and flowers. Owners Alex and Betsy Hitt were awarded the Patrick Madden National Sustainable Agriculture Farmers of the Year Award in 2006 representing the southern region. From Debbie Roos' Growing Small Farms website... "When they began farming in 1981, the Hitts cultivated five acres and set a goal of going smaller without sacrificing income. Over the years, they have reduced acreage and labor by improving their soil with cover crops, concentrating on high-value crops that grow well in the area, and direct marketing through the Carrboro Farmers’ Market and Weaver Street Market, a cooperative grocery store. Each acre returns a minimum of $20,000 annually, while four high-tunnel greenhouses bring in at least $1,000 per crop. The Hitts embrace their small scale, growing 80 varieties of 23 vegetables along with 164 varieties of cut flowers on just three acres. Betsy, who concentrates on the flower half of the farm, says Canterbury Bells and lisianthus draw the most customers due to their clear bright colors and long vase life."

Next will be Harland’s Creek Farm, a certified organic farm located four miles west of Pittsboro, NC. The Alston-Degraffenried House, a national historic site, is on the farm (where we will eat a local, organic lunch). Owner/operator Judy Lessler grows and sells flowers, produce, and herbs. Also, the farm is available for weddings and other events. They sell their produce, flowers, and herbs at the Durham Farmer’s Market and the Moore Square Farmer’s Market in Raleigh. They also have three CSAs (Community Supported Agriculture groups) that provide produce or flowers on a subscription basis (www.harlands-creek-farm.com). We also will visit the site of Piedmont Biofuels Industrial. Piedmont Biofuels’ mission is to lead the grassroots sustainability movement in North Carolina by using and encouraging the use of clean, renewable biofuels. The organization offers a variety of valuable services to the community: they produce and sell 100% biodiesel fuel to members throughout the Triangle region. They also design and build biodiesel reactors for clients across the United States. Piedmont Biofuels’ staff opened up their new commercial biodiesel plant with the capacity to produce one million gallons of biodiesel. Their goal is to be able to produce/collect feedstocks from within 100 miles of Pittsboro, and to distribute the fuel to that same 100 miles. Piedmont Biofuels Industrial is one of the demonstration sites for a Pollinator Conservation and Biodiversity project led by Chatham County extension agent Debbie Roos. We will see how the Piedmont Biofuels lawn was replaced with mostly native plants that attract pollinators. We will also hear about the area’s thriving organic agriculture community from Debbie, who has won national awards for her website and her outreach and support of the producers (www.growingsmallfarms.org). Special needs: personal gear as needed.

Green Swamp Preserve, 8:00AM-5:00 PM
Trip Leaders: Peter White, Director North Carolina Botanical Garden (919-962-0522, peter.white@unc.edu) and Alan Weakley, UNC Herbarium (919-962-0578, weakley@unc.edu)
Enrollment limit: 25, Cost per Person: $24
This is an all day field trip to the very species-rich longleaf pine savannahs, pocosins, and other habitats of the North Carolina coastal plain. The Nature Conservancy’s Green Swamp Preserve presents some of the finest examples of these habitats that remain anywhere in the Southeast. The Preserve contains 14 species of carnivorous plants including a potential highlight for any botanist’s life: seeing the unique Venus Flytrap (Dionaea muscipula) in the wild! Easy hike in gentle terrain.

Post-meeting Educational Workshops
Google Earth for Ethnobotanists, Thursday June 5, 9:30-11:30AM
Organizer: Dr. Kim Bridges (kim@hawaii.edu)
Enrollment limit: 24; no charge
Dr. Kim Bridges, Department of Botany, University of Hawai‘i, will lead this workshop in cooperation with the Duke University Office of Information Technology in the OIT teaching classroom. The workshop will be a hands-on experience with Google Earth. Demonstrations and exercises start with basic features and extend to a variety of tasks that are helpful to ethnobotanists; e.g.,
- Find a place, altering the view, and obtaining the location and elevation
- Record and annotate research locations
- Share location information across the Internet
- Capture Google Earth for use in PowerPoint presentations
- Link a GPS to Google Earth: How to uploading and view Waypoints and Tracks
- Measure distances and areas
- Add photographs to Google Earth: Welcome to Panoramio
- Add data overlays, load maps from Google searches, create your own data overlays
- Use Google Earth without the Internet
- Travel Google Earth in real-time with a GPS
- Track Google Earth in the blogosphere to find out about new features and capabilities

Ethnobotanical Laboratory Activities, Thursday June 5, 1:00PM-4:00PM
Organizer: Dr. Linda Lyons, Dept of Environmental Sciences, University of Montana Western (406-683-7075, l_lyons@umwestern.edu)
Enrollment limit: 21, Cost per Person: $30.00
Participants will have an opportunity to learn hands-on teaching techniques that can be coordinated directly into their classrooms. Participants can rotate through interactive teaching technique stations where they will leave the station with the ability, and in some cases materials, to apply the technique in the classroom. For example, one station might demonstrate how to use a talking book in the field with illiterate children to introduce them to medicinal plants common in their area. The station coordinator would then aid the group in assembling their own individual books, so they understand how to employ the technique in their own educational setting. Another station might show participants an interactive technique to introduce the theory or Participatory Rural Appraisal (PRA) to their students.

Station coordinators will be competitively selected to present a technique that would work with students from the K-12 to the graduate educational level. Criteria for selection to present a station will be based on usefulness of technique to given audience, applicability to ethnobotany, and feasibility to present and demonstrate technique in 45 minutes. Participants will rotate through each of the five stations. Each coordinator will have approximately 45 minutes with each group of participants as they rotate throughout the stations. To learn more or if you are interested in being a station coordinator, please contact Dr. Lyons.
Symposium Review  
continued from page 4

accomplishments included the Center’s ability to produce labeled plant compounds through tissue culture and to track the fate of these compounds in biological samples, and to profile metabolites, and the use of molecular biology techniques and proteomics to identify functional changes when exposed to botanicals.

Dr. Rosenthal presented an overview of the ICBG program, covering its scope and mission, since its inception in 1993 to the present, in particular emphasizing the interrelationships between drug discovery, economic development, and biodiversity conservation. Highlights of accomplishments of the program, the accomplishments of its many funded groups (ICBGs), and an analysis of the results of discovery in the area of drug discovery were presented. Actual examples of the discovery of promising molecules as potential candidates for development to treat various diseases, including cancer, parasitic diseases, and TB, were presented. And finally, the following challenge was raised: “In an era of reduced support for classical plant-based drug discovery, how can we best integrate and exploit our extensive and growing knowledge of plants to identify novel therapeutic mechanisms and chemistry from diverse organisms? And how can this best support conservation and development?”

