



# Society For Economic Botany Newsletter

# PLANTS & PEOPLE

A biannual newsletter published by and for the members of the Society For Economic Botany

Volume 32

Spring 2018

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Get Ready for the 2018 Joint Conference of the  
Society of Economic Botany  
and the  
Society of Ethnobiology  
in Madison, Wisconsin  
3-7 June 2018

**"Food Security, Sovereignty, & Traditional Knowledge"**



SOCIETY OF ETHNOBIOLOGY



## Travel Scholarships

Students, international participants, and members of Indigenous communities should check EconBot.org for more information about applying for the travel scholarships. We hope to post funding information presently, so sign up soon.

## Indigenous Food Sovereignty on Turtle Island

This plenary symposium is on Monday morning, 4 June 2018. In order to foster dialog among different perspectives, we have invited three Indigenous speakers and two U.S. government speakers.

### Speakers and Topics of the Plenary Symposium:

- *Rowen White*: Seed Keepers and Indigenous Seed Sovereignty
- *Sean Sherman*: The Sioux Chef's Indigenous Kitchen: Revitalizing Native American Cuisine
- *Valerie Segrest*: Muckleshoot Food Sovereignty in the Pacific Northwest
- *Candice Gardner*: The U.S. National Plant Germplasm System Maize Collection—Status, Utilization and Possibilities
- *Katlyn Scholl*: International Frameworks for Germplasm Exchange: An Introduction to the International Treaty on Plant Genetic Resources for Food and Agriculture.



Photo Strip Courtesy of SierraSeeds.Org

Continued on page 3

*Plants & People***The Newsletter of  
The Society  
For  
Economic Botany****Website:  
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**Designer**

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**

Hello again,

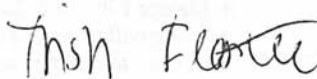
It seems time slips by us, but that is a good thing when we imagine that the next annual meeting is around the corner. Eve and David already have many confirmed speakers and have submitted grants to offer more travel grants. Thank you both for an amazing prelude to our meeting!

We will be joined by the Society of Ethnobiology. We met with them at Cherokee in 2014 and it was a great success in the types of papers we shared, the overlapping disciplines and members with whom we have conversations. See pages 1, 3, 9, and 10 for an update on the meeting in Wisconsin June 3-7, but remember to watch the website for the latest info.

The SEB students have been working hard and have submitted a great report included in the Newsletter. Congratulations! Page 5.

Finally, find choice tidbits sprinkled within these submissions. Please enjoy, but remember we all want to hear about your exploits in economic botany.

Fondly,



Trish



Braised buffalo over polenta, tepary tri color beans, and wild rice salad is an example of the indigenous cuisine. This submitted photo was first published <https://news.wisc.edu/food-sovereignty-events-explore-indigenous-cuisine/> (9 March 2017).

## 2018 SEB Meeting

*continued from page 1*

### Indigenous Speakers:

Rowen White, Indigenous Seed Keepers Network  
Akwasasne Mohawk  
Director of the Sierra Seed Cooperative  
North San Juan, California

Sean Sherman  
Oglala Sioux [Lakota]  
Author, *The Sioux Chef's Indigenous Kitchen*  
Minneapolis, Minnesota  
(Sean will also be our guest chef for the Native  
Foods Banquet on Wednesday evening!)

Valerie Segrest  
Muckleshoot Tribal Member  
Muckleshoot Food Sovereignty Initiative  
Seattle, Washington

### U.S. Government Speakers

Katlyn Scholl  
Foreign Affairs Officer  
Bureau of Oceans and International and Scientific  
Affairs  
Office of Conservation and Water (OES/ECW)  
U.S. Department of State, Washington, D.C.

Candice Gardner  
USDA Agricultural Research Service  
Research Leader, North Central Regional Plant  
Introduction Station  
Ames, Iowa



On Monday afternoon, after the plenary symposium, we will continue to feature talks in the same theme in a highlighted session that features Indigenous Food Sovereignty, and also other aspects of Food Security, Sovereignty, & Traditional Knowledge.

### DEB Lecture

The meeting title, "Food Security, Sovereignty, & Traditional Knowledge" is perfect for our DEB, Gary Nabhan—or is it the other way around, as he has been a pioneer in this field for many years. Gary is an internationally acknowledged natural history writer, lectures constantly, and has a creative focus on slow food, slow money, and other community initiatives that are helping to sustain our society. This will be a great talk from this agrarian activist. To learn more about Gary please go to <https://www.garynabhan.com/>.

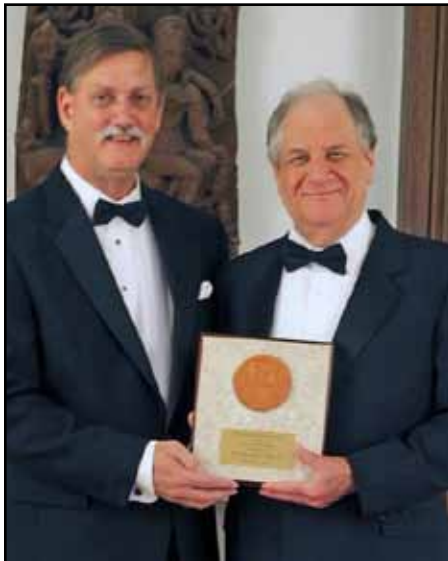


## Our Past DEB Is Honored

Michael J. Balick, Ph.D., Vice President for Botanical Science and Director and Philecology Curator of the Institute of Economic Botany at The New York Botanical Garden (NYBG), has been awarded the 2018 David Fairchild Medal for Plant Exploration by the National Tropical Botanical Garden (NTBG). The Hawai'i-based conservation, research, and educational organization recognized Dr. Balick for a career spanning more than four decades of botanical fieldwork and research around the globe.

