ELECTRONIC MAIL REQUESTS

If you have requested electronic fliers and *Lasthenia* this year, we will process your request at the end of this quarter. We thank you for your patience!

HERBARIUM HAS NEW WEBSITE

The Center for Plant Diversity has revamped its website. We have tried to keep the event notices in the same spot and make the rest easy to negotiate. If you have problems, please contact Ellen at eadean@ucdavis.edu

LASTHENIA

LASTHENIA, the Newsletter of the Davis Botanical Society, is published in collaboration with the staff of the UC Davis Botanical Conservatory and Center for Plant Diversity.

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Winter 2012

DAVIS BOTANICAL SOCIETY

LASTHENIA

NEWSLETTER OF THE DAVIS BOTANICAL SOCIETY

WHATEVER HAPPENED TO *ASTER*? *JEPSON II* IS OUT AND GUY NESOM BLITZES THE HERBARIUM

How often do we think of the herbarium, with its painstakingly precise identification, detailed specimen mounting procedures and extensively documented loans as a virtual whirlwind of intense activity? It happened over four very long days in November when Guy Nesom came to curate our collections in parts of the Asteraceae (the daisy family). As one of the authors of the Asteraceae genus/species identification keys and descriptions in the *Flora of North America* volumes, he is a current acknowledged expert. All those blue-to-purple rayed plants that look alike to many of us when we're hiking in the Sierras in late summer do *not* look alike to Guy Nesom.

After completing his graduate study at the University of North Carolina, Nesom taught at Memphis State University, was curator at the Lundell Herbarium at the University of Texas, and served as research botanist at BRIT, the Botanical Research Institute of Texas, to list only the longest tenures on his cv. Most recently he has contracted with the Flora North America Project (FNA) to prepare treatments of all or part of numerous families.

As readers may recall from Dan Potter's workshops on name changes in the now just-published (January 2012) *Jepson Manual II* (the revised flora of California), phylogenetic research has led to many changes in plant names in recent years. An article in our last newsletter reported on the herbarium's project to update our collections to reflect the changes. Nesom performed two functions simultaneously: sorting specimens according to the new genus names and correcting any misidentifications he encountered.

***Symphiotrichum spathulatum* (the new name for *Aster occidentalis* - western Aster). Photo: M. Starbuck**

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THE SEEDLING HAS GROWN: $100,000 DONATION GIVEN TO CONSERVATORY!

The Davis Botanical Society planted the seed for the Conservatory endowment in 2004. Now the seedling has grown. This past November, Ernesto Sandoval, Conservatory Director, learned that the Conservatory was the beneficiary of a $100,000 bequest to be used for the improvement of their facilities. Approximately $60,000 will be used to bring the Conservatory endowment to $100,000 (the gift that keeps on giving), while the balance will be used to improve the Conservatory's water quality. To be specific, Ernesto will switch their irrigation water source from deionized to reverse osmosis water, which will benefit the plants, cost less, and waste less water.

Who was responsible for such a generous gift to the Conservatory? A Tuesday volunteer propagator, Frances "Fran" Edna Mara, who volunteered at the Conservatory from 2005 until a month before her passing on November 7, 2011. Fran moved to Davis from Napa County to be near her daughter Paula Mara and son-in-law Kurt Kabica, both then with the UCD Dept. of Viticulture and Enology. One day Kurt was in the greenhouse next to the Conservatory and happened to ask Ernesto if they needed volunteers, mentioning that his mother-in-law was an enthusiastic gardener and propagator. Ernesto thought that Tuesday mornings might work, and from then on, Fran came to the Conservatory nearly

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THE SEEDLING HAS GROWN (CONT. FROM PAGE 1)

Intern Jenny Tiet practices pruning after learning about plant hormones and proper pruning techniques. Photo: E. Sandoval

every week, something that Fran very much looked forward to. She was a big help and primarily enjoyed propagating plants for the plant sales. Her independence and strong desire to help the Conservatory made her a joy to work with for the Conservatory staff.

Along the way, Fran observed the many students who came to the Conservatory either as part of a tour or as undergraduate interns. She was impressed with the numbers of students served and the way the facilities were made available to them, and she decided she wanted to do more for the Conservatory.