Dr. Raskin discussed studies on multi-component botanical therapeutics as part of an ICBG-funded project based at Rutgers University. He presented results on work with *Tripterygium wilfordii* (Celastraceae) that involved clinical trials, cultivation, standardization, and GMP-based industrial processing of products, and work on *Artemisia dracunculus* (Asteraceae), that involved genetically controlled cultivation, standardization of bioactive compounds, and pharmacokinetics-pharmacodynamics studies. Both plants have a long history of human use for disease treatment. He concluded that the pillars of multi-component botanical standardizations are biochemical, functional, and good manufacturing.

Dr. Louis Barrows presented ICBG studies on the biodiversity of Papua New Guinea regarding the links between botanical and ethnomedical documentation with pharmacological assessment, in order to foster conservation, health care, and training opportunities in this country. Many plants have been collected, extracted, and tested in TB, malaria, and HIV disease systems, and many active species have been discovered. Ethnomedical surveys conducted have yielded information on 800 botanical therapies that have been organized in a proprietary database. At the University of Utah, scientists have identified several sentinel orsellinic acid compounds by liquid chromatography and mass spectroscopy, and are evaluating the pur-ported activities in animal models. Overall, the studies have enabled the categorization and evaluation of PNG’s biological resources, empowerment of scientists and students at national institutions, support of forward-looking government initiatives, and improving healthcare for the society.

Dr. Capson presented results of ICBG-funded studies in Panama on cancer and tropical parasitic diseases (leishmaniasis, Chagas disease, and malaria) from terrestrial plants, endophytic fungi, marine cyanobacteria and octocorals, linking research, capacity building, and biodiversity conservation. The most potent compounds discovered to date are cyanobacteria-derived cyclic peptides with potent activity against *Plasmodium falciparum* and tumor cell lines. Program participants have worked closely with the Panamanian government to protect biodiversity by providing input to legislation to protect national parks, and by spearheading efforts that led to the creation of a UNESCO World Heritage Site, in an area of exceptional marine and terrestrial biodiversity in Panama’s Tropical Eastern Pacific.

Dr. Cao presented results of ICBG supported research on biodiversity conservation and drug discovery in Suriname (1993-2002) and Madagascar (1998-2007). In Suriname, a central Suriname forest preserve was established through the project’s initiative, and a Forest Peoples Fund was established. Many bioactive compounds were discovered from plants of Suriname and Madagascar. Three promising leads are a selective cytotoxic agent from Suriname plant evaluated by the NCI and presently being developed by a major pharmaceutical company, and a highly cytotoxic agent from a Madagascar plant. A potent insecticide from Madagascar was discovered by Dow AgroSciences as part of the ICBG cooperation.

Jobs Available in Ethnoecology

Visiting Professor (Limited Term)

We seek a two-year, visiting professor to support our distinctive program in ethnoecology. While we will consider applicants with wide-ranging skills, our primary interest is in ethnobotany. The rank is open, but a successful applicant appointed beyond floor-level Assistant Professor would negotiate a commensurate partial appointment. The successful applicant will demonstrate an ability to connect ecological and cultural knowledge, a capacity for interdisciplinary work, a strong research profile, and a strong commitment to undergraduate teaching. There will be minor administrative duties appropriate to the position. For a more detailed description, please consult <web.uvic.ca/enweb/>.

The University of Victoria is an equity employer and encourages applications from women, persons with disabilities, visible minorities, Aboriginal Peoples, people of all sexual orientations and genders, and others who may contribute to the further diversification of the University.

All qualified candidates are encouraged to apply; in accordance with Canadian Immigration requirements, Canadians and permanent residents will be given priority.

Assistant Professor (Tenure-Track)

We seek a tenure-track Assistant Professor to continue the development of our distinctive program in ethnoecology. The successful applicant will demonstrate an ability to connect ecological and cultural knowledge, a capacity for interdisciplinary work, a proven track record of high caliber research, a strong commitment to undergraduate teaching and graduate supervision, and dedication to long-term community-based knowledge and learning. For a more detailed description, please consult <web.uvic.ca/enweb/>.

The University of Victoria is an equity employer and encourages applications from women, persons with disabilities, visible minorities, Aboriginal Peoples, people of all sexual orientations and genders, and others who may contribute to the further diversification of the University.

All qualified candidates are encouraged to apply; in accordance with Canadian Immigration requirements, Canadians and permanent residents will be given priority.

Please submit hardcopy applications for either position by October 22, 2007 to:

Dr. Eric Higgs, Director  
School of Environmental Studies  
C132A Sedgwick Bldg., 3800 Finnerty Road  
University of Victoria  
Victoria, BC, CANADA V8W 2Y2
Past Presidents

The Society for Economic Botany’s Klinger Award Report—2007

The SEB’s Mary W. Klinger Book Award for 2007 was given to Kat M. Anderson for her book *Tending the Wild: Native American Knowledge and the Management of California’s Natural Resources*, 2005.

There were six nominations for this award:

These are excellent texts, so as winter approaches in the northern hemisphere add these to your reading list and sit by the fire.

For submissions please contact Dan Austin or any of the members of the committee listed below.

- Daniel F. Austin, Chair
  Conservation & Research Department
  Arizona-Sonora Desert Museum
  2021 N. Kinney Road, Tucson, AZ 85743
dustin@desertmuseum.org
- Eric Boa
  CABI Bioscience
  Bakeham Lane
  Egham, Surrey Tw20 9ty, United Kingdom
eboa@cabi.org
- Mary W. Eubanks
  Department of Biology
  Duke University, Durham, NC 27708-0338
eubanks@duke.edu
- John Rashford
  Dept. Sociology & Anthropology
  College of Charleston, Charleston, SC, 29424
  rashfordj@cofc.edu
- Nancy J. Turner
  School of Environmental Studies
  P.O. Box 1700, University of Victoria
  Victoria, BC, CANADA V8W 2Y2
  ntturner@uvic.ca

The Rachel Carson Environmental Award honors individuals who have made outstanding contributions to the protection of the environment. This year’s recipient is Michael J. Balick. Ph.D., Vice President and Chair, Research and Training, Phylecology Curator of Economic Botany, Director of the Institute of Economic Botany for the New York Botanical Garden.

For nearly three decades, Dr. Balick has studied the relationship between plants and people, working with traditional cultures in tropical, sub-tropical, and desert environments. He specializes in ethnobotany, working with indigenous cultures to document their plant knowledge, understand the environmental effects of their traditional management systems, and develop sustainable utilization systems—while ensuring that the benefits of such work are always shared with local communities.

Dr. Balick is an expert on the palm family, an economically important family of plants in the tropics.