The Fairchild Medal, one of the most prestigious awards in the botanical sciences, was presented to Dr. Balick recently at a black-tie dinner at The Kampong in Coconut Grove, Florida, NTBG's historic garden and former residence of David Fairchild (1869–1954), the great plant collector and influential botanist. Like the medal's namesake, Dr. Balick has many decades of experience conducting botanical fieldwork and exploration in regions as diverse as Central and South America, the Caribbean, South Asia, and the Middle East.

To read the full press release, go to:  
[https://www.nybg.org/content/uploads/2018/02/Balick\\_Fairchild-Medal-2018-Release.pdf](https://www.nybg.org/content/uploads/2018/02/Balick_Fairchild-Medal-2018-Release.pdf)



Charles R. "Chipper" Wichman, President, Chief Executive Officer and Director of the National Tropical Botanical Garden, presents the 2018 Fairchild Medal to NYBG's Dr. Michael J. Balick. Photo by Lynda LaRocca.

## Meetings

### Our Farms, Our Future Conference

Date/location: April 3-5, 2018  
 Hyatt Regency, St. Louis, Missouri

Note from the Editor: I hope this is not too late, but it maybe a good contact regardless for future reference. This conference may be of interest to our native plant growers and botanicals producers!

#### What will you learn?

This national event, hosted by the Sustainable Agriculture Research and Education (SARE) program and the National Center for Appropriate Technology (ATTRA) program, will bring together a diverse agricultural community including farmers and ranchers, agribusiness stakeholders, students, researchers, scientists, agency representatives, and nonprofit leaders. Every decade, SARE hosts a conference to examine the progress of sustainability in agriculture and to understand their trajectory for the future.

There are five breakout sessions on 16 tracks over the two days, along with optional full- and half-day farm tours on the third day.

You will be asked to choose the breakout session upon registering, so be sure to read about them first.

Find early bird and Standard rates for general public, farmers/ranchers/, and students.

*Conference website:* <http://ofof.sare.org/schedule/>

*Session Details:* <http://ofof.sare.org/wp-content/uploads/2017/11/Our-Farms-Our-Future-Breakout-Schedule.pdf>

#### Registration:

<https://app.certain.com/profile/form/index.cfm?PKformID=0x2690268f9de>

### ISE/SBEE 2018 Belém +30

XVI Congress of the International Society of Ethnobiology  
 XII Brazilian Symposium on Ethnobiology and Ethnoecology  
 Submitted by Past President Gail Wagner,  
[gail.wagner@sc.edu](mailto:gail.wagner@sc.edu)

**Core Theme**—The rights of indigenous and traditional peoples and sustainable uses of biodiversity three decades after the Declaration of Belém.

#### Subthemes

- Traditional knowledge associated with biodiversity: legal, ethical, and economic considerations;
- Global changes—local perceptions and actions;
- Food—diversity, sovereignty, innovations, gender;
- Historical ecology and landscape ontologies;
- Traditional medicine, cosmology, and biodiversity; and
- Conservation and management of biodiversity—dialog of knowledge and experience.

#### Objective

This Congress is designed to reflect on the Declaration of Belém and the field of Ethnobiology over the last 30 years, focusing on scientific, ethical, legal, and political advances and challenges related to indigenous peoples and traditional populations and the sustainable use of biodiversity.

#### Venue

The Congress will be held at the HANGAR Convention Center, Belém do Pará (Brazil), August 7 - 10, 2018. Although the full schedule is not yet posted, the first day of the event, August 7, 2018, will be reserved for registration activities as well as workshops and mini-courses, to be held in classrooms at the main conference venue.

**Deadline** extended for submissions to ISE/SBEE 2018 "Belém +30": Feb. 20 for sessions, April 5 for individual papers/posters

Submissions of proposals for organized sessions, workshops, mini-courses, and film festivals will remain open until February 20, 2018. Proposals for individual papers, posters, and films will open March 1 and close April 5. A preliminary program will be available April 25. Discounted, early-bird registration will close April 30. Submissions and more information: <https://www.ise2018beleem.com/englishversion>.



## Student Committee News

The Student Committee has been very active and below you will find some of what has completed.

### Guidelines for Students:

#### A Guide for Growth

##### Mission Statement

To cultivate an international and interdisciplinary network of students interested in economic botany, broadly defined.

##### Objectives

Connect members of student organizations with each other and professionals in the Society for Economic Botany to facilitate mentorship-collaborations;

Circulate funding opportunities, research, internships, and jobs to students; and

Advance the discussion of economic botany in the 21st century, including advocacy of research trends to the Society for Economic Botany Council.

Please find the full document posted on the SEB website including the following sections:

History of the Student Committee	2
Structure & Role of the SEB Student Committee	4
Institutional Growth	6
International Student Groups & Chapters	6
Graduate & Undergraduate Programs	7
SEB Student Committee Roster	9
Alumni Biographies	
Affiliate Contacts	

If you would like to contact this committee, please contact Alex O'Neill (alexander.o.neill@duke.edu), or other members listed in the Fall 2017 Newsletter. [http://www.econbot.org/file.php?file=sitefiles/pandp/SEB\\_Fall\\_2017\\_Color\\_for\\_Web.pdf](http://www.econbot.org/file.php?file=sitefiles/pandp/SEB_Fall_2017_Color_for_Web.pdf).

