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Building Bridges with Traditional Knowledge II

The SEB 2001 Annual Meeting in Honolulu, Hawai'i May 28-June 2. (www.botany.hawaii.edu/traditionalknowledge)

Update: Organization of the 2001 annual meeting of the Society for Economic Botany is coming along. We have had a few bumps in the road, particularly with posting and maintaining information in the web site. These problems seem to be worked out and we are moving forward. As of January 31, 2001, 382 individuals were registered for the meetings and 131 papers/posters had been selected for presentation in concurrent and plenary sessions. We expect a strong turnout from Hawai'i and other local ethnic communities who will enhance the meetings with presentations and contributions to discussions. Keynote evening speakers will include Sir Ghillean Prance (Former Director, Royal Botanical Garden, Kew), Nat Quansah (2000 Goldman Prize Recipient), Paul Cox (Director, National Tropical Botanical Garden), Sir Ratu Mara (President, The Republic of Fiji), Daniel Akaka (U.S. Senator from Hawai'i), and Nainoa Thompson (Polynesian Navigator). Post-summit excursion options will include a tour of Dole Farms, guided hikes to see native plants of Hawai'i, a day at the Polynesian Cultural Center, a chance to work in a traditional Hawai'i taro garden, or a guided tour of Honolulu's "China Town." We will welcome all participants in true Aloha fashion and are eager to share the flavors, sights, and sounds of Polynesia with all who attend.

Will McClatchey (bbr2@hawaii.edu).

You may view the abstracts that are now online and the form that is available as well as by highlighting the new Message Board Feature on the SEB web site.

Read more on the 2001 Meeting on page 16

Ethics

by the SEB Ethics Committee

Gail Wagner, Column Editor, Chair of the SEB Ethics Committee, and Associate Professor, Dept of Anthropology, University of South Carolina

In this column we pose an ethical field dilemma and examine how our Guidelines of Professional Ethics (posted on our web page) address the problems raised. Discussion by invited scientists on other codes from closely related professional societies (International Society of Ethnobiology and American Anthropological Association), as well as comments by a philosopher, provide counterpoint or alternative viewpoints. We feel that it is only by examining our own Guidelines and engaging in dialogues such as these that we will be able to pinpoint ambiguities or lacunae in the SEB Guidelines of Professional Ethics. We invite members to continue the dialogue by responding to this discussion. Likewise, we solicit new ethical dilemmas to examine in future columns. Correspondence may be submitted to the Chair, Gail Wagner at gail.wagner@sc.edu or Department of Anthropology, University of South Carolina, Columbia, SC 29208 USA.

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Plants & People

The Newsletter of
The Society
for
Economic Botany

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www.econbot.org

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The articles within the Newsletter are independently submitted and do not represent the position of The Society for Economic Botany as a whole.

Deadlines for submissions are February 1 (Spring Issue) and September 1 (Fall Issue).

Notes from the Field

This is an earlier edition of our Newsletter than usual due to the change in the date of our annual meeting. I hope you have already registered, but if not look at the column on the 2001 meeting in Hawai'i. The presenters and those in attendance will be all we can hope for an internal exchange on traditional wisdom.

There are several books reviewed in this issue, which I rarely have room to include. Also Dan is seeking more reviewers, so check in with him after reading his request in Book Reviews.

Otherwise, things move along in our field. I think you will all agree there are more classes, more research grants and more students. What a great time to be an economic botanist or ethnobotanist.

Many have commented on the spelling of words such as programme and specialised. I leave the spelling as it is submitted as we are an international society and spelling is correct both ways. Send in your comments and articles we want to hear from you.

Trish Flaster



Letter to the Editor

As an Editor I appreciate criticism both good and bad. Thank you for sending this. . .

Just to note that you managed to spell Will McClatchey incorrectly both times (page 2 and 8). Ahhhh, the life of an Editor!

Hawai'i, by the way, is now spelled with an 'okina (glottal stop) between the two i's to indicate that there is a missing consonant. Diacritical marks [the kahako (macron), which I can't use in e-mail] and the 'okina are now being used regularly as aids in pronunciation and to tell the difference between similarly spelled words].

See you next year.

Aloha,
Al Keali'i Chock
Adjunct Colleague of Botany
University of Hawai'i at Manoa

Awards

Books

The Council on Botanical and Horticultural Libraries presented its first Annual Literature Award to Daniel E. Moerman, author of "Native American Ethnobotany," and Timber Press, the book's publisher, on May 3, 2000 at the Smithsonian Institution. The award was created to recognize significant contributions to the literature of botany or horticulture, and the CBHL cited Moerman's work as "an outstanding example of botanical literature that relies on exhaustive scholarly research. It comprehensively reviews how Native Americans used plants for medicine, food, and other purposes. The book met or exceeded all criteria for the Literature Award, including excellence of intellectual content, usefulness, and uniqueness." Dale Johnson was Moerman's editor at Timber Press, and Darcel Warren oversaw production of the book. It was designed by Susan Applegate, and the typography was done by Lila Braker. To see a photo of Timber staff with the award, go to www.timberpress.com/news/newsletter.cfm?source=21

Judith Tankard, author of "The Gardens of Ellen Biddle Shipman" and co-author of "Gertrude Jekyll at Munstead Wood: Writing, Horticulture, Photography, and Homebuilding," received a Gold Medal from the Massachusetts Horticultural Society for the advancement and dissemination of knowledge of the history of the garden in New England. All of Tankard's books were acknowledged in the citation.

Basketweavers

"The Alliance for California Traditional Arts has awarded grants of \$2,500 each to 15 pairs of master traditional artists and dedicated apprentices representing some of California vast cultural wealth." Awards were given to native basketweavers well known in The California Indian Basketweavers Association. This group has been instrumental in affecting pesticide and herbicide regulations in National Forests. They have been informative on invasive species. Many of the plant materials used in basket weaving are weedy in nature and found on lands that our government wishes to spray, thus destroying the materials and creating health hazards to native peoples. Join them at the 2001 meeting in Chaw'se, CA June 22-24, Ph: 530-478-5660.



SEB Announcements

Membership

Michael Thomas has completed work on the Membership Directory; 1,500 copies are being printed. According to the updated database, membership is now up to 1,021. The Directory will be distributed (probably included with a journal mailing) to all existing members and, I hope, to new members until stocks run out—by which time it will need updating.

Journal News

Lawrence Kaplan has completed the mammoth task of compiling an index to the first 50 years of the journal. This will appear first in print and will be distributed to individual and institutional subscribers. It is being produced to allow subsequent production as a CD or on-line version. This is something that Council is discussing.

Elections

Ballot papers for the 2001 elections will be going out shortly. Besides electing Officers and Council Members, this year members will be asked to vote on a proposal from AIBS to establish a Public Policy Office, salaries for staff to be funded partly by pro rata contributions from AIBS member societies. Background information on this proposal will be included with the ballot papers, but I would like to exhort all members to USE THEIR VOTE! Returns of ballot papers have been declining, and if Council is to reflect the interests and opinions of the membership satisfactorily, we need the membership to express those interests and opinions whenever they have the opportunity!

Web Site

Brad Bennett submitted a draft of the SEB Web Policy to Barbara Pickersgill, President, which will run until late May, pending discussion, modification, or ratification by Council.

Draft #1 of SEB Web Policy

1. The SEB Message Board and ListServ is for the use of SEB members only.

2. The student ListServ is for any student interested in economic plants in accordance with the objectives of the society.

3. Non-members may submit information to the SEB web editor for consideration.

4. Appropriate postings on the Message Board will include information and questions relevant to the Society's objectives (i.e., to foster and encourage scientific research, education, and related activities on the past, present, and future uses of plants, the relationship between plants and people, and to make the results of such research available to the scientific community and the general public.)

5. No commercial postings will be accepted.

6. Message Board postings are subject to review/edit by the Web Editor and Web Committee.

7. Those messages violating the policies of the Society will be removed and violators will be removed from the ListServ.

8. Members and students are encouraged to post non-urgent requests and comments on the Message Board rather than the ListSers. Dr. Bradley C. Bennett, Assoc. Professor, bennett@fiu.edu

Graduate and Undergraduate Classes

The SEB's Education Committee is updating information on courses and graduate programs. The revised information will be posted on the Society's web site (www.econbot.org). If you offer courses or graduate degrees in economic botany or ethnobotany and you would like this information posted on SEB's web site, please respond to the questions below. We will not post information without explicit permission from each university; that is, until you respond to this e-mail, your courses will not be added to the site. If you do post any information, be prepared for many inquiries. Because of the paucity of ethnobotany programs, you may expect more than one hundred contacts per year.

Class Listing Questions

Is the information new or updated?