In 1981, he co-founded The New York Botanical Garden’s Institute of Economic Botany with Sir Ghillean Prance. The largest and most active program of its kind in the nation, the Institute is devoted to furthering knowledge of the relationship between plants and people. From 1986-1996 he helped lead the Garden’s collaboration with the U.S. National Cancer Institute to survey Central and South America and the Caribbean for plants with potential applications against cancer and AIDS. As part of this work, Dr. Balick established numerous collaborations among communities, governmental, non-governmental organizations, and institutions in the United States and Europe all working towards the common theme of discovering plants with potential therapeutic uses.

The author of more than 14 scientific and general interest books and monographs, Dr. Balick currently serves as an adjunct professor at Columbia University, New York University, Yale University, and City University of New York. He is also a co-founder of a course that teaches herbal medicine to practicing physicians and other health care professionals, run in collaboration with Columbia University’s College of Physicians and Surgeons and the University of Arizona Program in Integrative Medicine. He is an active mentor to postdoctoral, masters, and international fellowship students.
Botanizing the Web

CPC Plant Conservation Directory
The Directory for 2007 is here! An added feature is that you can now search by expertise, making it easy to find an expert in a particular field. The Center wants to thank all of you for participating in the update process. Also updated are the maps and related fields. This provides valuable information on federal agency maps, links to their programs, the endangered species act, and Index Herbariorum: A Global Directory of Public Herbaria and Associated Staff (http://www.centerforplantconservation.org/CPCDirectory/CPC_DIR_Find.asp).

The CPC Plant Conservation Directory contains the following information:
- Center for Plant Conservation contacts within each state,
- Federal and state government contacts that can provide information about rare and endangered plants, permit procedures, and government programs,
- Botanists and other contacts in state Heritage Programs, Native Plant Societies, and others in national non-governmental organizations working on plant conservation,
- Academic and affiliated research scientists who are active in conservation of rare plants and their areas of expertise,
- Links to state laws (courtesy of Defenders of Wildlife) and U.S. Fish and Wildlife Service permits, and
- Links maps and related fields.
Submit changes/corrections to cpc@mobot.org.

Guidelines for Health Research
The Canadian Institutes of Health Research has released Guidelines for Health Research Involving Aboriginal People. They are available in html at www.cihr-irsc.gc.ca/e/29134.html and in PDF format at www.cihr-irsc.gc.ca/e/documents/ethics_aboriginal_guidelines_e.pdf. Below are excerpts from the Website. A sample research agreement from the Centre for Indigenous Peoples’ Nutrition and Environment is posted at www.cihr-irsc.gc.ca/e/29134.html#7.

These Guidelines have been prepared by the Ethics Office of the Canadian Institutes of Health Research (CIHR), in conjunction with its Institute of Aboriginal Peoples’ Health, to assist researchers and institutions in carrying out ethical and culturally competence research involving Aboriginal people. The intent is to promote health through research that is in keeping with Aboriginal values and traditions. The Guidelines will assist in developing research partnerships that will facilitate and encourage mutually beneficial and culturally competent research. The Guidelines will also promote ethics review that enables and facilitates rather than suppresses or obstructs research. These Guidelines are applicable to researchers carrying out research to which CIHR has made a financial contribution. The reader should note that these Guidelines are not regulations nor are they meant to be of general application. Rather, they are guidelines that should be followed by anyone who carries out research involving Aboriginal people in Canada if the research is funded by CIHR.

Summary of Articles
Article 1: A researcher should understand and respect Aboriginal worldviews, including responsibilities to the people and culture that flow from being granted access to traditional or sacred knowledge. These should be incorporated into research agreements, to the extent possible.

Article 2: A community’s jurisdiction over the conduct of research should be understood and respected. This article should be read in the context of the discussion in Section 1.5, which addresses the application of this document.

Article 3: Communities should be given the option of a participatory-research approach.

Article 4: A researcher who proposes to carry out research that touches on traditional or sacred knowledge of an Aboriginal community, or on community members as Aboriginal people, should consult the community leaders to obtain their consent before approaching community members individually. Once community consent has been obtained, the researcher will still need the free, prior, and informed consent of the individual participants.

Article 5: Concerns of individual participants and their community regarding anonymity, privacy, and confidentiality should be respected, and should be addressed in a research agreement.

Article 6: The research agreement should, with the guidance of community knowledge holders, address the use of the community’s cultural knowledge and sacred knowledge.

Article 7: Aboriginal people and their communities retain their inherent rights to any cultural and sacred knowledge, and cultural practices and traditions. The researcher should also support mechanisms for the protection of such knowledge, practices, and traditions.

Article 8: Community and individual concerns over, and claims to, intellectual property should be explicitly acknowledged and addressed in the negotiation with the community before starting the research project. Expectations regarding intellectual property rights of all parties involved should be stated in the research agreement.

Article 9: Research should be of benefit to the community as well as to the researcher.

Article 10: A researcher should support education and training of Aboriginal people in the community, including training in research methods and ethics.

Article 11.1: A researcher has an obligation to learn about and apply Aboriginal cultural protocols relevant to the Aboriginal community involved in the research.
The President’s Message

The President’s message is a great way to begin our year as we change officers in June. The President’s letter is at www.econbot.org and is a preview to the year’s activities. Here is John’s letter in its entirety.

July 5, 2007

Dear SEB members,

On behalf of the Society for Economic Botany, I would like to thank David Lentz and colleagues for a very successful 48th Annual Meeting in Chicago, noteworthy, among other things, for having the largest number of registrants on record for an Annual Meeting (See page 3). We are indebted to our sponsors, which included Lake Forest College, (whose beautiful campus and accommodating community provided an ideal venue), the Chicago Botanical Garden, the University of Illinois at Chicago, the Field Museum of Natural History, and Northwestern University. The full-day symposium, “In the Service of Human Health: the Search for New Plant-based Therapies,” (See page 4 for a full review) brought into focus the current research on the known and potential value of medicinal plants. It was well received and we congratulate the organizing committee Djaïa D. Soejarto (Chair), Scott Franzblau, Charlotte Gyl- lenhaal, and Gail Mahady.