The Committee is working on your behalf, so please connect, join, get active! Find out about your peers, programs, funding, research topics, and other items of interest!

## Grants and Internships

### Richard Evan Schultes Award

SEB has a spectacular award for students. Named after our Founder and Mentor, the Richard Evan Schultes Award is a large monetary award for field research. Please consult the website where all the details are listed, and names of past recipients and their topics are shown. The application deadline is March 15, 2018.

<http://www.econbot.org/index.php?module=content&type=user&func=view&pid=50>.

### Sigma Xi Grants-in-Aid of Research,

Submitted by Past President Gail Wagner, [gail.wagner@sc.edu](mailto:gail.wagner@sc.edu)

Twice yearly deadlines, can fund \$1,000 to undergraduate or graduate students currently enrolled in degree-seeking programs, and you do not need to be an American citizen or resident. The two deadlines are March 15 and October 1. While membership in Sigma Xi is not a requirement for application, 75% of funds are designated for use by individuals who are members or whose primary advisors are Sigma Xi members.

#### Funding Restrictions

Research grants may be used to support scientific investigation in any field. Below is a description of the types of expenses funded by the Grants-in-Aid of Research Program.

- Fundable Expenses:
- Purchase of specific equipment necessary to undertake the proposed research project;
- Travel to and from a research site;
- Supplies specific to the proposed project not generally available in an institutional research laboratory; and
- Reimbursement for human subjects (psychology studies).

Guidelines for grant applications: <https://sigmaxi.fluidreview.com/res/p/guidelines/>  
<https://www.sigmaxi.org/programs/grants-in-aid/> apply

### The National Socio-Environmental Synthesis Center (SESYNC)

Based in Annapolis, MD, SESYNC brings together the science of the natural world with the science of human behavior and decision-making to find solutions to complex environmental problems. They convene science teams to work on broad issues of national and international relevance, such as water resources management, land management, agriculture, and species protection, among other areas of study. They provide support for teams of researchers from academia, government, NGOs, and the business sector to accelerate collaboration leading to scientific discovery by providing computational support, team process facilitation, education, logistics and travel, and research communications. <https://www.sesync.org/>

I've participated in two of their short courses/workshops, and I cannot speak too highly about what they do there and how much I learned.

Some of SESYNC's current application deadlines include:

#### Graduate Pursuits—Request for Proposals

Deadline: May 15, 2018

SESYNC seeks proposals for independent, collaborative team-based synthesis research by graduate student teams.

#### Introduction to Spatial Agent-Based Modeling:

##### June 2018

Deadline: Apr 02, 2018

SESYNC invites applications for a five-day short course that will serve as an introduction to the theory and practice of spatially explicit agent-based modeling (ABM).

#### Bayesian Modeling for Socio-Environmental Data

Deadline: Mar 15, 2018

SESYNC will host a nine-day short course May 29 - June 8, 2018, covering basic principles of using Bayesian models to gain insight from data.

Continued on page 7



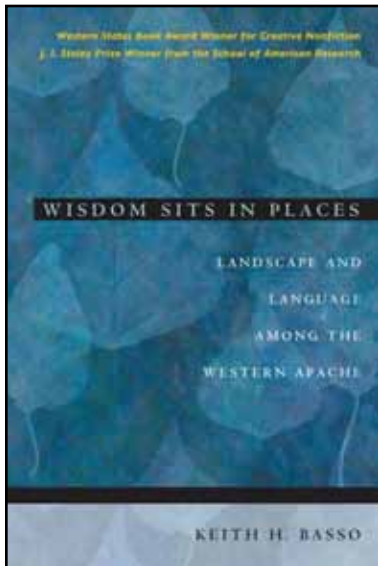
## Education

### Videos and Readings for the Classroom Topic of Worldview

Submitted by Past President Gail Wagner,  
gail.wagner@sc.edu

I like to begin the semester in my Ethnobotany and my Ethnoecology courses by contrasting a generalized indigenous worldview against a generalized western worldview. One can now find many articles or book chapters that go along with this topic, and I'll list for you a few that undergraduate students enjoy.

- Basso, Keith H. 1996. *Wisdom Sits in Places: Landscape and Language among the Western Apache*. University of New Mexico Press, Albuquerque.



- Margolin, Malcolm. 2005. "Indian Pedagogy: A Look at Traditional California Indian Teaching Techniques." In *Ecological Literacy: Educating Our Children for a Sustainable World*, edited by Michael K. Stone and Zenobia Barlow, pp. 67-79. Sierra Club Books, San Francisco.
- Pierotti, Raymond. 2011. "The World According to Is'a: Combining Empiricism and Spiritual Understanding in Indigenous Ways of Knowing." In *Ethnobiology*, ed. by E. N. Anderson, D. Pearsall, E. Hunn, and N. Turner, pp. 65-81. Wiley Blackwell, Hoboken, NJ.
- Salmon, Enrique. 2000. "Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship." *Ecological Applications* 10(5):1327-1332.

A reading that helps me prepare what I want to say is:

- Schelbert, Leo. 2003. "Pathways of Human Understanding: An Inquiry into Western and North American Indian Worldview Structures." *American Indian Culture and Research Journal* 27(1):61-75.