- ◆ What undergraduate courses relevant to economic botany or ethnobotany does your university offer?
- ◆ What graduate courses relevant to economic botany or ethnobotany does your university offer?
- ◆ If syllabi are available online, please provide the link.
- ◆ Does your university offer opportunities for M.S. or M.A. research and/or opportunities for Ph.D. research in economic or ethnobotany? If so, in what department(s)?
- ◆ How do students contact you? Provide your e-mail address, regular mail address, phone, and fax as well as links to your web sites about courses and graduate programs.
- ◆ Please indicate that you are granting permission to post all (or part of the information, as you have indicated) on the SEB web site.

Dr. Bradley C. Bennett (bennett@fiu.edu)
Chair Education Committee
Dept of Biological Sciences, Florida Internat'l Univ.
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Ethics

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The Dilemma

Dr. Cynthia Fowler, Department of Anthropology, College of Charleston (SC) submits the following ethical dilemma:

In 1997-1998 I conducted fieldwork in a rural "village" called Wailabubur on the island of Sumba. While I was there I witnessed the beginning stages in the construction of a road that cut through various patches of forests and numerous gardens. I was quite disturbed by this road construction because of all the negative repercussions of road building that I had learned about through reading academic and popular literature about tropical deforestation. I assumed, because of my education, that the local people would agree that this new road would be devastating to the environment and to their culture.

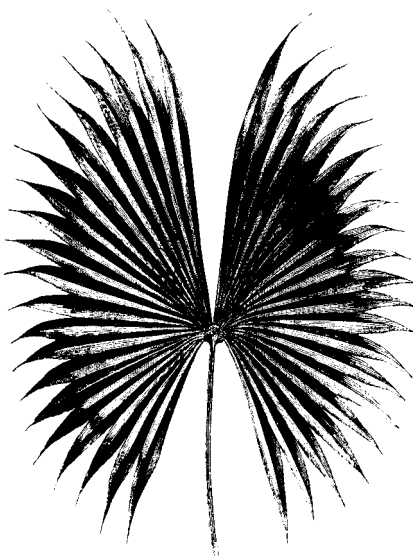
However, after observing their participation in the road construction as paid laborers (they were paid per pile of rocks that they collected and/or laid down in the roadbed) I began to conduct interviews with these laborers to ask them about their opinions of the road. To my surprise, I learned that most of the people whose houses abutted the new road were glad to have the road because they "could watch people ride by" and because they could get their products to the market more easily.

My dilemma was: Should I inform them of all the devastating environmental and social impacts that are caused by the construction of roads through rural garden areas and forests? Should I attempt to sway their opinions? Should I agitate opposition to the road construction?

SEB Guidelines of Professional Ethics

<http://www.econbot.org>
by Gail E. Wagner

In the SEB Guidelines of Professional Ethics, adopted in 1995, members are said to have responsibilities to the public, to the people studied, to the host governments and institutions, to the profession, and to those who support their research. The five points listed under responsibilities to those studied do not address the dilemma, but rather deal with research issues such as disclosure, sharing of reports or materials, respecting confidence or anonymity, and compensation. Under responsibilities to the public, the Guidelines state that members "will strive to maintain professional competence and will not offer advice on subjects on which they are uninformed." If we allow that the people among whom one works are a sort of "public," then the researcher should offer advice only on those subjects for which she feels informed or professionally competent. Under responsibilities to the profession, the Guidelines reiterate that the researcher "will maintain a level of integrity and professional



behavior in the field." This statement is unclear on whose integrity should be maintained. The researcher's? In that case, does she feel that her integrity will be compromised if she does not express her opinion to the local people of the likely bad consequences of road building in this location?

International Society of Ethnobiology Code of Ethics

<http://guallart.dac.uga.edu/ISE/SocEth.html>
by Gail E. Wagner

The International Society of Ethnobiology (ISE) Code of Ethics, adopted in 1998, is based upon a commitment to work "in genuine partnership and collaboration with indigenous peoples, traditional societies and local communities." In the Preamble the Code supports the right of Indigenous Peoples to control their own "lands, territories and traditional resources." Several of the 15 Principles in the Code address Dr. Fowler's dilemma from somewhat conflicting viewpoints. Three of the Principles that peripherally address her dilemma may be interpreted to direct the researcher to not impose her views on how the community should handle its resources. The Principle of Prior Rights recognizes that the local community has "prior, proprietary rights and interests over all air, land, and waterways, and the natural resources within them." The Principle of Inalienability recognizes the individual and collective rights for local communities "to determine for themselves the nature and scope of their respective resource rights regimes." The Principle of Respect says a researcher should "avoid the imposition of external conceptions and standards."

Yet, two Principles place an active role upon researchers. The Principle of Active Protection asks the researcher "to protect and to enhance" how the local community maintains biological diversity, which Dr. Fowler feels will be threatened by new infrastructure. The Principle of

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Precaution "advocates taking proactive, anticipatory action to identify and to prevent biological or cultural harms resulting from research activities or outcomes, even if cause-and-effect relationships have not yet been scientifically proven." While the road construction itself was not an activity caused by the researcher, the incorporation into her research of peoples' opinions about road building may be interpreted, with some stretching, to require proactive action on her part.

Interestingly, the Principle of Traditional Guardianship places an obligation upon the local community (which is not a member of ISE) to maintain its ecosystem through its "cultures, mythologies, spiritual beliefs and customary practices"! This principle seems to me to be somewhat in opposition to the earlier described Principle of Respect.

In conclusion, the ISE Code of Ethics may be interpreted to advocate a respectful dialogue between the researcher and the local community. How that dialogue should best be conducted is left to the discretion of the researcher.

American Anthropological Association (AAA) Code of Ethics

<http://www.aaanet.org/committees/ethics/ethics.htm>

by J. David Neidel, doctoral candidate, Departments of Anthropology and Forestry & Environmental Studies, Yale University

The AAA Code of Ethics (adopted 1998) does not provide a clear answer to Dr. Fowler's dilemma concerning the ethics of opposing road building, nor does it necessarily seek to. Because the AAA recognizes that "no code or set of guidelines can anticipate unique circumstances or direct action in specific situations," the Code instead delineates "general contexts, priorities, and relationships which should be considered in



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Ethics

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ethical decision making." In providing this framework, the AAA firmly places responsibility for ethical decision making in the hands of the individual anthropologist, who is best able to resolve the inevitable ethical dilemmas in light of the specific circumstances at the research site.

The contingent nature of the Code can clearly be seen in its stance towards various forms of 'activism.' The Code states, "the active contribution and leadership in seeking to shape public or private sector actions and policies may be as ethically justifiable as inaction, detachment, or non-cooperation, depending on the circumstances." While the first clause creates a possible space for the various forms of opposition to road building considered by Dr. Fowler, the second clause makes approval of such actions contingent upon the larger framework of ethical considerations delineated by the Code.

The most important consideration in making this decision, according to the Code, is the anthropologist's ethical obligation to the population with whom he/she is working. The Code states "Anthropological researchers must do everything in their power to ensure that their research does not harm the safety, dignity, or privacy of the people with whom they work, conduct research, or perform other professional activities." While generating opposition to the road could be of benefit to some members of the local population and the environment, Dr. Fowler would have to carefully consider the possible social and political ramifications of her actions. The Indonesian government, for one, has not been known to look kindly upon local opposition to 'development,' so Dr. Fowler would have to take into account the fact that any success in increasing opposition to road construction could potentially place community members at risk.

In addition to the anthropologists' primary responsibility to the population with whom they are working, researchers also have additional responsibilities to scholarship and science, and the public. Of pertinence to this case, the Code states that "Anthropological researchers should do all they can to preserve opportunities for future fieldworkers to follow them to the field." Given the inherently political nature of environmental activism, Dr. Fowler would need to carefully consider whether her opposition to the road building project would jeopardize her relationship with members of the community or government authorities to the point where it could have a long-term detrimental impact for herself and future anthropologists, or whether this were somehow outweighed by other factors.

In weighing such considerations, the Code states "the individual anthropologist must be willing to make carefully considered ethical choices and be prepared to make clear the assumptions, facts and issues on which those choices are based." Given the limited information

provided on this case, I think it would be premature to say that Dr. Fowler would or would not have been ethically justified to have worked in opposition to the road. How, for example, would our estimations of risk change if Dr. Fowler generated opposition to the road based solely on her own initiative versus worked in conjunction with a local environmental non-governmental organization? The devil may be in the details. And this, I would suggest, is exactly why the AAA Code "does not dictate choice or propose sanctions," but rather provides a framework of principles and requires the individual anthropologist to grapple with how best to apply them.