From January 27th to the 30th, 2007, I was fortunate to be one of 44 participants in an Ethnobotanical Summit that was held at the National Tropical Botanical Garden in Kaua‘i, Hawai‘i. In light of the serious environmental challenges we face today, especially global warming and the increasing loss of cultural and biological diversity, the group decided to issue a statement on the importance of economic botany/ethnobotany for “providing some of the solutions towards more sustainable living.” This statement, called “The Kaua‘i Declaration” and titled “Ethnobotany, the Science of Survival,” was published in the Spring 2007 issue of the Society’s Journal (Vol. 61, No. 1) and Newsletter (Volume 21 Spring 2007, page 8). I encourage SEB members and readers of the journal to consider its content. Those of us who are committed to understanding all “past, present and future uses of plants” from the unique interdisciplinary perspective of economic botany have a special responsibility at this critical moment and we should embrace the challenge. An important aspect of meeting the challenge is the continued internationalization of our society. At the start of his tenure during the banquet of the 2006 annual meeting in Chaing Mai, Thailand, the Society’s immediate past-president, Will McClatchey, conducted a survey. In his July 30, 2006, presidential address he reported that “the most consistently expressed vision of the new SEB is that we become truly global with greater numbers from outside of North America and with more meetings on other continents and islands that encourage collaborative partnerships within the ranks of an expanded SEB.”

As the new SEB president, I encourage members to become actively involved in the Society’s affairs: be an ambassador capable of speaking to the relevance of economic botany in addressing current global issues; present the results of your research at the Annual Meetings and publish your results in the SEB journal; join a committee and be an enthusiastic participant; make suggestions for improvements whether they involve the organization of the society itself, the conduct of the meetings, or the publication of the journal; encourage your colleagues and friends who are not members to join the Society; and if you are in a position to do so, promote the Society’s objectives by making a meaningful donation to the Schultz’s Endowment Fund (which benefits students who submit outstanding proposals for research projects in economic botany and ethnobotany), and think about new awards like the President’s Fund for Student Participation in Meetings, the International Partnership Fund (which allows our members and colleagues in other parts of the world to obtain the levels of funding necessary to present their research at the annual meetings), and the Senior Scholars Award (which honors the respected “elders” of our society for their lifetime of service).

Our 2008 Annual Meeting—the 49th Annual Meeting of the Society—will be held at Duke University in Durham, North Carolina, from June 1st to June 5th and is being organized by Mary Eubanks. The meeting will be hosted by the Sarah P. Duke Gardens at Duke University, the North Carolina Botanical Garden at the University of North Carolina at Chapel Hill, and the J. C. Raulston Arboretum at North Carolina State University (See pages 6, 8, 9). The featured symposium, “Building Upon the Legacy of Botanical Education and Traditional Knowledge,” will focus on the diverse roles botanical gardens have played and continue to play in botanical education. The keynote speaker will be Peter Raven, Director of the Missouri Botanical Garden. As noted in the preliminary schedule, “A key objective of the symposium will be to put the teaching and dissemination of botanical knowledge into historical perspective, characterize the changes in university curricula and programs today, elucidate how those changes are impacting the teaching of botany, delineate the challenges we face, discuss how botanical gardens can embrace economic botany/ethnobotany to exhibit creative leadership for breathing new life into programs that will proactively shape a secure future for botany.” As usual, contributed papers and workshops will be the mainstays of the meeting. Members and prospective members are encouraged to present their latest research results. Details of the 2008 Annual Meeting and registration information can be found on the SEB Website—www.econbot.org. I look forward to seeing you all in Durham, North Carolina.

Sincerely

John Rashford
SEB President, 2007-2008

49th Annual Meeting of the Society For Economic Botany
Duke University
Durham, NC

Featured Symposium
Building Upon the Legacy of Botanical Education and Traditional Knowledge

Jun 1-5, 2008
www.SEB2008.com
Memory was thoughtful to send us this article to be published with the Journal’s permission here. It offer some food for thought so I am hoping that many of you will write in and offer your comments.

PROFESSIONAL RESPONSIBILITIES TO CUSTODIANS OF TRADITIONAL KNOWLEDGE

by Memory Elvin-Lewis, Ph.D., D.Sc (Honoris Causa). Washington University, St. Louis, MO. U.S.A. Distinguished Economic Botanist: 2006 (elvin@biology.wustl.edu)

In the past the rights of custodians of traditional knowledge (TK) were often disregarded when data were collected and worth derived. It was common place for those conducting academic pursuits or finding new therapeutic leads to conduct their activities irrespective of the rights of those that were contributing the information. This traditional approach enabled all to utilize and/or exploit the information in whatever way they chose. The same could be said for the protection of genetic resources, since many countries with rich biodiversities had yet to address issues related to protecting and conserving these valuable assets. Not only was advocacy lacking for those providing the information, but laws and policies had yet to evolve to protect the richness of unique floras that were being utilized. It was not until the latter part of the 20th century that sensitivity to these issues began to evolve and approaches to ethical behavior were delineated. In spite of the progress that has been made, it is evident that many colleagues are still unaware how changing world policies and laws, as well as professional guidelines are impacting on the way traditional knowledge should be acquired, managed, protected and disseminated so that maximum benefits accrue to its custodians. The objective still remains to make compliance a professional standard and prevent ways for any abuse of these mandates to take place.

Within the context of this editorial I have attempted to present the current status of these evolving concepts in terms defining how traditional knowledge, claims of ownership, its utilization and protection are viewed in the global perspective. Included are reviews of current and evolving mechanisms of TK protection including types of patent laws, and the challenges that are involved in protecting commercially viable TK. Within this context are explanations of how full disclosure of TK-associated genetic resources, referred to as “The Requirement” might be applied in various parts of the World, and how the generation of types of defensive data bases can be involved in this process. Hopefully this information will be useful to those investigators that collect or utilize these valuable assets so that they can address these issues ethically and fairly on behalf of those providing the information.

The complexity of these issues are immense, and depends upon where the work is being conducted, how ownership issues are delineated, and what type of information is disseminated to whom and when. Many national, international laws and policies as well as professional guidelines are now in place, which dictate the conduct of such endeavors. It is no longer acceptable to disregard these and it is imperative for investigators to make every effort to comply with those relevant to their research. The core issues pertain to respecting the rights of the custodians of TK through eliciting prior informed consent, and ensuring that these data linked to the use of genetic resources are protected appropriately so that potential optimal benefits are assured. Disclosure should be made with the acquiescence of those providing it and with their understanding of the consequences of this action. Moreover, those collecting this information have the legal and ethical duty to honor all fiduciary obligations elicited during this process and to comply with all national laws governing the extraction of genetic resources.