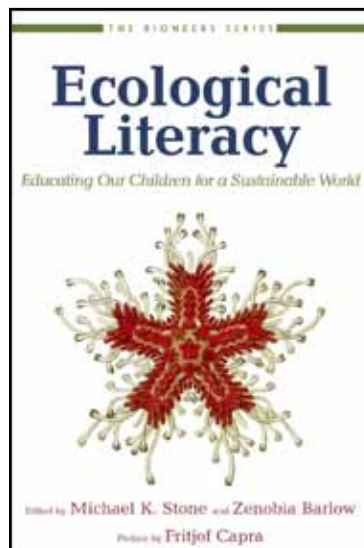
A perfect video to use as a prequel to the worldview topic is this entrancing introduction to the value of biocultural diversity:

- David, Wade. 2003 (21:51). *Dreams from Endangered Cultures*. TED talks. [http://www.ted.com/talks/wade\\_davis\\_on\\_endangered\\_cultures/](http://www.ted.com/talks/wade_davis_on_endangered_cultures/).

A favorite video I use in conjunction with these readings is

- Jennings, Katie. 2006 (58 min). *Teachings of the Tree People: The Work of Bruce Miller*. An Islandwood Production, Washington.

I can't resist sharing with you a few of my favorite quotations or ideas from this wonderful film: Don't teach them all the same thing (they won't need one another and the world will fall apart). The oldest teachings since creation are by the tree people. "The trees remember every experience they've had since they sprouted." "These trees could remember and retain knowledge for us." What do you see when you look at trees on a hill? Many nations of trees. Many generations living side by side in harmony. "If the earth was to remain in harmony, then we would be living like the trees: a multitude of nations living side by side with a common goal—the preservation of the earth that we live on. So trees were our first teachers." In talking about in a fallen tree trunk, Bruce says that its children change its structure and bring knowledge back to life. As Bruce says, "I may be gone, but my breath is still here." Yes, Bruce, it is.



Another video that illustrates several points related to indigenous worldview can be bought from the Museum of the Cherokee Indian in Cherokee, NC:

- Easterling, Nancy. 2001 (26 min). *Take a Closer Look: Plants and the Cherokee*. Cooperative effort by the North Carolina Botanical Garden, The Museum of the Cherokee Indian, and Laurel Hill Press.

A ponderous reading that can be assigned to students if you give them directions on what to read within it comes from a western point of view that makes an interesting contrast:

- Pouteau, Sylvie. 2014. "Beyond 'Second Animals': Making Sense of Plant Ethics." *Journal of Agricultural and Environmental Ethics* 27:1-25.

It pairs well with this short TEDxZurich video by a person who served on the Swiss commission to investigate whether plants have dignity:

- Koechlin, Florianne. 2015 (14:36). *Tomatoes Talk, Birch Trees Learn—Do Plants Have Dignity?* TEDxZurich. <https://www.youtube.com/watch?v=i8YnvMpcrVI>

If you need further discussion on how scientists with western worldviews of plants are now coming closer to understanding more about the applicability of indigenous worldviews:

- Simard, Suzanne. 2017 (19:32). "Nature's Internet: How Trees Talk to Each Other in a Healthy Forest." TEDxSeattle. <https://www.youtube.com/watch?v=breDQqrkikM>

You may want to introduce advanced students to panarchy, a western-viewpoint framework for thinking about human-nature interrelationships that may actually have applications from an indigenous point of view, too. Although an entire book on panarchy edited by L. Gunderson and C. S. Holling was published in 2001, and more recently articles assessing its impact or applicability, I prefer this condensed explanation:

- Holling, C. S. 2001. "Understanding the Complexity of Economic, Ecological, and Social Systems." *Ecosystems* 4:390-405.

You can find many great resources for teaching about and learning from an indigenous worldview on the Native American Science Curriculum web page: <http://www.nativeamericanscience.org/home>.

Finally, to further challenge students' (probably western) views of plants, I most highly recommend the following gem of a book. In fact, rush out and buy copies to give to your best friends!

- Wohlleben, Peter. 2015. *The Hidden Life of Trees*. Greystone Books, Vancouver.

## Grants and Internships

continued from page 5

### Johnson&Johnson Co-op/ Internship Program

Within its Research and Development Department This program offers a great opportunity for students to get some working experience. It is sent in by a student Alum, Kurt Reynertson. Its rolling applications deadlines give many chances to apply, attend, and blend with your educational programs. <https://jobs.jnj.com/jobs/experienceLevel/Student?page=2&keywords=consumer+products+R%26amp%3BD+co-op>

### Morton Arboretum Fellowships

The Morton Arboretum is recruiting applicants for 2018 summer undergraduate fellowships, which run for 10 weeks and cover housing and a generous stipend. Each fellow works closely under one scientist. Morton Arboretum scientists cover a broad range of topics: basic tree biology, forest ecology, arboriculture, biomechanics, root biology, soil science, population biology, genetics, phylogenetics, systematics, conservation biology,

and restoration ecology. The program endeavors to promote critical thinking, self-confidence, and perseverance, while helping prepare students for graduate studies and professional careers in science-related fields.

Information about undergraduate fellowships and the application process can be found at <http://www.mortonarb.org/science-conservation/center-tree-science/undergraduate-research-fellowship/apply-undergraduate>.

Information on the Morton Arboretum can be found at <http://www.mortonarb.org/> and information on research at the Arboretum can be found at <http://www.mortonarb.org/science-conservation/research-themes>. Students are encouraged to contact lead scientists directly to discuss potential areas of study. Please contact [ctsurf@mortonarb.org](mailto:ctsurf@mortonarb.org) with any general questions.

### Mountain Lake Biological Station

Please look at the University of Virginia's Mountain Lake Biological Station offering for the summer of 2018. The Station is located atop Salt Pond Mountain in the southern Appalachian Mountains of southwestern Virginia.