Philosophical Response

by Christopher J. Preston, Assistant Professor, Environmental Ethics, Univ. of South Carolina

Environmental ethics has generally avoided these tough questions of who has authority to say what to whom. That being said, it is perhaps worth observing that even those approaches to environmental ethics that are known for their categorical advocacy of environmental and ecosystemic goods often, at the end of the day, tend to defer to human communities and their own needs and wants. So for example, J. Baird Callicott's version of eco-holism yet maintains that one's obligations to the ecosystem are recent overlays on a set of prior obligations to human communities that retain their force. He offers as a guiding principle that "obligations generated by membership in more venerable and intimate communities take precedence over those generated in more recently emerged and impersonal communities" (Callicott 1999:73). Dr. Fowler's non-interference might follow from this. Similarly, Arne Naess (1995), founder of the deep ecology approach, includes 'local autonomy' and 'self-determination!' as two of the fifteen ultimate norms in his own ecosophy. He adds that "there is ample reason for supporters of the Deep Ecology movement to refrain from questioning other's ultimate beliefs" and that "priorities among First and Third world countries are and, to some extent, must be, different" (Naess 1995:400, 401). Though not all deep ecology voices are as sensitive as Naess's, this attention to human communities and their own rights to self-determination ahead of ecosystemic goods seems fairly unequivocal.

The approach to environmental ethics that speaks most specifically to context is Ecofeminism. Karen Warren includes among the eight boundary conditions of an ecofeminist ethic the conditions that the ethic must be 'contextual,' 'in process,' and that it must 'reject objectivist approaches' (Warren 1990). A contextualist ethic "sees ethical discourse and practice as emerging from people located in different circumstances" (Warren 1990:139). Who can say what to whom

depends on many things of a cultural and historical nature since "how a moral agent is in relationship to another becomes of central significance" (Warren 1990:142). An ethic that is in process "may/will change over time as the historical and material realities of...lives change" suggesting that road building in rich countries might have a different moral status to road building in poor ones. Ecofeminist ethics repeatedly warn that "what counts as appropriate conduct toward both human and non-human environments is largely a matter of context" (Warren 1990:142-143). Unfortunately, none of these conditions supplies a definitive answer to Dr. Fowler but then that should not be surprising for an approach that calls itself non-objectivist.

Even without a definitive answer, a tone does appear to be set. Contextualism and non-objectivism warn against a rule being imposed from the outside about what local people should advocate for themselves. Contextualism and the process approach suggest that the past and current historical-material circumstances of the inhabitants of the island of Sumba may be of particular relevance to the rightness or wrongness of any decision they make about the road. Are the people of Sumba economically oppressed? If they are, there is something else to add from Warren (1990). Consistent with a standpoint approach, Warren includes as a rule of thumb that if a non-objectivist has to include some sort of bias then "centralizing the voices of oppressed persons [leads to] a better bias...than exclud[ing] those voices" (Warren 1990:140).

It seems, then, that at least a few of the theories in environmental ethics lean toward Dr. Fowler remaining silent. But rather than leave this as the final word, I would ask...was there really *no* local opposition to the road?

References

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In the Classroom

The Three Ps of Scientific Talks: Preparation, Practice, & Presentation—Part 1

by Brad Bennett, Chair of the Education Committee

Dr. Thomas Eisner gave the keynote address at the 1995 SEB meeting. When he finished, the audience uttered a collective sigh. His message was so mesmerizing that he could have held the room's attention for another hour. Three factors explained his success: a fascinating topic, excellent visuals, and an enthusiastic and lucid style. Most speakers lack Eisner's ability but anyone, with practice and preparation, can become a good speaker and good speakers can become outstanding ones. Developing oral communication skills is crucial for all scientists. More than one job candidate, who looked outstanding on paper, torpedoed his chances with a weak talk. A strong scientific talk requires three things: preparation, practice, and proficiency at presentation.

simultaneously held the attention of undergraduates, graduate students, and faculty, as well as specialists in his own field of molecular systematics. He succeeded because he addressed broad question of interest to all biologists, he was intimately familiar with the topics and methods, and he had a lucid and logical discourse. Few can duplicate his skills.

After deciding on an appropriate general topic, the next step is to select some aspect of your research that can be covered in the allotted time. Most beginning scientist will have 10 to 20 minutes to present in contributed paper sessions. It is far more important to fully communicate one complete story than to casually mention a series of disconnected vignettes. During my early graduate days, I sometimes joined my guitar

Why should someone not interested in your taxon, geographic focus, or ethnic group care about your study? What "big picture" does your research address? What "problem" does your investigation solve? While the introduction must grab the listener's attention, it rarely should exceed 25% of the total allotted time. Conceptually, one can think of the introduction as a funnel, beginning broadly (to capture the listener's interest) and ending narrowly with clearly stated objectives (Fig. 1). Speakers often omit the latter. They tell what they did, how and where they did it, what they learned, but fail to explain the purpose of their research.

The main body of the talk should be structured like a scientific paper with methods, results, and discussion sections. In contrast to the funnelform introduction, the methods, results and beginning discussion should be linear. If the introduction ends with the three objectives, then the methods section should explain how those three objectives were achieved, the results should present the data relevant to those objectives, and the discussion should begin with an explanation of the data and its bearing on the objectives. Unlike a publication, however, the length of these sections differs. Methods should be explained concisely. There is no need to provide all the details of the study. The same is true of results, which should be summarized. Don't beat an audience over the head with raw data; present a few examples rather than all the painful details. Most of the talk should cover the discussion. What did you find? How is it different from other studies? Why is it important?

In the conclusion, restate your main findings and their significance, and suggest the next logical step in research. At the University of North Carolina, Dr. Al Radford espoused a simple philosophy that may be redundant, but it gets the message across: Tell them (i.e., in the introduction indicate your main objectives and briefly tell what you have found), tell them what you told them (i.e., spell out your results in the discussion), and tell them again (i.e., restate your objectives and findings in the conclusion).

You should always thank those who have helped you with your research or given financial support. Most often speakers, wait till the end of their talks to do so. My FIU colleague Professor Phil Stoddard encourages his students to give their acknowledgements at the beginning of their talks. This way there is a smooth and uninterrupted transition between the conclusion and questions. This makes sense; I think I'll try it in the future.

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Anyone, with practice and preparation, can become a good speaker and good speakers can become outstanding ones.

Preparation

Telling a story. A good scientific talk is no different than a good story. Each begins with an introduction, is followed by the main body, and ends with a conclusion. Poor speakers provide an incomplete or incoherent story. Even worse, they tell too many stories at one time. The latter is especially common among new Ph.D.s, who attempt to present 5 years of research in 50 minutes.

In preparing for a talk, the first question to ask is, "What story will I tell?" Foremost, the topic should be of interest to both you and the audience and it should be appropriate for the setting. A departmental seminar usually will differ from a talk given at a professional meeting, where more listeners are familiar with the specific topic. For ethnobotanists and economic botanists, tailoring a talk to a particular audience should not be difficult. Ours is a diverse discipline that employs a variety of methods. We, therefore, should be able to attract the attention of many. Moreover, our subject is innately interesting, since the plant-people relationship is universal. Even so, speakers must be aware of their audiences' backgrounds and interests and adjust their talks accordingly.

The most difficult task, perhaps, is to speak to a mixed group of experts and neophytes. Dr. David Hillis demonstrated remarkable proficiency when he was FIU's Glaser Seminar Speaker in 1995. Through a series of 10 seminars, Hillis

instructor, Josh Nolan, when he played in hospitals and retirement homes. A professional musician, as well as a teacher, he taught me an important performance lesson that is equally applicable to speaking. When one audience encouraged us to keep playing after our last set, Josh politely declined. He told me the first rule a professional musician learns is always leave your audience hungry for more. If more speakers followed this maxim, caffeine consumption at meetings could be halved. Skilled presenters, such as Thomas Eisner or David Hillis, tell complete stories but they exhaust neither their repertoires nor their audiences.

For an invited symposium, another consideration in selecting a topic is how it will fit with other themes. Usually, a presenter does not know what others will say until abstracts are published. Nonetheless, it is a good idea to carefully read the summaries of other papers presented in your session and then to modify your presentation as necessary. Skilled speakers will even make adjustments on the fly by referencing remarks of earlier speakers.

Preparing the story. Once a topic has been selected, the next step is to prepare the story's introduction, main body, and conclusion. During your introduction, you must capture the audience's attention and convey the importance of the topic. The first few words are critical and many poor seminar speakers lose their audiences at the onset. Consider the following questions.