Oversight and management of these data remain challenging particularly in academia where professional survival is linked to the requirement of “publishing or perish.” Within this context there is a need to understand the management of disclosing useful secondary information and primary data which must be considered differently. For example, simply citing all taxa with their uses in a presentation, publication or grant etc., is no longer acceptable unless care has been taken to dereplicate the information first. This task, while imperfect, can be done by referring to appropriate reference material and on line data bases so that any novelty can be identified and inadvertent disclosure of potentially valuable information, considered “know how” prevented. These sources should be duly referred to. An attempt not to consider this aspect in the context of current patent laws and other protective mechanisms is inexcusable. Most importantly, the onus of either inadvertent or inadvertent disclosure should fall on the investigator rather than the convener of a meeting or publisher of a journal. To protect these latter individuals as well as their organizations, clear guidelines regarding ethical and acceptable disclosure should be available to all presenters and authors, and means of indemnification required to verify that all guidelines, both legal and professional, have been followed in the collection and presentation of data. Similar procedures should be in place regarding the presentation of information in a dissertation or thesis, and when necessary certain proprietary data should be excluded or only presented in coded form. Doing otherwise would put these data into the public domain, and thereby compromise their worth. This is especially true of traditional knowledge which might lead to the potential commercial development of a product or products. University officials should affect suitable policies to protect this information so that academicians and/or their students are not obliged or coerced into revealing data that they feel compromise their commitment to individuals that have shared this knowledge with them, and who might benefit from keeping the information proprietorial. Understanding how to apply patent laws or other protective mechanisms can differ, and can be used to accommodate this need.

Disclosure of TK-linked proprietary information within the context of grant review remains a thorny issue. In spite of the presumed integrity of the reviewers this potentially “leaky” process, particularly within large review panels, could cause the unwarranted dissemination of this type of information thus nullifying its value. Granting agencies should not accept proposals associated with proprietorial TK-linked information unless they are willing to accommodate the need for protecting this information in more secure ways than is their normal policy. For example, they can expect to receive preliminary data related to the identity of plants or compounds in coded form because fiduciary agreements may prevent releasing this information until patent protection has evolved. In order to clarify any issues related to this type of data presentation additional information may be required from the principal investigator during the review process. Resolution could be easily achieved if the query was general in nature such as determining if these data represent more than one taxa or related compounds. However, should explicit information be required than clearly the number of individuals involved would have to be very restrictive such as assigning one representative within the granting agency and only the primary reviewer to be privy to these types of

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Review of Eshbaugh’s 2007 DEB Address
by Michael J. Huft

Dr. Hardy Eshbaugh of Miami University of Ohio delivered the 2007 Distinguished Economic Botanist address. After a few words recounting the many individuals and experiences that led him to his distinguished career as an economic botanist and teacher, Dr. Eshbaugh launched into his main topic—the complexities of observing ethical considerations in ethnobotanical research. Ethnobotanists are subject to the ethical standards governing experimentation with human subjects that derive from the Nuremberg Code and other sources and are administered by Institutional Review Boards. However, those standards and their implementation were developed primarily in relation to medical and psychological research and therefore are poorly suited to ethnobotanical research, in which the perspective of the human subjects and their rights and expectations are of paramount importance, both scientifically and ethically.

Dr. Eshbaugh presented several examples of situations in which ethnobotanical researchers find it necessary to consider and observe ethical principals that go well beyond, and often differ from, the standards that are appropriate in medical and psychological research. All of these examples require the researcher to be acutely aware of the interests of the human subjects that are being studied and the ethical consequences of gathering, using, and disseminating the data that form the essence of the research. Issues that arise include the proper ownership of information, determining appropriate credit, how to insure effective informed consent from individuals who are unable to read or write, and perhaps even more problematic, where researcher and subject are operating in wholly different cultural contexts. The proper recognition of intellectual property rights, the application of such rights in differing circumstances, and even dealing with the dilemma of whether and how to apply intellectual property rights in contexts where such concepts developed in a Western culture may have little meaning, also present ethical problems for the ethnobotanist. These issues are especially acute in the current world context in which investors, pharmaceutical companies, and others are avidly attempting to claim rights to plants and animals and their products as well as exploiting the knowledge of native peoples, with little or no consideration given to the rights of such peoples and the devastating effects on them of the theft of their rights and knowledge.

Dr. Eshbaugh discussed several other examples of the need for careful application of ethical principles in ethnobotanical research, and the necessity of finding novel ways to apply such principles in situations that are often not contemplated in the original formulation of such rules for medical and psychological research. He ended by lamenting the lack of sufficient training in ethical principles for ethnobotanists and emphasizing the need to recognize the importance of such principles and make them a larger part of the curriculum.

Elvin-Lewis Editorial
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information. These individuals would be legally bound to comply with additional strictures accompanying this limited disclosure and be obliged not to reveal to the entire review board, or others, the explicit nature of the proprietary information. This additional information would not be retained by the granting agency in its portfolio but returned once the review had been accomplished.

There are still parts of the world where laws have yet to be instituted to protect TK and genetic resources. During the period where these countries and/or communities of nations struggle to address these issues appropriately it is important to emphasize what aspects must be prioritized over others. Recognizing that traditional knowledge is rapidly disappearing as globalization increases, it is imperative that this information be recorded and safeguarded as soon as possible. Ideally this should be done by those that are custodians of this information or alternately by professionals willing to aid in this endeavor. When a local, national or regional data base does not as yet exist detailed records should be formatted using guidelines set up by the WHO/WIPO or other types considered suitable. Consideration should be given to all proprietal aspects with the idea that these will eventually be incorporated into some form of defensive data base. Should professional help be elicited, or conducted independently, investigators should be willing to elicit prior informed consent as well as honoring national policies regarding the collection of genetic resources and other international policies of engagement, and disclosure. Moreover to protect any rare or endangered species, geopositioning data and TK information should be kept separate from that which appears on any herbarium voucher specimens. When commercial development is envisioned or is being conducted, the circumvention of potential benefit sharing with herbaceous voucher specimens. When commercial development is envisioned or is being conducted, the circumvention of potential benefit sharing with custodians of this knowledge should be avoided. Investigators ignoring these guidelines, evoke the risk of retrospective retribution should their activities become apparent to outside sources.

New Mentor Award

Honoring our elders is central to all ethnobotanical fieldwork. We value our mentors in the classroom, but only rarely do we have a chance to acknowledge their importance to all of us. The Society now has a second award to demonstrate that support—an award named after Charlie Heiser, a great teacher, 1984 DEB, and 1978 Past President who has guided many of our younger mentors. At the 2007 SEB meeting, the Council voted to support this new award, which was submitted for consideration by the Student Committee.

SEB Charles B Heiser Jr. Mentor Award

The Student Committee initiated the Mentor Award to recognize outstanding economic botanists who have substantially impacted the training and professional development of economic botany and ethnobotany students. This award, chosen by students, spotlights dedicated educators who foster the development of the field by example and through student mentoring. It acknowledges mentors who are experienced, knowledgeable, trustworthy friends, counselors, and teachers.