<http://mlbs.virginia.edu/summercourses>. Of the few courses, most involve animal studies, but maybe?

#### Field Biology of Fishes:

Summer Session I: May 21-June 15

#### Field Herpetology:

Summer Session I: May 28-June 15

#### Wildlife Disease Ecology:

Summer Session II: June 18-July 6

#### Stream Ecology:

Summer Session III: July 16-August 3







### Consumer Products R&D Co-ops and Internships

Johnson & Johnson's Consumer Research & Development organization is offering current university students opportunities to gain invaluable industry experience through co-ops and internships. We offer an interactive team environment, where your capabilities and skills will be developed to build a strong cross-functional career foundation.



Co-ops and interns are assigned to a wide variety of roles within the broad scope of consumer R&D, including:

- Formulation Science and Development**  
Developing, testing, scaling up and troubleshooting new formulated products and ingredients (gels, emulsions, suspensions, creams, foams, lotions, cleansers, etc.)
- Foundational Biology, Measurement Science and Product Efficacy Testing**  
Utilizing biochemistry, optics and cell biology to develop and utilize new methods for testing product efficacy and new claim validation.
- Device and Package Engineering**  
Developing, designing, testing, prototyping and troubleshooting consumer devices, packaging, and manufacturing equipment.
- Consumer Science, Clinical Testing, and Technology Development**  
Connecting various aspects of market research, consumer psychology and perception, clinical studies, computational / image analysis and modeling, and data management to provide technical and market insights into consumer products.

**FOR MORE INFORMATION AND TO APPLY:**

Please visit [careers.jnj.com](http://careers.jnj.com) and search for the appropriate requisition number:

10-12 week Summer Internship (Jun. - Aug. '18): **00001B4F**

6-month Winter/Spring Co-op (Jan. - Jun. '18): **00001B7P**      6-month Spring/Summer Co-op (Apr - Sep. '18): **00001B50**

6-month Summer/Fall Co-op (Jun. - Dec. '18): **00001B5P**      6-month Fall/Winter Co-op (Sep. '18 - Mar. '19): **00001B5Q**

**Applicants must meet the following qualifications to be considered for a co-op or internship:**

- Enrollment in a full-time undergraduate/graduate program seeking a degree majoring in a Science or Technology related field.
- A minimum 3.0 Cumulative GPA at the time of application.
- Ability to work 40 hours per week for the entire duration of co-op/internship term.
- Authorization to work in the United States without limitations requiring no sponsorship for visa status now or in the future (e.g. H1-B status).

Want to learn more? Connect with J&J on the Be Vital app: iOS <http://bit.ly/JNJAppleApp> Android: <http://bit.ly/JNJGoogleApp>  
Search for jobs on [careers.jnj.com](http://careers.jnj.com), find Johnson & Johnson on LinkedIn, and follow @JNJCareers on Facebook and Twitter!

#### About Johnson & Johnson

Johnson & Johnson is the world's most comprehensive and broadly based manufacturer of health care products. We are a global leader in health and personal care, with approximately 127,000 employees in over 85 countries around the world. Johnson & Johnson provides market leading products and services in three business sectors: Consumer Pharmaceuticals, and Medical Devices.

#### J&J Consumer Inc.

J&J Consumer Inc. is a corporate division passionate about research, development and engineering, which develops an array of well-known products in the adult skin and hair, feminine care, oral health, wound care, infant, kids and teen categories. Included are such brand names as BAND-AID® Adhesive Bandages, JOHNSON'S® Baby products, NEUTROGENA®, AVEENO®, CLEAN & CLEAR®, NEOSTRATA®, LISTERINE®, OXIGEL®, ROGANE®, and TYLENOL®.



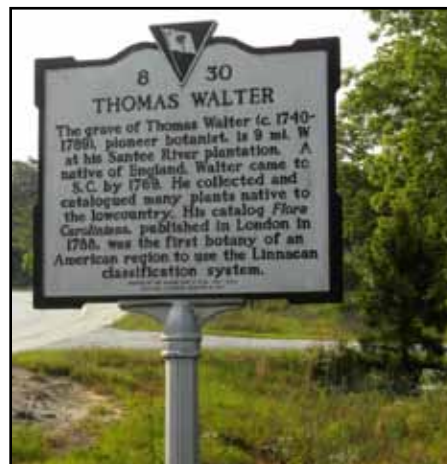
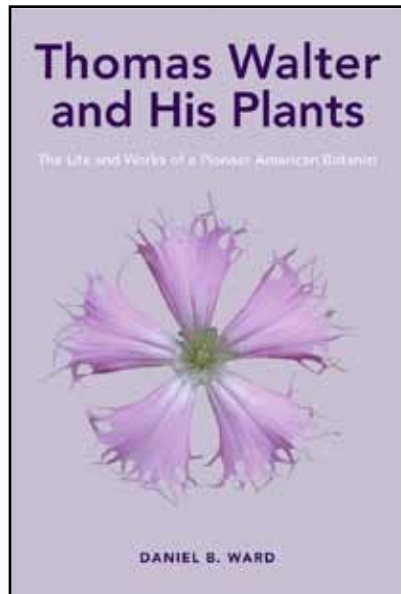
## Publications

### *Thomas Walter and His Plants: The Life and Works of a Pioneer American Botanist*

Giving a landmark achievement of late 18th-century American science new life for the 21st century, *Thomas Walter and His Plants: The Life and Works of a Pioneer American Botanist*, by Daniel B. Ward, is now available from The New York Botanical Garden Press. Part biography, part botanical detective story, *Thomas Walter and His Plants* gathers what is known about the life of Walter, who is believed to have been born in about 1740 and died in 1789, and painstakingly updates the species' names of his *Flora Caroliniana*, the first scientific treatment of the plants of South Carolina's coastal area. Among the 1,056 species Walter identified are such familiar trees and plants as spruce pine (*Pinus glabra*), blue beech (*Carpinus caroliniana*), myrtle holly (*Ilex myrifolia*), and the cabbage or sabal palmetto (*Sabal palmetto*), depicted on the state flag of South Carolina. *Flora Caroliniana*, published in 1788, was the first flora written in America to employ the binomial classification system devised by Swedish botanist Carl Linnaeus that scientists still use today to name plant and animal species.