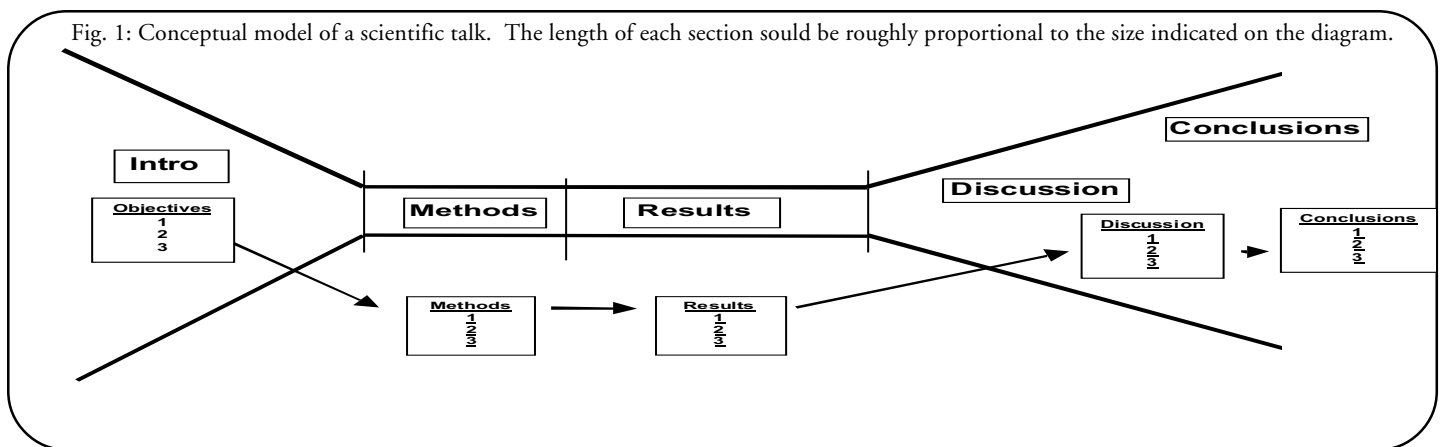
In the Classroom—The Three Ps

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Outline or Full Draft. If you want to be certain of boring your audience, write out your talk and then read the transcript verbatim. Reading may be effective at book fairs but not at scientific meetings. Written communication, of course, has its purpose (that's what journals are for). The oral format, in contrast, offers a different way to communicate that permits you to present your data in a more flexible and personal way. Still, there are advantages of preparing a full script of a talk, especially for beginning presenters. It helps develop confidence and ensures that

Timing. Never, never, never speak longer than your allotted time. Speaking too long shows disrespect for the audience, the moderator, and speakers who follow. A good moderator will not allow a speaker to exceed the limits, but many moderators are timid. During one meeting I attended, the organizer handed out party noisemakers. At the beginning of each talk, he started a timer that was visible to both the speaker and the audience, which he instructed to alert the speaker when time was up. From fear of embarrassment, everyone finished early. In practicing,

Tables and figures should have straightforward legends, labeled axes, and clearly designated units. A recent seminar speaker presented data from her published papers but used simplified versions of her tables and figures, going so far as to remove page numbers and table numbers. I liked that approach. With no numbers, the sequence the tables were shown did not matter and it was easier to eliminate or add additional slides. Non-text slides should be clear and the subject obvious. This is the time to pull out your best slides. Dr. Mark Moffett was a keynote



you cover all of your objectives in a logical fashion, but never read the text or even use it as a guide during your talk. If you need a prompt, put your outline on note cards (you are guaranteed of losing your place if you use a 10-page manuscript for your cues). I seldom write out a talk, rather, I begin by preparing an outline. With the outline complete, I select existing slides from my file and then prepare additional transparencies text slides, figures, and tables, as needed. On a light table, I arrange them in the desired order and begin removing non-essential ones until I have a manageable number.

Whether using notes or not, the rules of writing apply to speech. Use short, well-known words and the active voice. Eliminate extraneous words and jargon. Oral presentations allow you to communicate with both the meaning and the sound of a word. Speakers can emphasize different points with changes in tone and volume and they can demonstrate their excitement for their topics by the sound of their voice. Just as with written communications, speakers should demonstrate knowledge of the literature by citing relevant publications. Several years ago, a job candidate presented a talk on epiphytic plant communities in Central America. The research was well designed and the conclusions were valid but the candidate never mentioned other studies on New World epiphytes. It was like claiming responsibility for inventing the wheel. The candidate, needless to say, did not receive my vote.

try to finish your talk in about 80% of the allotted time, thereby allowing time for questions.

Visuals Aids. Slides and overheads are, to a speaker, what props are to an actor. Good visual aids are a must for illustrating points and for holding the audience's attention. Only the most skilled speaker can make a presentation without them. Until recently, 35 mm slides were the most common option and, not surprisingly, the use of poor-quality slides is still too frequent. The use of too many slides is another common error.

The first rule of thumb is clarity. A slide should contain no more than 2 or 3 points and no more than about 25 words. How many times have you heard a speaker say, "I know you can't see everything on this slide, but..."? If everyone in the audience can't see it, don't show it! This requires that you know the size of your audience and the science of the room, in which you will present. Use bullets, short phrases, large type, and appropriate colors. PowerPoint has radically changed the look of presentations but a good slide need not be a multicolored masterpiece. Black bold-type on a white background is perfectly acceptable but, whatever the form, visuals must be clear and easy to understand. Figures and tables prepared for publications generally are too complex for oral presentations. The reader of a publication can examine a figure for as long as needed, and can refer back to it, if necessary. The typical slide is visible for a minute or less, so it must be immediately intelligible.

speaker at the 1991 International Canopy Symposium at Marie Selby Botanical Garden. He dazzled the audience with his breathtaking photos and no one was anxious to make a presentation after his. Dr. Larry Roberts, an equally talented photographer and colleague at FIU, presented a seminar on marine organisms of the South Pacific. With beautiful pictures and infectious enthusiasm, it was hard not share Larry's delight over nudibranchs and cnidarians.

There is a fine line between excellence and excess. FIU has an outstanding graphic artist named Stacy West. She has the knack for presenting just the right amount of information in a concise and clear manner. With her artistic eye, she can select colors that are aesthetically pleasing and readily visible. Because of Stacy, our graphics are works of art unto themselves. Therein, lies the problem. On several occasions someone has said, "I liked your talk, but who did your slides?" I want the audience to focus on the message not on the art.

Once you have prepared all your slides, the hard part begins: eliminating all but the most essential ones. A rule of thumb is to use about one slide per minute (and never more than two). One economic botanist, whose practices many will recognize, employs so many slides during his talks that he can scarcely show one before moving

Continued on page 9

Jobs and Internships

Graduate Fellowships in Plant Science, The City Univ. of New York

Graduate research assistantships are available for students applying to the Plant Sciences Ph.D. Subprogram of the Biology Ph.D. Program of the City University of New York. The Plant Sciences Ph.D. program is a long-standing joint program between CUNY and the New York Botanical Garden, consisting of 30 doctoral faculty. Research areas include: biotechnology and metabolic engineering of plant biosynthetic pathways, natural product biochemistry, medicinal plants and economic botany, signal transduction in plants, plant-microbial interactions, in-vitro production of plant natural products, plant development, ecology, biodiversity and systematics.

To apply, download the Doctoral Program application forms from our web site link to "applications"

(<http://a32.lehman.cuny.edu/PlantPhD>).

For more information, contact:

Dr. Eleanore Wurtzel

Chair, Plant Sciences Ph.D. Program

etwlc@cunyvm.cuny.edu

Department of Biological Sciences

Lehman College, CUNY

250 Bedford Park Blvd. West

Bronx, New York 10468

phone: 718-960-8643, fax: 718-960-7348

Forest Campaign Internship

Description: The Environmental Investigation Agency (EIA) is a nonprofit group that fights environmental crime by documenting and exposing illegal trade in endangered species, illegal logging and international trade in the wood derived from it and illegal trade in ozone depleting chemicals.

The Washington, D.C. office seeks an intern now for a six month duration to research and analyze international trade in illegally produced timber.

This position requires a college graduate with strong writing and research skills; self-starter with excellent organizational, communication, computer skills; and a commitment to environmental protection.

The internship requires a 40-hour work-week and provides a stipend of \$1,200 per month.

Qualified candidates should submit a resume and 1 or 2 brief writing samples via mail to: Seth Horstmeyer seth@eia-international.org Environmental Investigation Agency.

Assistant Professor (Horticultural Therapy)

Applicants must have a Ph.D. in Horticulture or related plant/biology/behavioral science discipline with primary emphasis in Horticultural Therapy or a related people-plant interaction area, such as Biomedicine or Sociohorticulture. Horticultural therapy teaching responsibilities include instruction of undergraduate and graduate courses, and advising horticultural therapy B.S., M.S. and Ph.D. students. Applicants must have teaching abilities to interact effectively with students and special needs populations, expertise in computer-assisted teaching methods, and abilities to work with distance learning technologies. Research responsibilities may include work with (1) human central nervous, autonomic, and immune system responsiveness to plant environments, and (2) related people-plant behavioral sciences. Applicants must have an expertise in biomedical laboratory operation and research methods, and experiences in coordinating biomedical research projects. Applications will be accepted until February 28, 2001 or until filled. For full consideration, send a letter addressing your interest, pertinent qualifications, vita, official college transcripts, and telephone number with three letters of reference to:

Dr. Richard Mattson, Search Committee Chair, rmattson@oznet.ksu.edu.

Department of Horticulture, Forestry & Recreation Resources

2021 Throckmorton Hall

Kansas State University,

Manhattan, KS 66506-5506.