One Tuesday, Fran initiated a conversation with Ernesto about a donation. Ernesto encouraged her to make the gift while she was alive and could enjoy seeing the results of the fertilizer she would be adding to the plant, but Fran was not one to enter the limelight. She preferred to make a planned giving donation and wrote the Conservatory into her will.

A late summer donation of a large staghorn fern yielded many plant sale specimens that were prepared by interns Allyson Ayalon and Sundar Cheruki. Photo: E. Sandoval

Intern Jenny Zhao preparing yet more staghorn fern specimens in the Conservatory headhouse. Photo: E. Sandoval

Many, many thanks to Fran and her family for supporting the Conservatory in this way. Her gift will benefit both plants and students for many years to come. We can only hope this generous gift will help stimulate more donations to grow the Conservatory endowment and fertilize the possibility of a new Conservatory!

E. Sandoval and E. Dean

PLANNED GIVING

Fran Mara at the 2009 graduation of her daughter Paula. Photo: E. Sandoval

Making a bequest in your will to an organization, as Fran Mara did, is called planned giving. It is a way to have some control over what will happen to your estate after you are gone, and it is revocable (you can change your mind as many times as you want to).

The reasons that donors make charitable bequests are as varied as the donors themselves, but perhaps one common denominator is a sincere desire to give back to a particular organization with which they have a positive relationship. As you can see from the Conservatory's experience, planned giving can have a wonderfully positive impact on small museums that are struggling to raise endowment funds.

Making a bequest is as simple as inserting a few sentences into your will, such as, "I give $10,000 to [name of charitable organization]." Bequests are not only easy to make, but they also benefit your estate (and your heirs) by lowering the estate's tax liability; your estate is entitled to an unlimited estate tax charitable deduction for bequests to qualified charitable organizations.

With improvements to the Conservatory watering system (changing from distilled to reverse osmosis water), plants like this rare osa (Osa pulchra, endemic to Costa Rica) will require less fertilizer and may flower more profusely. Photo: E. Sandoval

More information on planned giving is available at the UC Davis planned giving website at: http://www.gftpln.org/Home.do?orgId=445

E. Dean

RECENT GIFTS

Herbarium Endowment
Eric Conn
Beth & Raymond Corbin
Gerald Dickinson
Lewis Feldman
Gordon & Delia Harrington
Julie Knorr
Pam Muick
Sue Nichol
Barry Rice & Elizabeth Salvia
Mandy Tu & Philip Rogers
J. Giles Waines
Alan Whittemore
Roger Willmarth

Herbarium Operations
Willa Pettygrove

Herbarium Gifts in Kind
Judy Jernstedt
Michael Barbour
Ellen Dean & Thomas Starbuck

Conservatory Endowment
Eric Conn
Rebecca & Fred McWhorter
Estate of Frances Mara

Conservatory Operations
Carole Ludlum
Tim Metcalf
Ruth Richmond
Peninsula Succulent Club
San Francisco Succulent Club

Davis Botanical Society Student Grants Fund
Eric Conn
Pam Muick
Frederick Ryan
Roger Willmarth
Marie Jasieniuk & Frank Roe

Jack Major Student Grant Fund
Mary Major
Marcel Rejmanek & Eliska Rejmankova

Thank you for your support!

LESLIE DAVID GOTTLIEB 1936-2012

We are very sorry to report that Les Gottlieb, Davis Botanical Society member and Society President from 2003 to 2004, passed away on January 31, 2012 from pancreatic cancer. Les came to UC Davis to join the Department of Genetics in 1969, finishing his career as part of the Department of Evolution and Ecology. He and his wife Vera Ford (also a scientist) were consistently strong supporters of the herbarium during that stressful time when we were raising funds to build our new facility (now called the Center for Plant Diversity).

A specialist in the genera *Clarkia* (farewell to spring) and *Stephanomeria* (wirelettuce), Les was a frequent visitor to the herbarium. Jean and Ellen (and numerous undergraduate assistants) assisted him with his *Flora North America* treatment of *Stephanomeria*. We requested over 8,000 specimens on loan from numerous herbaria across the country and then assisted with their annotation. That treatment was then revised and included in the new *Jepson Manual II*. When it came time to describe a new species of *Stephanomeria, S. fluminea*, he came by several times to discuss his choice of specific epithet. The epithet "fluminea" means "pertaining to rivers" in Latin; the species grows in river cobbles in Wyoming. Our herbarium is home to hundreds of Gottlieb herbarium specimens making it a resource for anyone with an interest in *Stephanomeria* or *Clarkia*.