To read the full press release, go to: [https://www.nybg.org/content/uploads/2017/11/NYBG\\_Press-Thomas\\_Walter\\_and\\_His\\_Plants\\_Release.pdf](https://www.nybg.org/content/uploads/2017/11/NYBG_Press-Thomas_Walter_and_His_Plants_Release.pdf)

Please contact me if you'd like more information or to request a review copy.  
Thanks, Steve  
Stevenson Swanson  
Science Media Manager  
The New York Botanical Garden  
718.817.8512



Roadside Historical Marker



*Sabal palmetto*



Flag of South Carolina  
Sporting a *Sabal Palmetto*

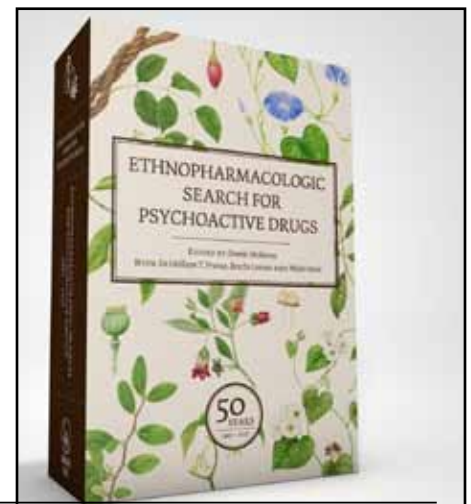
### *Ethnopharmacologic Search for Psychoactive Drugs: 50 Years of Research (1967-2017)*

In June 2017, an esteemed group of researchers met to discuss the last 50 years of ethnopharmacological research and to discuss the future of the field. The result of that gathering is a publication of the Proceedings, *Ethnopharmacologic Search for Psychoactive Drugs: 50 Years of Research (1967-2017)*, edited by Sir Ghilleen Prance, Dennis McKenna, Ben De Loenen, and Wade Davis. Many of these editors have been active participants in the Society for Economic Botany. Some of the pioneers of the field of ethnopharmacology are also some of our Society founders, such as Dr. Richard Evans Schultes and his colleague, Gordon Wasson. Some of the contributors in this volume are active members of the Society, so we can be sure the Proceedings contain some great content.

Dennis McKenna starts the book with a summary of the 50 years of search and discovery of psychoactive drugs since 1967. The remaining presentations are separated by geographic groupings: Ayahuasca and South America, Africa, Australia, Southeast Asia, Mexico, and Central America.

Thanks to the many contributors, including Synergistic Press and many others, for support of this two-volume boxed set (nicknamed ESPD 50). Take advantage of an Advance Purchase deal till mid-March for direct purchases at \$100 for the set, plus shipping. They are happy to extend that presale price to our readers for a while longer. ISBN 978-0907791-68-3  
Retail is \$125.00  
Distributed worldwide by PGW/Ingram

Link to web page: <http://www.synergisticpress.com/shop/ethnopharmacologic-search-psychoactive-drugs-50-years-research/>.





## 2018 SEB Meeting

*continued from page 3*

### Dormitory Housing

Registration for dorm housing will soon be live. Once it is, then conference attendees will be able to register by first following this link, and then choosing our conference. <https://www.housing.wisc.edu/conferences/guest/reservations/>.

Information about the dorms are posted on the registration page at [econbot.org](http://econbot.org). Residence hall accommodations will be available in Ogg Hall (photo below) as early as Saturday, 2 June 2018 through check-out on Friday, 8 June 2018.

Check-in time: 12:00 p.m.

Check-out time: 12:00 p.m.

Rates: Single Occupancy @ \$70.48/night per person; Double Occupancy @ \$47.23/night per person. Rates include breakfast in the Gordon Avenue Market, located across the street in the Gordon Dining & Event Center, and 5.5% Wisconsin sales tax. Payment must be made in full at time of reservation via American Express, Discover, MasterCard, or VISA.

Housing Reservation Deadline: Thursday, May 17, 2018 (11:59PM CST).

Information about Ogg Dormitory can be found here: <https://www.housing.wisc.edu/conferences/accommodations/ogg/>

The room prices include breakfast in the Gordon Dining Center. More about the Center can be found here: <https://media.housing.wisc.edu/documents/conference-services/2018-Gordon-Market-Sell-Sheet-FINAL.pdf>.



Ogg Dormitory on the campus of the University of Wisconsin

### Economic Botany Symposium

#### June 6: American Ginseng

Several speakers have been invited to be on an informal panel about the growing, economics, regulatory, medicinal uses, and cultural aspects of this American native and prized botanical of Wisconsin. This symposium precedes the ginseng field trip listed below on 7 June 2018. More details will be uploaded to the webpage as confirmations are made.