Eligibility Criteria for Nominated Mentors
1. Open to SEB members and non-members
2. Closed to previous awardees

Eligibility Criteria for Students to Nominate a Mentor
1. Students and recent graduates (within 5 years) who are current SEB members

Mechanisms for Soliciting Nominations from Students
1. Student listserv
2. Plants & People Newsletter
3. Annual SEB meeting (e.g., student mixer)

Nominations
1. Students will submit letters explaining their reasons for nominating a mentor. These can be submitted via email or in a posted letter to the Student Committee chair. (Nominations of names only will not be considered.)

Criteria for Forming the Committee of Students Who Will Choose the Mentor
1. The committee shall be formed each year and must consist of five people: four voting members (two current members of Student Committee and two general SEB student members) and one non-voting coordinator.
2. All four voting members must abstain from nominating a mentor. The non-voting coordinator may submit a nomination letter before reading any other submitted letters of nomination.
3. The coordinator will be responsible for receiving, organizing, and distributing letters of nomination to the committee after the deadline for submissions. Before distributing the letters to the committee, s/he will remove or blacken out the names of the nominee and the letter writer to assure anonymity and then group multiple nominations for the same person together (if they exist).
4. Each of the four voting committee members will review all letters and rank their top two choices for a mentor. Together, the committee will discuss their choices and then vote on the top choice (by submitting it via email to the coordinator). The nominee with the most votes will win the award. In the case of a tie, the committee must discuss further and vote again.

Criteria for Committee Members to Consider in Selecting the Mentor
1. Most convincing letters (rated on a scale of 1-5: 1=weak, 2=OK, 3=good, 4=outstanding, 5=exceedingly outstanding and unique)
2. Number of letters

Recognizing the Mentor
Prior to announcing the award, the selected mentor will be notified and encouraged to attend the SEB annual meeting where s/he will be publicly recognized and presented with the plaque. If the mentor is not present at the meeting, a representative of the mentor committee will publicly recognize the mentor and the plaque will be sent to the mentor after the meeting.

Timeline
Solicitation: 1 March – Listserv, Spring Issue of Newsletter
Submissions: 2 March – 1 April
Committee Chooses DEBM: 1 May
DEBM is notified: 2 May
Order the Plaque: 10 May
Announcing the Award: Annual meeting in June and afterwards in the Newsletter

Award
For purchase of a plaque, the SEB Council will supply $45/year to the Student Committee, which will order and present the award and the plaque at the annual meeting.

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David Rodgers, a founding member

One of our founding members, David Rodgers, has passed away on May 14, 2007. He was a pioneer of cassava research whose valuable contributions are cited by all scientists in this field. David Rodgers was born in Florida in 1918. He received his bachelor’s degree in botany at the University of Florida, Gainesville, in 1941. After 4.5 years of military service in the United States Army in World War II, he continued his graduate education at Washington University, St. Louis, receiving the M.A. degree in 1949 and Ph.D. in 1951. His major studies were in taxonomic botany, with emphasis on monographic studies in the Euphorbiaceae. Dr. Rogers’ major interest was in economic botany, with strong emphasis on systematic development of computer programs to aid in the analysis of complex problems in biology. He (and a staff of 10 interdisciplinary personnel) developed taximetric procedures as powerful aids to the biologist in understanding of complex phenomena. His concern for the application of research findings to problems of humanity was indicated by his numerous endeavors to aid in the improvement to the cultigen, Manihot esculenta, and by recent interdisciplinary environmental analyses.

His comments are taken directly from our history page on the Internet. In a 1958 essay at the conference, which was to found the Society for Economic Botany, David J. Rogers wrote, “A current viewpoint is that economic botany should concern itself with basic botanical, phytochemical, and ethnological studies of plants known to be useful or those which may have potential uses so far underdeveloped. Economic botany is, then, a composite of those sciences working specifically with plants of importance to [people].” Closely allied with economic botany is ethnobotany, a growing field, which emphasizes plants in context of the anthropological sciences. Some would say that science is what scientists do, perhaps the best definition of economic botany is found in the work presented in our journal and at annual meetings of the Society. The geneconserve (www.geneconserve.pro.br) invites his friends and students to send obituaries to be published in this page.
Education—In the Classroom

Class Announcement

**Ethnobotany How People Use Plants in a Cultural Context: Theory, Applications, Fieldwork**

Anyone who wants a Great Lakes perspective on Ethnobotany, this is a great hands-on, low enrollment (16 cap) class, with many scholarships available. Apply early, like January or February, to ensure U of M students don’t fill up all the seats. We had a wild rice case study last year that went well and we will likely carry that through 2008. This class meets at the Biological Station in northern Michigan near the towns of Pellston and Cheboygan, only 15 minutes of the Mackinac Bridge.

**EEB 455 Ethnobotany**

Prereq.: Two college-level courses in biology of BIO 162, 4 weeks (5 credits), Scott Herron. Ethnobotany is the direct interaction between people and plants. Culturally, people name, classify, and use plants. Behaviorally, they collect, harvest, manipulate, and domesticate plants. Plants impose limitations on people because of their ecology, reproductive biology, population dynamics, physiology, anatomy, and biochemistry. Ethnobotany considers the human-plant equation as an integrated system. We will draw examples in lecture world-wide but concentrate on Native American cultures for our research problems and numerous field trips. In particular, we will consider their methods of plant management, critical aspects of indigenous knowledge for conservation and applied problems, and the ethical issues of intellectual property rights as we explore the ethnobotany of particular cultures. Native Americans of northern Michigan will be class guests.

Contact: Scott Herron, ScottHerron@ferris.edu
Adjunct Assistant Professor of Ethnobotany
University of Michigan Biological Station
College of Literature, Science, and Arts
Univ. of Michigan (www.lsa.umich.edu/umbs/)

Films

There has been a short, but interesting exchange on the listserv about films for ethnobotany. Do not hesitate to send me your favorites for the next issue. Maybe we can begin to see these at our meetings.

**Some Favorites**

- Walkabout
- At Play in the Fields of the Lord
- Plants and the Cherokee
- Indigo
- Serpent and the Rainbow
- Amazon (IMAX)
- Kon-Tiki
- Kao Hina E Hiapo (2001)
- Traditional Healers of Tonga (1999)
- Unnamed films by the University of Nevada and Penn State
- Series on Ethnobotany, by the University of Hawai’i
- Ilha das flores (Isle of flowers)
- Anacondas: The Hunt for the Blood Orchid
  (Greedy Bioprospects Meet Their Match)
- From Life On Terra (www.lifeonterra.com/), films about plants, biodiversity and indigenous, e.g., see TERRA 302–Making a Yidaki; TERRA 303–Jewels of the Jungle, Part 1; TERRA 309–Picante! The Power of Peppers, Part 1

More Favorites from www.globaldiversityfund.net/filmview

- The Dreamers of Arnhem Land, Christopher Walker, Quark Productions, ARTE France (2005)
- Still the Children Are Here, Dinaz Stafford, Mirabai Films in collaboration with IFAD (2003)
- The Shaman’s Apprentice, Miranda Smith, Miranda Productions, Bull Frog Films (2001)
- Forest and Fence, Tropical Forest Research Group & DFID (2000)
- Ancient Futures: Learning from Ladakh, John Page, ISEC Films (1993)
- Red Persimmons, Ogawa Shinsuke/Peng Xiaolian, Benigaki Documentary Film Production Committee/First Run Icarus Films (1984)
Updates & Activity
We would like to extend our gratitude to Heather McMillen for serving two years as our student chair. Best of luck to Heather! Arika Virapongse is the new student chair for 2007-2009 and Cassandra Quave, Laura Weiss, and Hugo DeBoer remain on as committee members.