Phone 785- 532-1420, FAX: 785- 532-6949

Past Presidents

The Naranjilla and Relatives after 38 Years, by Charles Heiser

Editor's Note: You may remember the first part of this article was in the Spring 2000 issue, Volume 14, page. 4.

Another lowland species from northern South America, *S. stramonifolium*, has two varieties: one armed with prickles and with fruits 1.2 to 1.8 cm in diameter, and a second that is unarmed and with fruits 1.5 to 2.5 cm in diameter. I know little about this species except that the fruits are very sweet. I have collected the second variety twice in eastern Ecuador. In both places, I thought that it was growing as a weed. An increase in fruit size and a loss of prickles is generally characteristic of domesticates of this section, but I do not know to what extent—if any—this plant is cultivated. I am hoping that my readers can supply me with information.

The fruits of *S. pseudolulo*, an endemic to Colombia, are sold in markets as I discovered in 1965. In my visits to markets in Colombia, if I did not see them I would ask for lulos. At Popayan and at several other places I was referred to this fruit. They were much smaller than other lulos that I had seen and when I cut them open and saw that they had orange rather than green flesh, I was sure that they weren't *S. quitoense*. I later learned the fruits were collected from weeds or wild plants that were fairly common in much of the Colombian Andes where they are known as *lulo común* or *lulo de perro*. The fruits are used much as the true lulo but I find the juice decidedly inferior to it. The most remarkable thing about this species, which I learned when I returned to the United States, is that it had never been dignified with a Latin name. It seemed a little surprising to me that a plant sold in market almost anywhere in the world at that time would never have been given a scientific name.

A delightful flavor and large fruits that are glabrous at maturity make *S. pectinatum* "a promising species for agriculture" (Whalen et al. 1981). It also bears very stout prickles on the stem and leaves and unarmed mutants should be sought. When he lived in Costa Rica, Dr. Jorge Soria became very fond of the juice of this species. Around 1975, he sent fruits to England for chemical analysis and learned that they were very high in alkaloids; Soria discontinued his use of the fruits. Therefore it would seem advisable for anyone contemplating domestication of this species to have the juice analyzed chemically first. This is a lowland species extending to 1,500 m



In the Classroom—The Three Ps

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to the next. His presentations look like motion pictures. Every time the screen changes, the audience must refocus and if they are constantly readjusting their eyes, they will never hear what you have to say. Slide projectors are particularly abrupt when shifting between images. Changing images in PowerPoint are less disruptive and may allow you to use a few extra slides.

Always prepare some form of backup. If you give enough talks with slides, you eventually will suffer through a blown projector bulb or a trapped slide. PowerPoint presentations are guaranteed to fail. I've never sat through more than a few hours of PowerPoint talks without a hard disk crash, upload failure, or incompatibility problem. One former M.S. student ignored my admonition to make overheads as a backup for her thesis defense. Though she recently had used PowerPoint in the seminar room, the equipment had just been reconfigured. After fiddling for more than an hour, we found a projector that was compatible with her computer. By that time few remained for her presentation and those who did, including her major advisor, were not happy.

Depending on your audience and subject, you might use other props. Art Tucker gave a memorable talk at the University of North Carolina when I was a doctoral student. Speaking about plants used in the perfume industry, Art passed around wicks soaked with plant fragrances. The audience of 150+ was enthralled by the flood of olfactory sensations. At the International Botanical Congress in 1999, Professor Michael Donoghue had two assistants roll out a cladogram down the aisle of a long narrow hall. No slide could have made the point more strongly to the audience of 1,500. At the same meeting, Paul



Cox enlisted one of his Swedish colleagues to portray Carl Linnaeus. The ensuing dialog not only informed and entertained those present, but it also proved that Dr. Cox could work as the straight man in any comedic duo. At an FIU seminar last week, one of our graduates discussed male vocalization patterns in dendrobatid frogs. Instead of merely showing sonograms, as is typical of such a talk, she played a short audio file as she explained the details of the sonogram. Although these techniques differ, each left a lasting impression with the listeners. To be continued....

Students

Well, the Student Network is steadily growing and currently has 338 members. (!!) If we all put our heads together, we could really have a powerful international student organization. As students and upcoming professionals, we have the power to shape and direct where ethnobiology is going. We should take full advantage of this opportunity. Also, I'm sure many of you believe that the Network is not living up to it's potential. What can we do to change this? Again, I welcome any comments/suggestions you may have, www.econbot.org/students

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SUMMER CLASSES

For information on 2001
Summer Field Courses, contact
me or visit SEB's web site.

Dr. Bradley C. Bennett, Chair
Education Committee

Dept of Biological Sciences

Florida International Univ

Miami, FL 33199

E-mail: bennett@fiu.edu

You may view the abstracts that are now online and the form that is available as well as by highlighting the new Message Board Feature.

Also members can always review what has been posted on either one of the SEB ListServes by simply clicking on the home page item.
SEB Membership Archive | Student Archive

Publications

Lyle Cracker and Kara Dinda, *Growers Guide to Medicinal Plants*, is published by a new press, HSMP. If you would like to grow medicinals try this guide of 30 plants. It includes traditional use information followed by field conditions, propagation, growing, harvesting, processing, and marketing information. In the appendix they have extended the information to include GAP, good agricultural practices. This is a helpful book whether you are an amateur gardener, cottage industry, or researcher. Send your \$30.00 to HSMP 176 Heatherstone Road, Amherst, MA 01002, 413-545-2347.

UNESCO Sources no. 125, July-August 2000

During the past years, UNESCO has carried out a number of activities related to traditional/indigenous knowledge and its implications for development processes and natural resource management. You are invited to read a special issue on "Tapping into the World's Wisdom" published in "UNESCO Sources, no. 125, July-August 2000" (please find the reference at the end of the message). This issue offers some examples of UNESCO's ongoing activities in this domain, such as the "Best Practices on Indigenous Knowledge" for raising awareness of the role that such knowledge can play in development processes, "Andaman Sea project (Thailand)" aiming at involving indigenous peoples in coastal resource management, and a project in the Cévennes Biosphere Reserve (France) to revitalize traditional skills and techniques.

To further develop these and other activities in an interdisciplinary manner, UNESCO is currently elaborating a programme proposal for 2002-2007 involving its different Programme Sectors. This process is still at the planning stage.

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Book Reviews

Members of SEB, for the first time in several years, I am running short of book reviews for the next issue. Please log onto our web site and peruse the list of available books. If you find something that you would like to review, please contact me by email and I will send the book immediately.

If you do not find a book that you would like to review, please contact me anyhow and see if it has already been sent out, or if I can get it for you. Our reviews depend on reviewers, and I do not like having to go outside the Society to find them.

Finally, if you OWE me a review, please send it to me. There are several that remain outstanding.

Thanks for the help! Dan Austin, Book Review Editor

<http://www.fau.edu/divdept/biology/seb/books.htm>

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Jobs and Internships

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The Botanical Garden of Montreal is seeking a **botanist** (full time) specialised in ethnobotany. Applicants must have a PhD. or a Masters Degree in botany in the field of biodiversity or ecology of population. Candidates will be involved in the research and development department and will participate in the development of the future First Nations Garden that will open in August, 2001. The candidate should be able to communicate in French, the language of work in Montreal.

Applicants should send a resume, letter of interest, and two references as soon as possible to: Michel Labrecque Curator
Montreal Botanical Garden
4101 Sherbrooke East
Montreal Botanical Garden
Montreal, Qc H1X 2B2

Field Botanist. M.S., or Bachelor's degree with five years experience in plant taxonomy, plant identification, field collection, sampling, germplasm acquisition and good general botanical knowledge required. 12 month salary of approximately 30K pending approval. National Center for National Products Research, School of Pharmacy, University of Mississippi. Contact Dr. Charles Burandt (cburandt@olemiss.edu) or visit www.olemiss.edu/depts/HR/joblists/prof

Botanizing the Web

This may be a little out of date, but I would suggest people try, (Editor)

CALL FOR PAPERS: Elements Online Environmental Magazine Upcoming Edition: ETHNOBOTANY

Possible article ideas:

- Wonder drugs from the wild
- Uses of plants from all over New Brunswick
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- i.e.: use of indigenous plants that may be endangered, intensive harvesting of plants
- Your views on this subject
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About us: Elements offers a wide spectrum of environmental information to its online readers through a reader-friendly site that contains articles, poetry, satire, science, personal opinion, audio interviews, and children's stories and a discussion forum.

Our content is updated on a bi-monthly theme based basis, followed by weekly updates of new material. Our content is intended to be challenging, yet focused for the general public's reading pleasure. Elements strive to represent the full cultural mix of our region.