#### Native Foods Banquet Wednesday evening, 6 June 2018

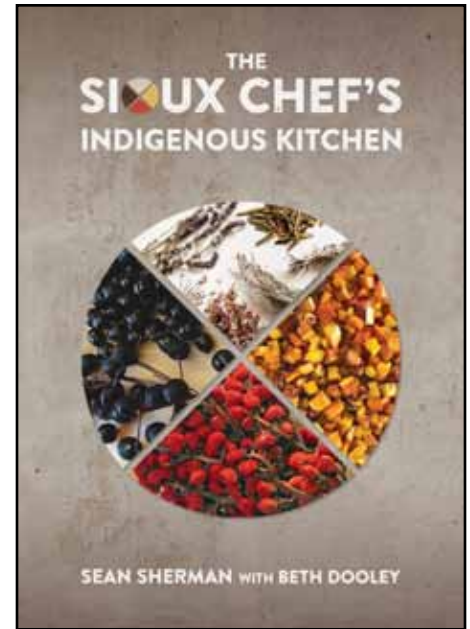
We are very fortunate that our guest chef will be Sean Sherman, founder and CEO of The Sioux Chef and author of a new book by the same name. He will also be one of the plenary speakers in the symposium on Monday morning. We will be able to offer banquet tickets at only \$50, much less than usual for events catered by The Sioux Chef. Much more about The Sioux Chef can be found here: <http://sioux-chef.com/>.

### Field Trips

More field trips are under development, but these are a few that are already planned for June 7th:

#### 1. Ginseng: A trip to Wausau, WI.

This field trip will be led by industry veterans Paul and Will Hsu from Hsu's Ginseng, leaders in the field of American ginseng. Paul is a pioneer and holder of medicinal use knowledge and all things ginseng. We will observe ginseng cultivation and ginseng in the wild, a Chinese food lunch stop with ginseng foods on the menu, and a stop at a ginseng beverage company for some tasting.



#### 2. Indigenous Raised-Bed Agriculture

Dr. William Gartner, Geography Department of UW-Madison, will lead a trip about Indigenous raised-bed agriculture and other land management techniques used for over 10,000 years in Wisconsin. Native peoples have long called south-central Wisconsin home. From the time of the receding Late Quaternary ice sheets through EuroAmerican settlement of the area in the mid-19th century, native peoples played an important role in shaping ecosystems and landscapes here. This tour will highlight the roles of nature and culture in shaping the surprisingly diverse south-central Wisconsin scene of the past 10 millennia, including prairies, oak openings, closed-canopy deciduous forests,

mixed coniferous-deciduous forests, riparian forests, and wetlands. Native peoples used hundreds of plants from these communities for food, fiber, medicine, and myriad other uses. They actively managed their botanical resources through planting, tending, selective tree felling, and landscape burning. We will also see pre-Columbian components of the built landscape in south-central Wisconsin such as effigy mounds and raised fields. As we will see,

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## 2018 SEB Meeting

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native peoples were the original organic and sustainable agriculturalists in Wisconsin, practicing sophisticated raised field agriculture in marginal environments long before the Columbian Encounter.

### *Field Trip #2 Itinerary*

#### *Stop 1) Observatory Drive Overlook*

*Landmarks:* Scenic Overview of Lake Mendota.

*Topics:* Field Trip Overview; Late Quaternary and Holocene Environmental History of the Four Lakes of Madison (Dejope); Winkler Pollen/Limnology Core.

#### *Stop 2) Mendota Mental Health Institute*

*Landmarks:* Effigy Mounds (Raptors and Water Spirit); Forest Succession (Oak Opening to Closed Canopy Maple Forest).

*Topics:* Social Relations and Spatial Structures of Effigy Mounds; Effigy Mounds and Ho Chunk History; Pre-Columbian and Historic Period Fire Regimes; Native American Resource Management.

#### *Stop 3) Natural Bridges State Park (Lunch Stop)*

*Landmarks:* Raddatz Rockshelter; Forest Hike.

*Topics:* Archaic Stage Subsistence Economies (hunting, gathering, fishing); Medicinal Ethnobotany (Medicinal Plants are identified along the forest trail).

#### *Stop 4) Hulburt Creek Raised Fields*

*Landmarks:* Raised Fields.

*Topics:* Agricultural Origins, Dispersals, and Landscapes in Native North America; Raised Field Agroecology.

### *Drive-Bys*

(do not disembark from bus, except possibly for Wollersheim)

### *Morning*

*Sauk City/Saint Aloysius Cemeteries in Sauk City.*

*Landmarks:* Corn Hill remnants; Jonathan Carver's 1766 description of "the great Village of the Saukies."

*Schluckebier Sand Prairie*

*Landmarks:* Prairie and Uses by Native Americans.

### *Afternoon*

*Hulburt Creek Natural Area.*

*Landmarks:* Wetlands, Riparian Forest, and Uses by Native Americans; Catastrophic Drainage of Glacial lake Wisconsin.

*County Highway A mounds and Man Mound*

*Landmarks:* conical and effigy mounds.

### *Devils Lake*

*Landmarks:* Late Quaternary History, Maher pollen core; effigy mounds.

### *Wollersheim Winery*

with a possible tasting stop at the end of the tour

*Landmarks:* Agoston Haraszthy and California viviculture.

### *Aztalan State Park*

Dr. Sissel Schroeder, archaeologist with the Anthropology Department of UW-Madison, will lead a tour of the Aztalan archaeological site, featuring especially the evidence of crop plants and animal foods used by people who inhabited this site from A.D. 1100 to 1250.