The 2007 SEB conference in Chicago was a great success. Following are some accounts of the student activities and participation in the conference.

2007 Workshops
Ethnobotany Training Program and Curriculum Development
by Laura Weiss, workshop organizer

Over 30 people attended this workshop, including students, faculty, professionals, and potential employers in the field, making for a very full room. Laura presented background on the need for development of focused ethnobotanical curriculum and training programs, highlighting feedback from a questionnaire sent out to the student network listserv, as well as bringing up several issues for discussion, such as program goal clarification, identifying potential jobs and key employable skills, certification, consistency between programs, and inter-disciplinary and inter-institutional collaborations. This was followed by lively discussion among the workshop participants and many requests to keep this dialogue in motion. As a follow-up, Laura will initiate and moderate an SEB listserv discussion on this topic, continuing to collect feedback from the student questionnaire, and sending out additional questionnaires to professors, professionals, and employers. Results of the questionnaires will be shared with the listserv. An employer panel workshop is being planned for next year’s meeting as an additional follow-up.

Tips on Getting Published
by Cassandra Quave, workshop organizer

The publication workshop had a great turnout with nearly 50 attendants. Participants were given handouts with information on the peer-review process, impact factors, and tips for scientific writing. They had the opportunity to listen to advice on writing and submitting work for publication from five editors of ethnobotany journals. This was followed by a Q & A session with the Editor’s panel, which included Dr. Dan Moerman for Economic Botany, Dr. Rick Stepp for Journal of Ethnobiology, Dr. Norman Farnsworth for Phytomedicine, Dr. Doel Soejarto for Journal of Ethnopharmacology, and Dr. Charlotte Gyllenhaal for Integrative Cancer Therapies.

Hand Papermaking
by Karen Hall, workshop organizer

As I type this brief note on a virtual sheet of writing paper on my computer, I am reminded of the primary use of paper through time—as a means to communicate—either through languages or imagery. Of course, this is still true, though our uses for paper products have increased exponentially as has the technology to produce them. Despite our reliance on mass-produced paper today, hand papermakers can still be found in many regions of the globe, with families or whole villages taking part in the process. The paper that they make, though also used for many products, continues to supply a surface on which people might communicate with each other or with spiritual entities.

Over a dozen SEB conference goers were treated to a hand papermaking workshop in order to generate interest in these amazing traditions and to demonstrate an easy ethnobotanical lab. Participants were given a brief lecture describing the myriad ways in which handmade sheets of paper are formed around the globe. Participants made small sheets of paper from the bast fibers of kozo (traditionally Broussonetia papyrifera, but in this case, Morus alba), seed hair fibers of cotton (from recycled blue jeans), and leaf fibers of combined Juncus and Scirpus species.

In addition to the technical know how, we also revisited (for some) the ‘beauty queen wave’ as needed to stir the vat so no splashing occurs and the ‘kiss-off’ to return the fiber to the vat when you have made a mistake. Creativity and generosity ruled the day. In preparation for the workshop, I hand harvested and prepared all of the fiber (excepting the blue jeans). With my vested interest in the fiber, I wonder—how are those sheets of paper now being used? Are they communicating what I had hoped?

Collections of Ethno- and Economic Botany (CEEB) Working Group
by Jessica M. Dolan, participant

The CEEB working group met twice this year during the SEB conference in Chicago. During our first meeting, we introduced ourselves, and spoke about our work with collections of economic and ethnobotany. We elaborated on areas of particular interest. At this meeting, there were representatives from Clemson University, Duke, Harvard University Herbaria, The New York Botanical Garden, Missouri Botanical Garden, Royal Botanic Gardens, Kew, and the Universities of Arizona and Michigan. Some participants at the meeting work with the CEEB that belongs to their home institution, while others spoke about separate private collections they have encountered through their work. At this Monday meeting, we made plans to meet again on Friday at the Field Museum.

Friday morning, we toured the Field Museum, including its herbarium and economic botany collections. After lunch, we met with Christine J. Niezgoda, Collections Manager of Phanerogams at the Field Museum, and discussed future projects amongst participants of the CEEB working group. The theme of the meeting was increasing public access to CEEB via the creation of a Website, and the necessary steps to enable that work to be carried out. Two key projects seem to take top priority at this time. First, the CEEB working group is in the process of creating a Website that will link the databases of economic and ethnobotany collections at AV/GH, F, K, MO, NY, and more. Once this is completed, the user will be able to conduct an online search of all of those collections, using one search page on the CEEB website. An advantage of this is that the user will more easily locate collections that have been divided between institutions.

Second, the CEEB working group is in the process of creating an online network of CEEB that will be accessible through the same Website, with information about CEEB worldwide. This Website will be similar to Index Herbariorum, in that it will provide information about the curators and holdings of each collection. For more information about CEEB project goals, please visit www.wlbcenter.org/ceeb.htm.

We touched upon the need to enumerate the many uses of historical collections, to make CEEB more attractive to scholars and granting organizations. Ultimately, attraction is a matter of accessibility—to attract scholars and others to CEEB, they must first be aware of the collections’ existence! Increasing organization and accessibility of CEEB will increase their value.

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2007 Field Trips
Indiana Dunes
by Laura Weiss, participant
Charlotte Gyllenhaal and Michael Huft led this magnificent excursion through a variety of enchanting ecotones comprising the Indiana Dunes National and State Parks, including forests, marshes, swamps, and sand dunes. We marveled at and learned about the native flora and fauna, participants discussed their own knowledge about the plants and their uses and meanings, and we watched a lovely short film about the history of the area and struggle for its preservation against the encroachment of urbanization at the informative visitor center. We also learned about local cultural and harvesting activities such as maple syrup extraction. The trip culminated in a lovely white-sand beach visit, where I attempted to sandboard, and for a pleasant swim in the crisp and refreshing freshwater beach.