For inquiries please contact:

Christa McMillan webmaster@elements.nb.ca
<http://www.elements.nb.ca/about/submit.htm>

2000 Whitley Award Winner

Tibetan Plateau Project

Gargi Banerji (tppei@earthisland.org)

Tibetan Medicinal Plant Conservation,
Northern India

www.whitley-award.org/winners/banerji.html

As director of Pragma, an Indian NGO, Gargi Banerji has spent the last decade working to maintain the sustainable management of the Tibetan Plateau environment supporting the local peoples who depend on this fragile ecosystem for their livelihood. One of the biggest threats to the Himalayan flora and fauna system comes from the large-scale removal of mountain herbs and plants of medicinal value which are threatened by the increasing demands of the international medical and perfume industries. The region is estimated to contain 10,000 species of plants, of which a tenth are harvested indiscriminately for their medicinal value, without regard for regeneration of species. Government development programmes involving plantations of non-native tree species are further damaging traditional habitats. Furthermore, little of the benefits of commercialisation flow back into local communities.

Gargi's project is a community-based initiative promoting traditional knowledge and customs alongside the commercial development of traditional herbal medicines to ensure sustainable utilisation of the medicinal and aromatic plants. Working in the districts of Lahaul and Spiti in northwestern India and also part of the Tibetan Plateau region, she and her team seek to involve the Tibetan monks (lamas), medicine practitioners (amchis), and local women in the collecting, processing, and benefits of the research and product development, thus improving their social and economic status.

Ethnobotanical research will produce a comprehensive inventory of medicinal plants helping to set priorities for species and the forest areas needing preservation. This will include establishing horticultural nurseries including 'herb orphanages' for rare and slow-growing species and the creation of mixed micro-plantations of endemic species through community forestry initiatives as well as herbal gardens for low-density, high-value plants. Such effective intervention will reduce the habitat destruction and mismanagement of this area of rich biodiversity, which is placing local traditional health and environmental systems at risk and will ensure the rights of the indigenous people over their natural and cultural heritage.



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Past Presidents

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with a somewhat discontinuous distribution from the state of Vera Cruz in Mexico to northern Peru. It has been reported to be cultivated by Indians in the southern part of its range; I would be interested in hearing from anyone who has information on its cultivation.

The last species to be discussed is the most difficult, partly because of a recent name change and partly because so little is known about it. In the monograph (Whalen et al. 1981) we recognized a wild species, *S. lasiocarpum* of southeastern Asia, and a domesticated species of the southern Pacific islands, *S. repandum*. Living material of neither was seen at the time. Now that I have grown the plants, I think it advisable to recognize a single species. In doing so I have been strongly influenced by the work of Kerr (1954) and Hasan and Jensen (1994). I should also point out that what was said about the relationship of *S. repandum* to *S. sessiliflorum* in the monograph and later in my book (Heiser, 1985) cannot be maintained (to put it kindly). Molecular studies (Bruneau et al. 1995) support the close relationship of *S. repandum* and *S. lasiocarpum*.

For reasons I go into elsewhere (Heiser, 1996), the name now used is *S. ferox*. Two varieties are recognized:

1. *S. ferox* var. *ferox*, which occurs wild, or at least once did, from southern Thailand to Indonesia and is readily distinguished from the following variety (as well as from all other members of section *Lasiocarpa*) by having a prickly calyx that grows to envelop the fruit at maturity;

2. *S. ferox* var. *lasiocarpum*, which also occurs wild from India to New Guinea.

Both of these varieties contain cultivated plants that are placed in cultivar groups. Some of these are clearly domesticated and here we find the old *S. repandum*, now treated as *S. ferox* var. *lasiocarpum* cv. group Repandum; the quadrinomial is a little clumsy perhaps, but it shows the relationship much more clearly than the binomial did. The fruits, which may reach 6 cm in diameter, have a strong, pleasant aroma, although one of my friends has described it as a “sickeningly-sweet” smell. The fruits are used cooked as well as raw and for the juice.

Another domesticate is found in Thailand. In going through markets in Bangkok in 1980, I found hairy solanurn fruits of two sizes for sale. Seeds from the smaller ones gave rise to plants corresponding with what was then called *S. lasiocarpum*; seeds from the larger one gave rise to plants that I described as a new variety. Today the latter is known as *S. ferox* var. *lasiocarpum* cv. group Domesticum. The fruits are used to make sauces and sour relish and various parts of the plants are used in medicine.

I would like to devote the rest of this account to *S. ferox* var. *ferox*, for it is the principal reason I wrote this article. I have grown all of the

species and varieties of section *Lasiocarpa* except this one. I would also like to grow it—not to be able to say that I have grown all of them but to try to answer several questions:

1. Is our classification correct? When living material is available the molecular biologist can probably answer this to my satisfaction. Also I can try crossing the two varieties of *S. ferox*. I would expect that hybrids could be readily obtained and would be fertile.

I would be interested in hearing from anyone who has information on its cultivation.

2. The calyx that grows to embrace the fruit in *S. ferox* var. *ferox* is unique in this section. Prickles on the calyx lobes are found in no other species and only very rarely in *S. ferox* var. *lasiocarpum*. What is the reason for these characters? I realize that even with field study, I shall unlikely be able to answer this, but it is, I feel, a question worth asking. I would say these characters afford protection (from what I don't know), but I would also think the hairs on the berries also afford protection. Why the “double” protection in this variety?

3. The prickles on the calyx lobes are rather ferocious (hence *ferox*, more likely Linnaeus so named it because of the prickles all over the plants). As I looked at herbarium specimens six years ago, I wondered how people could collect the fruits without some damage to their fingers. Do the calyx lobes relax as the berry matures? I don't know.

In 1995, I wrote letters to over 50 people—botanists, agricultural scientists, and former Indiana University students—throughout the range of *S. ferox* var. *ferox*, and since that time I have written a dozen more. I have had replies from about one-third of them, and six people have sent seeds, one of these in 2000, from a letter sent to him in 1995. Unfortunately, none of the seeds proved to be of the plant I wanted. In 1999, I spent two weeks in Bali and failed to find the plant. Nor did I find anyone who had ever heard of it. (I used native names not the Latin one but, of course, I was limited in the number of people I could question in English.)

Why haven't I secured seeds? I will suggest several possible answers.

1. The plant is extinct or very rare. I know from the examination of herbarium specimens that earlier in this century it was found from nearly one end of Java to the other and that by the time the *Flora of Java* was written in 1965, it was limited to the eastern half of the island. The great increase in the human population in this part of the world may be responsible for the

decrease in its range. *Solanum ferox* var. *ferox*, however, may occur as a weed in disturbed areas and one would think that many habitats for it would still be available.

2. Could it be that *S. ferox* var. *ferox* has been replaced as a cultivated plant by *S. ferox* var. *lasiocarpum*, because the fruits of the latter are more easily harvested? As I said previously, I think it would be difficult to avoid the prickles in gathering fruit of *S. ferox* var. *ferox*. Perhaps some of the botanists to whom I wrote knew the plant but weren't willing to get prickles in their fingers in order to collect seeds for some American whom they had never heard of.

3. Over the past 55 years, I have often been able to get seeds of plants that I wanted from botanists in developing countries, but I have found it more difficult in the last 15 or 20 years. I think it may be that some people in these countries want to protect their own plants from exploitation in the United States without any return to their own country. People in the poor countries often resent, and rightly so, the attempts to have plants patented in the United States that they consider belong to them. They do not realize that I see no economic benefit to me or to the United States in acquiring seeds of *S. ferox* var. *ferox*. Possibly it may have genes that could be used in the improvement of the naranjilla, which then might help the economy of certain tropical countries in the Americas (and perhaps eventually put it on my table for breakfast).

One final puzzling feature about *S. ferox*—Linnaeus stated that the species came from Malabar, which is a coastal area in southwestern India. In 1954, Kerr wrote that in so far as he was aware the plant had never been collected in any part of the Indian Peninsula and that still holds true. Although the specimen on which Linnaeus based his species has never been located, his description of a plant having a very hairy berry completely covered by the very prickly calyx is so precise that there is little doubt that it is the plant that I have been discussing. The only thing that I can add is that there is a Mount Malabar in western Java. Although *S. ferox* has not been collected near there for 100 years, perhaps the plant grew in this area more than 250 years ago.

In conclusion, let me ask any of my readers going to southern Thailand, northern peninsular Malaysia, Java, Bali, or Christmas Island to please keep me in mind if they see this plant. How do they harvest the seeds? Take heavy leather gloves with them. No, only kidding. What I had proposed to do if I had found the plant in Bali was to use a newspaper to hold the plant and a pocketknife to cut open the berry for the seeds.

Meeting

NEW TECHNOLOGY, ANTHROPOLOGY, MUSEOLOGY AND INDIGENOUS KNOWLEDGE, 17-18 May 2001

Centre National de la Recherche Scientifique, Auditorium, 3 rue Michel Ange, 75016 Paris, France
Co-convenors Dr Barbara Glowczewski (Laboratoire d'Anthropologie Sociale, Centre National de la Recherche Scientifique) and Dr John Stanton (Berndt Museum of Anthropology, University of Western Australia)
barker@ehess.fr email :
jstanton@cyllene.uwa.edu.au

All papers will include interactive presentations : CD-ROM, DVD-ROM, web sites or databases, and, if possible, a video-conference with an Indigenous community in Australia will be scheduled.