These websites give information about Aztalan, considered "the largest and most significant archaeological site in Wisconsin" and the "northernmost known outpost of the Mississippian culture" (both those quotes are from <https://www.mpm.edu/research-collections/anthropology/online-collections-research/aztalan-collection>).

These websites have more information about Aztalan from the state DNR.

- <https://dnr.wi.gov/topic/parks/name/aztalan/>
- <https://dnr.wi.gov/topic/parks/name/aztalan/history.html>



Effigy Mounds—Mendota State Hospital Group, Madison, WI 06-29-2012 by RA Hurd



Deer or rabbit effigy mound near Lake Mendota. Photograph taken in 1914.

# Organic Farming

View the new three-minute video, "Growing Organic," and learn about NRCS assistance for organic farmers.

Organic farming is an ecologically based system that relies on preventative practices for weed, insect, and disease problems, uses nontoxic methods to manage problems if they arise, and improves the natural resources of the land, including soil and water quality.

View the video at <https://youtu.be/t8HmI3StJvc> and learn more at [www.nrcs.usda.gov/organic](http://www.nrcs.usda.gov/organic).



**ASSISTANCE FOR CERTIFIED ORGANIC**

USDA's Natural Resources Conservation Service provides technical assistance to producers who are certified organic or intend to become certified organic. The range of conservation activities that also help meet USDA National Organic Program requirements include:

- Soil health** - EROSION CONTROL, ORGANIC MATTER, NUTRIENT MANAGEMENT, COVER CROPPING
- Biodiversity** - BIODIVERSITY & BIODIVERSITY PLANNING, WILDLIFE, POLLINATION AND NECTAR PLANTS
- Livestock practices** - NUTRITION & HEALTH MANAGEMENT, STRESS FACTOR PLANNING, BEHAVIOR MANAGEMENT, PACKING FACILITIES

NRCS PROVIDES FREE ASSISTANCE TO ALL AGRICULTURAL PRODUCERS. TURN OVER TO LEADS NOW!

**ORGANIC** NATURAL RESOURCES CONSERVATION SERVICE

**TYPES OF ASSISTANCE**

NRCS provides free technical assistance to all agricultural producers. For all programs, producers must intend to meet the National Organic Program's requirements for organic production, and must meet additional requirements for certain programs. Learn more at [www.nrcs.usda.gov/organic](http://www.nrcs.usda.gov/organic)

**ENVIRONMENTAL QUALITY INCENTIVES PROGRAM ORGANIC INITIATIVE**

EQIP provides financial and technical assistance to agricultural producers to help plan and implement conservation practices that address natural resource concerns and the opportunities to improve soil, water, plant, animal, and soil related resources on agricultural land. To qualify for the Organic Incentives, producers must be certified organic, transitional, or emerging from certification. Practices are made in eligible geographical areas, conservation practices and projects identified in an EQIP plan are implemented. Contracts can be up to five years annually, and be up to \$10,000 per acre per year.

**GET STARTED**

Producers should visit their local USDA Service Center at <http://plants.usda.gov> to work with an EQIP representative, or contact their state office to ask for their nearest regional point of contact at [www.nrcs.usda.gov](http://www.nrcs.usda.gov) ([plants.usda.gov](http://plants.usda.gov)), [www.nrcs.usda.gov](http://www.nrcs.usda.gov), or [plants.usda.gov](http://plants.usda.gov)

**Contact Us**

To learn more about opportunities for technical and financial assistance, producers should contact their local NRCS service center, at <http://plants.usda.gov>

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[www.nrcs.usda.gov](http://www.nrcs.usda.gov)  
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## Economic Botany Business Office

4475 Castleman Avenue

St. Louis, MO 63110

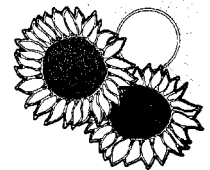
Nonprofit Org.  
U.S. Postage

**PAID**

Permit No. 116  
Lawrence, KS

### Handheld Microscope Recommendations

Submitted by Gail Wagner, Past President, [gail.wagner@sc.edu](mailto:gail.wagner@sc.edu)



Consider buying a Handheld Digital Microscope. You can buy a quality product that is inexpensive enough to take out in the field or inexpensive enough to buy for students. A number of years ago, I bought a Celestron Deluxe Handheld Digital Microscope that is wonderful and is still working. I've used it to take photos of moss in the field, seeds, archaeological artifacts (works best with flat items such as ceramic sherds), and even pictures in books. The current price ranges from \$37-\$70. It is small enough to easily pack for the field with a netbook. It is powered through a USB port. It has a built-in 2MP digital camera for capturing images and videos, 10x to 40x magnification (up to 150x on some monitors), 6 LED ring illuminator, and comes with Windows software to capture images and video of your discoveries. You can measure your on-screen photos of specimens with a built-in measurement tool. Computer requirements: CD/DVD drive and USB 2.0 port. UVC plug-and-play with Windows 7, Vista, and XP. Also compatible with Mac OSX 10.4.9 and above (without measurement feature). I'm now thinking of upgrading to a Celestron Handheld Digital Microscope Pro. Check out the various products and shop around for prices, including discounts for buying multiple scopes for education. <https://www.celestron.com/collections/digital-microscopes>.

Find great prices on the Amazon site dedicated to Celestron handheld digital microscopes.

Editor: When I was teaching an ID class through sensory evaluation, we went online and found apps that magnify the raw whole ingredients we were tasting, smelling, touching, and visually inspecting. So if you need a smaller version or a really inexpensive version of a scope, you can use a magnifying app. Not quite the same as the microscope for accuracy, but in a pinch, this was a way to get the lay person excited about the plants.

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