Integrative Medicine Tour
by Heather McMillen, participant
Charlotte Gyllenhaal led our small group to two clinics located north of Chicago. The first was at the Center for Complementary Medicine, affiliated with Lutheran General Hospital, and the second was at the Block Center for Integrative Cancer Treatment. We met with a variety of health professionals including physicians, researchers, and dietitians, and had time to engage in meaningful discussions about cross-cutting issues in health care collaborations and the current and potential role of ethnobotany in these areas. We ended the tour with a delicious meal at a local vegetarian restaurant in Evanston.

Urban Ethnobotany
by Joanna Michel, organizer and tour leader
Imagine a group of ethnobotanists with safari hats and magnifying glasses perusing the streets of northwest Chicago for plant life! Okay, so no one was dressed for the jungle or equipped for taxonomic identification, but it was a great turn-out and everyone enjoyed learning more about the Latino culture in Chicago.

After getting picked up from the Clybourn Metra stop in a yellow school bus, our first stop was Centro San Bonifacio (CSB), a non-profit that has been providing health outreach and education to the Latino community since 1991. As Director of Development and the sole native English speaker for the organization, Joanna Michel, Ph.D. (last year’s SEB presentation award winner in Thailand) led the discussion on the mission of the organization and Latino health concepts and herbal practices that can affect patient-practitioner relationships. Four Health Promoters from CSB had a dynamic presentation, complete with a simulated spiritual cleansing of a baby (okay, it was a rubber doll) by a curandero (okay, not a real one).

We then filed into two small convenient stores on the same block, one with fruits, herbs, and even seeds of papalo (*Porophyllum* sp.) imported from Mexico, the other with a few things from the Dominican Republic, the most interesting of which was a bottle filled with roots used to enhance male virility!

We stopped by the garden plot owned by CSB and received a thorough tour of the organic vegetable and herb beds built right on top of cement! Now that’s an “urban garden!” Our last stop before tacos and horchata was a small but incredibly packed botánica owned by an elderly gentleman with eyes that read through you and a face that told you he’d seen a lot since opening the store 42 years ago. Especially popular items among our group were the powders and candles used to create the submissive husband and deter bad spirits!

Overall, it was a fine day and everyone walked away with an herb or two in their bag, the smell of tortilla in their hair, and one or two thoughts about empacho, mal de ojo, or susto.

The Field Museum Herbarium and Ethnobotany Collections
by Adam Brown, participant
One of the highlights of the 2007 SEB meeting was a visit to the Field Museum in Chicago. This visit began with a tour of the museum’s plant exhibit, an extensive collection containing a combination of highly realistic plant replicas and where appropriate, natural plant parts such as seeds, woody stem sections and examples of processed fibers. After enjoying this exhibit for a time we were led from the public displays and given a private tour of the museum’s extensive herbarium, ethnobotanical collection, specimen mounting facilities and research labs. The museum’s botany staff showed us a selection of particularly interesting specimens such as historic herbarium sheets, some of which contained plants collected during expeditions lead by such famous persons as Captain James Cook, Captain William Bligh, and Dr. David Livingston. There were many other objects of interest including coco de mer seeds and a basket woven from seaweed. After leaving the research areas the group dispersed to visit the rest of the public displays, the Dorothy Atkins Medicinal Plant Garden and/or the collections meeting. I visited the Atkins garden, which is a teaching tool of the University of Illinois at Chicago College of Pharmacy containing a nice collection of over 70 important medicinal plants. Both the museum and garden were quite impressive and I learned a great deal from this day of activities.

2007 Student Social
by Heather McMillen, organizer
This was the largest turnout for a SEB student event in my memory. We filled the back room of the Lantern, a bar and grill about a 10-minute walk from Lake Forest College campus. Students hailed from Asia, Canada, Ghana, Latin America, Niger, and the United States. Some were new attendees to SEB meetings and were looking to begin graduate programs or are new graduate students; some were seasoned SEB student members. Great information and camaraderie, as well as beer and wine, were enjoyed by all. We began at 8:00PM and when I left after 11:30PM, the party was still in motion!

Distinguished Economic Botanist 2007—Dr. Hardy Eshbaugh
by Heather McMillen
Drawing on his own insights and those of his students, Dr. Eshbaugh spoke about ethics and the limitations of the human subjects IRB approval process. He stressed our need to go beyond those restrictive requirements. In our research, he encouraged us to recognize indigenous and local people’s rights as the owners of their knowledge, their rights to keep that knowledge from outsiders, and their rights to be anonymous altogether.
United Nations adopts Declaration on Rights of Indigenous Peoples

13 September 2007 – The General Assembly today adopted a landmark declaration outlining the rights of the world’s estimated 370 million indigenous people and outlawing discrimination against them – a move that followed more than two decades of debate. The United Nations Declaration on the Rights of Indigenous Peoples has been approved after 143 Member States voted in favour, 11 abstained and four – Australia, Canada, New Zealand and the United States – voted against the text. A non-binding text, the Declaration sets out the individual and collective rights of indigenous peoples, as well as their rights to culture, identity, language, employment, health, education and other issues. Also, it emphasizes the rights of indigenous peoples to maintain and strengthen their own institutions, cultures and, traditions and to pursue their development in keeping with their own needs and aspirations. It prohibits discrimination against indigenous peoples and promotes their full and effective participation in all matters that concern them, and their right to remain distinct and to pursue their own visions of economic and social development. General Assembly President Sheikha Haya Rashed Al Khalifa, Secretary-General Ban Ki-moon, and High Commissioner for Human Rights Louise Arbour have welcomed today’s adoption. Sheikha Haya said “the importance of this document for indigenous peoples and, more broadly, for the human rights agenda, cannot be underestimated. By adopting the Declaration, we are taking another major step forward towards the promotion and protection of human rights and fundamental freedoms for all.” But she warned that “even with this progress, indigenous peoples still face marginalization, extreme poverty and other human rights violations. They are often dragged into conflicts and land disputes that threaten their way of life and very survival; and, suffer from a lack of access to health care and education.” In a statement released by his spokesperson, Mr. Ban described the Declaration’s adoption as “a historic moment when UN Member States and indigenous peoples have reconciled with their painful histories and are resolved to move forward together on the path of human rights, justice and development for all.” He called on governments and civil society to ensure that the Declaration’s vision becomes a reality by working to integrate indigenous rights into their policies and program. Ms. Arbour noted that the Declaration has been “a long time coming. But the hard work and perseverance of indigenous peoples and their friends and supporters in the international community has finally borne fruit in the most comprehensive statement to date of indigenous peoples’ rights.” The UN Permanent Forum on Indigenous Issues estimates there are more than 370 million indigenous people in some 70 countries. Members of the Forum said earlier this year that the Declaration creates no new rights and does not place indigenous peoples in a special category.