Two days are organised to study the impact of new technologies (multimedia, internet) on research and teaching in anthropology, museology and current protocols for the re-appropriation of their tangible and intellectual cultural property by Indigenous peoples.



Past Presidents

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Acknowledgements

There are many people to whom I owe thanks for collecting seeds or helping me in other ways. Here I would like to particularly thank Greg Anderson, Jack Humbles, and Jorge Soria.

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Publications

—continued from page 9

Only limited funds are currently available at UNESCO for cooperation in this domain. We hope that this situation may improve as of 2002, but please keep in mind that UNESCO is not a funding agency and at best can provide only seed funding and support for acquiring funds from other UN agencies.

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www.unesco.org/most or unesdoc.unesco.org/images/0012/001202/120200e.pdf#120208

CRC World Dictionary of Plant Names,

Umberto Quattrocchi, CRC Press, 2000, \$400.00

This is an expansive 4 volume set. There is no other like it in print. It has origins and meanings for over 22,000 genera, 200,000 species, and, when known, lists synonyms, common names, names used in other countries, and bibliographies of the researchers who have contributed to the specific plant. From the most obscure to the most common, Quattrocchi has done a remarkable job with infinite detail for the plant lover and the etymologist. Browsing this book is a rewarding way to spend a few free moments.

In the past, many have wondered why I at times review books that have been in print for a while. Well, my answer is that there are some books that are just great and as younger members join our society, it is an offering to them and other new members. In this issue I am listing two books by Nancy Turner, [Plant Technology of the First People in British Columbia](#) and [Food Plants of the Interior Peoples](#), both Royal British Columbia Museum Handbooks 2nd editions, 1-800-668-0821, info@ubcpres.ubc.ca, www.ubcpres.ubc.ca. I think these books represent excellent formats for any ethnobotanical research and can be used by researchers in the NW United States and Canada up to Alaska.

Nancy is very thorough in her presentation of information in her books. In [Plant Technology](#),

you enter the world of the First Peoples by walking through their environment, and a short, but in depth, discussion of the people, their tribal names and languages, and, finally, the plant materials. It is evident from the writings how much time Nancy has spent talking to many people and how close she has become with these folks to present to the reader the fine details of the cultural aspects of technologies. It is a rich experience complemented by photos of people, products, and the raw materials step by step.

The second text, [Food Plants](#), follows a similar format to [Plant Technology](#). Nancy validates her information by sharing her sources of information and introducing you to several of the First Peoples of the Interior. She includes great details about diets, how to harvest and prepare foods, trade them, and when foods are available throughout the year. The individual listings of the plants are a supplement to this background information, and once again you become part of their lives. In her thoroughness, Nancy includes warnings, when appropriate, on plant use.

Finally, both books have full indices and bibliographies.

Chris Kilham, [Tales from the Medicine Trail](#), Rodale, \$19.95.

Chris travels to remote areas to investigate the rumors of herbal medicine use. He is seeking to validate those plant uses and his book is a presentation of his experiences. Most field researchers are familiar with the rudimentary, often less than desirable accommodations he is faced with during his field work. He includes lots of information about the current hot herbs. My only critical comment is the lack of references within the text, which separates it from a scientific work and his lack of establishing reciprocal programs or development projects in the field and with whom he works. Chris has written other books on current trendy herbs such as his [Kava](#), by Park Street Press. It is a fun read and great for the armchair jungle tourist.

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Ethnobotanews

New York Times,
February 6, 2001

“Remedies: Herbal Relief for Premenstrual Syndrome”

By John O’Neil

An herbal compound made from the fruit of the chasteberry tree was effective in reducing most of the symptoms of premenstrual syndrome, German researchers reported last month in *the British Medical Journal*. The researchers tested dried extract of the fruit of *Vitex agnus castus*, a tree found widely in southern Europe and western Asia. *Vitex* has been used as a folk remedy for premenstrual syndrome for centuries. Traditionally it was thought to counteract sexual desire; in addition to the name chasteberry, it has also been called monk’s pepper tree.

In the study, 170 women suffering from premenstrual syndrome were given either the extract or a dummy medication through three menstrual cycles. About half the women taking the *Vitex* extract reported a reduction in all symptoms except bloating. Only a quarter of the women taking placebos reported improvement.

Since the syndrome can often be difficult to treat and the extract appeared to have minimal side effects, the researchers suggested that it be considered for women not responding to other medications. The full article is found in the *British Medical Journal* 2001;322:134-137 (20 January).

Treatment for the premenstrual syndrome with *V. agnus castus* fruit extract: prospective, randomised, placebo controlled study www.bmj.com/cgi/content/full/322/7279/134.

U.S. News and World Report,
February 12, 2001

The cover story, “The Risk of Natural Cures,” is devoted to dietary supplements. The following are links to the articles: “Natural Hazards: Tonic or toxic?” (www.usnews.com/usnews/issue/010212/altmed.htm); “Herbs Dollars and Lawmakers,” (www.usnews.com/usnews/issue/010212/altmed.b2.htm); “Performance in a Capsule,” (www.usnews.com/usnews/issue/010212/altmed.b.htm).

The media seems to be having a hay day with natural products. In some cases there are valid reasons, but for the most part I believe that the herb industry has not been proactive. The American Herbal Products Association is beginning to change that. We as scientists have the opportunity to collaborate with industry and publish articles that establish botanical, chemical, and biological methods to raise the quality of products. I believe publications also validate traditional wisdom when the plants or remedies in use are founded in ethnobotanical origins, Editor.

Ethnobiology in UK Higher Education—A Survey

<http://www.rbgkew.org.uk/SEB-UK/ethnoedu.htm>

by Mark Nesbitt, Centre for Economic Botany, Royal Botanic Gardens, Kew
(m.nesbitt@rbgkew.org.uk)

The updated version of a survey carried out in 1997 by E. Ball, M. Johnston (University of the West of England) and H Prendergast, L. Thompson (RBG, Kew), is available on SEB-UK’s web site (<http://www.rbgkew.org.uk/SEB-UK/>).

Names, addresses, and web sites have been checked, and degree titles partly updated. There will have been changes in course content (for example, the modules offered) since 1997, so you should always check this in the current prospectus. I have added some courses that were not running in 1997, and would welcome suggestions of any other higher education courses in the UK that should be included. The range of degrees covered here is wide, including anthropology, conservation, archaeology, forestry, and agriculture. This reflects the highly interdisciplinary nature of ethnobiology.

The ethnobiological component of most of the undergraduate courses listed is fairly modest. Many ethnobiologists have studied either anthropology or an area of biology/agriculture for their first (undergraduate degree), and then specialise in ethnobiology at M.Sc. level. A wide range of well-established M.Sc. courses in ethnobiology exists in the United Kingdom, including the new M.Sc. in Ethnobotany at the University of Kent. Most institutions that offer M.Sc. courses also offer Ph.D. research programmes. Many postgraduate programmes offer financial support; the chances of this are much higher if you apply for a course in good time.

Further information on courses in economic botany/ethnobotany is available on the Society for Economic Botany web site (<http://www.econbot.org/>); a brief listing of courses is available through the *Students* link.



Botanizing the Web

—continued from page 10

2000 Rolex Award WinnerDr Laurent Pordié — Tibetan Medicine
“Traditional Medicine for Survival”<http://www.rolexawards.com>

The Tibetan system of medicine was once practiced throughout the Himalayas and beyond. Today, Ladakh in northern India is one of the few places where it remains central to community life. In the past, Amchis, or traditional doctors, provided their skills free of charge, with villagers shouldering their farming chores in return. But the introduction of conventional modern medicine and a growth in social mobility have seen that barter system fall from favour. With it, Amchi skills themselves have begun to disappear.

Laurent Pordié, a French anthropologist and ethno-pharmacologist, wants to re-establish these skills and improve healthcare in the region.

Buddha himself is said to have developed the Tibetan system of medicine 2,500 years ago. It is based on a holistic philosophy, where illness results from an imbalance of bodily or mental states with one of four possible sources: climate, diet, behaviour, or the influence of demons. In Ladakh, the Amchis, doctors trained in traditional Tibetan medicine, pass their knowledge from father to son— although a small number of women also qualify.

In exchange for their healing skills, which they offer free of charge, Amchis have in the past relied on their fellow villagers to take on the bulk of their communal duties, such as ploughing, harvesting, and the raising of livestock. That gave them time to offer consultations and treatment,

Amchi skills themselves have begun to disappear.

and to gather medicinal plants and minerals. Their unique status earned them respect, and they were held in the same esteem as village leaders and monks.

But in the last 20 years, all that has changed. Social mobility has increased and people are less likely to remain for life in the rural communities in which they were born. Village hierarchies are more fluid and market forces have to some extent replaced indigenous barter systems. Moreover, government initiatives to introduce conventional modern medicine to these impoverished areas have led to the marginalization of holistic skills. As a result, these skills are disappearing.

Pordié realized that by reinstating Amchi skills he could improve healthcare in the region and possibly ensure the survival of a group of people who inhabit one of the world's least

hospitable environments. In 1998, he set up a programme called “Traditional Medicine for Survival,” and it is for this project that he was chosen as a Laureate of the Rolex Awards for Enterprise.

Dr Laurent Pordié
NOMAD Health & Education
24, chemin du Roussimort
31270 Frouzins, France

Plant Poaching in the Smokies

Thanks to John George (he was in attendance at the SEB meetings 2000, Editor) on the USFWS Medicinal Plant Working Group who noted that the current issue of the National Wildlife Federation magazine has an article about plant poaching in the Smokies. You can find the article online at the following URL:

<http://www.nwf.org/nwf/natlwild/2001/ginseng.html>

UBC Leads the Way in Ethical**Bioprospecting**

<http://www.library.ubc.ca/patscan/news/fall2000news.html>

Bioprospecting has a black name internationally due to allegations from Old World countries and indigenous peoples that their knowledge of medicinal folk remedies from local flora and fauna is being pirated. No benefits ever seem to flow back to aboriginals or their ecosystems from pharmaceutical companies who purify and patent the active ingredients. (I think there are several of us that have worked on projects that have IPR benefits flowing back to our collaborators. Maybe someone should suggest they join SEB, Editor)

UBC in co-operation with Dr. Raymond Andersen and his collaborators have set a standard for ethical use of bioprospecting research by ensuring that profits from patented biologicals revert to the place of origin.

“This is the first time in the world that anyone has returned revenues to a third world country for intellectual property obtained by bioprospecting,” says Dr. Andersen. “The UBC model is now being copied by many people who do this kind of research, and the US National Institute of Health is holding it up as an example of how this should be done.”

Interestingly, Dr. Andersen and his colleague, Terry Allen from the U. of Alberta, decided on this path of action in the early 1980's before the subject of intellectual property ethics became an issue for Old World countries such as India.

Grazing in the Field**Request**

Most have seen this, but for those of you who are not online with SEB—

Dear Sir/ Madam

The Museum of Botany in the Polytechnic Institute of Beja is located in South Portugal and has about 1,500 items of Economic Botany that cannot be displayed because we do not have the necessary shelves to put them in.

We are trying to obtain 4.000 USD to buy the necessary equipment. Anyone wishing to contribute to our Museum please contact us. We appreciate any contributions that allow us to approach our main goal, i.e., give to those that visit us the best information available about plants and the history of their uses.

Thank you very much for your help.

Luis Mendonça de Carvalho
(lmmc@esab.ipbeja.pt)
Museu de Botanica Escola Superior Agraria de Beja Rua Pedro Soares
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Fax. 00.351.284.388.207



Cross Pollination—A Student's Perspective

Once again, I waited until the last minute to put out a plea for abstracts on the ethnobotany student ListServ. But this time I was rewarded with too many great responses. While we only have space to print one at a time, I'm lucky enough to get to read them all. The others will have to stay on my computer until we have the space to print them. It's further proof that students are doing valuable, interesting work. In this issue, Alice Warren-Bradley from the Florida International University in Miami describes her research on the irapai palm of Peru. Any student interested in airing out research proposals or looking for possible Society feedback should send abstracts to Kurt Reynertson (kreynert@lehman.cuny.edu).

Sustainable Harvest of Irapai (*Lepidocaryum tenue* Mart.) in the Peruvian Amazon

By Alice Warren-Bradley (lwarr01@fiu.edu)

Lepidocaryum tenue is a small, understory palm that is used for roofing thatch by Amazonian people. Rapid population growth in the

Alvarez 1995, and Pinard 1993). Within each plot, all *L. tenue* individual stems will be measured and tagged. Numbers of new fronds produced per stem will be recorded for each of the four size classes. Plots will be censused for a minimum period of one year. Population demographics and life tables of individuals and leaves will be calculated from field data.

Introduction and Research Strategy

Ethnobotany as a discipline is concerned with the interrelationships between people and plants, especially the use, management, domestication, and classification of plants by cultures (Bennett 1996). Ecological sustainability and conservation are concepts that often are interwoven in ethnobotanical research, and manifest themselves as goals of such projects, including the investigation of ways "to strengthen the protection of natural areas and contribute to the well-being of local communities" (Martin 1995). Tropical resource management and conservation increasingly focus on the concept of sustainability. While promising in theory, defining sustainability and development is difficult. Sustainability is directly connected to resource productivity, harvest levels, and demographics.

community needs is collected from wild irapai populations located within a few days travel from Iquitos. These are the same forests from which ribereños collect roofing materials to maintain family homes. The most likely factors affecting the availability of irapai are soil and habitat type. In addition to construction materials, irapai also now can provide economic opportunity for ribereños, although it is not known whether this trade will be sustainable.

I propose to study the effects of thatch harvest on populations of this palm by employing demographic life tables and matrix models to evaluate population leaf production sensitivity and growth compared with different harvest levels. Similar studies have been conducted on *Iriartea deltoidea* in Brazil by Pinard (1993) and in Ecuador by Anderson (1998), and on species of *Thrinax* and *Coccothrinax* populations in Mexico by Olmstead and Alvarez (1995). The objective of this demographic analysis is to determine the stability of palm populations and evaluate impacts of leaf harvesting. Sustainability will be measured through palm population stability and yield continuity. I will travel to harvest locations to collect data that provide insight into the use and management of this resource, and document enhancement planting and agroforestry activities conducted by individuals or communities. Irapai abundance, harvesting practices, and biological factors specific to this palm also can be recorded. I can collect initial market data within the city of Iquitos that yield information regarding the number of irapai palms harvested within a certain distance of the capital, as well as the ways in which they are utilized.

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This study will examine the demography and use population life tables and matrix models to determine the stability of harvested and non-harvested irapai populations around Iquitos, Peru.

region has led to an increased harvest of fronds. The biological, ecological, or economical sustainability of the increased harvest rates are unknown. This study will examine the demography and use population life tables and matrix models to determine the stability of harvested and non-harvested irapai populations around Iquitos, Peru. It also will estimate sustainable harvest levels. Expected results include documentation of abundance and distribution of irapai, estimation of sustainable harvest levels, and recommendations for local resource management.

To describe the population structure of *Lepidocaryum tenue*, four size class categories or stages will be defined. Five study sites within a two-day travel time from Iquitos, Peru, have been selected and include harvested and non-harvested areas. Multiple 5 m x 5 m randomly located study plots have been established at each study site (e.g. Anderson 1998, Olmstead &

The city of Iquitos is the commercial and government center of the Peruvian department of Loreto, which encompasses the majority of the country's Amazonian lowlands. Its population is greater than 250,000 people, and the city is situated along the bank of the Amazon River. The majority of products produced for sale within communities along the Amazon, the Ucayali, the lower Napo, and Marañón Rivers make their way by boat to the markets of Iquitos (Padoch 1988). As international travelers continue to desire an Amazon rainforest experience, Iquitos is also becoming a center for ecotourism. Less frequent guerrilla activity and government stability have improved Peru's reputation in the traveler's eye and, over the last five years, ecotourism around Iquitos has increased significantly (Jensen 1994).

To accommodate ecotourists, construction of lodges and other similar housing also has increased. Roof thatch for both commercial and

SEB 2001 Meeting/Symposium

Schedule

Monday May 28th 8AM-1PM: SEB committee meetings

Tuesday May 29th 8-11:30AM: Economic and Ethnobotany Contributed Papers

Wednesday May 30th 7AM-1PM: SEB Council Meeting...a light breakfast will be served as well as a box lunch for those who are registered

Thursday May 31st 11:30-1PM: SEB business meeting (during lunch)

Friday June 1st 8-11:30AM: SEB symposium

Friday June 1st 11:30-1PM: SEB DEB meal/talk by Isabella Abbott who will be discussing, among other things, the contents of the meal that will be prepared by prominent local chef Herbert Ho

Friday June 1st 7:30PM: SEB Awards at the beginning of the evening presentation by Polynesian navigator: Nainoa Thompson.

Saturday/Sunday June 2nd (many options ranging from all day to part day)

-Museum Curators meeting at the Bishop Museum followed by Chinatown visit

-Tour of Dole Plantations/Research

-Tour of Hawai'ian and Japanese agriculture on Oahu

-Hikes to visit native vegetation sites/view points

-Working experience in Hawai'ian agriculture system (lo'i)

-Guided tour of Chinatown/Vietnamesetown

-A number of other tourist type options will also be available



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