***Clarkia* at Pine Hill Preserve, 2010. Photo: M. Starbuck**

Les was born in New York City. Following a Bachelor of Arts degree from Cornell University in 1957, he earned a Master's degree from Oregon State University in 1965, where he studied hybridization between species of manzanita in southwestern Oregon. His PhD at the University of Michigan in 1969 examined patterns of diversity and mechanisms of speciation in *Stephanomeria*. During this time, he realized that if he studied recently evolved species, he could compare them to their progenitors, and where else to study this phenomenon but in California? At UCD he researched a broad array of subjects including plant speciation, polyploidy, biochemical evolution of isozymes and molecular genetics. He will be long remembered as a pioneer and strong advocate for the application of biochemical and molecular data to plant systematics. Many of his studies dealt with rare and endangered species.

In 2004, Les and Vera retired from UC Davis and moved to Ashland, Oregon, where they enjoyed hiking and botanizing. Les was active in the Native Plant Society of Oregon and served as Chair of the Rare and Endangered Plants Committee. The UC Davis Center for Plant Diversity staff and associates will miss knowing that Les is in the world – the botanical community has lost another knowledgeable and enthusiastic scientist.

E. Dean and Aaron Liston

WHATEVER HAPPENED TO ASTER? (CONT. FROM PAGE 1)

Guy Nesom. Photo: Genevieve Nesom

The genus *Aster* was a primary Nesom target. The name *Aster* now applies mainly to plants originating in Europe. There is only one native *Aster* in the United States (an eastern plant that comes down from Canada) and one introduced *Aster.* The California *Aster* species have been divided into seven genera, none of which is *Aster*. Another Nesom target was the cudweeds, previously in the genus *Gnaphalium* (now divided into four genera in California, one of which is still *Gnaphalium*).

Starting early and working into the evenings, Guy reviewed our specimens and sorted them. Ellen Dean oversaw a changing group of volunteers and students who prepared and pasted the small determination labels that went on each specimen with a name change. Guy could usually keep four people busy typing and pasting, and every horizontal surface was covered with folders and specimens.

After he'd finished with the Asteraceae, Guy moved on to his current project for FNA: *Mimulus,* the monkey flowers. (In the new *Jepson II*, that name hasn't changed yet, but it's in a different family: Phrymaceae.) Again he reviewed our collections for accurate and current identifications, while gathering data for the forthcoming treatment. Two local *Mimulus* specialists dropped by one afternoon to talk about some of the current questions on species; sometimes it's fun to eavesdrop inconspicuously, even if you don't understand everything that's being said. It was during that meeting that Guy used the memorable phrase "blitzing the herbarium," to describe his brief, focused visits. He left Davis to go to the herbaria at UC Berkeley and the California Academy of Sciences to gather additional information from those collections.

The new *Jepson Manual II* hasn't made life easy for people who hesitate over scientific names, but the herbarium's collections are up to date and ready to help. And Ellen gathered information for her Asteraceae workshop (see adjacent text box) and our January herbarium tea, which focused on the Asteraceae.

K. Mawdsley

Participants in Ellen Dean's February Asteraceae workshop learned how to distinguish new genera in the new *Jepson Manual II*. Ellen had prepared charts and lists, placed the inflorescence "heads" of the genera that used to be in *Aster* in Petri dishes, and prepared microscope demonstrations of tarweed fruit types. Unfortunately, Ellen mixed up some Petri dishes. It went like this:
Ellen: "…and here are the heads of *Eurybia,* which have phyllaries with white bases, as shown in my chalkboard drawing on the board….."
Student 1: "Nope, can't see it"
Student 2: "The bases look like that chalkboard drawing of *Symphyotrichum* phyllaries."
Ellen: "Maybe the white bases are just on the inner phyllaries?"
Student 2: "Well maybe…."
Student 3: "My phyllaries look a little bit like the *Eurybia* drawing."
Student 1: "Nope, can't see it."
Ellen: "Oh darn, those are *Symphyotrichum* heads!!! I handed out the wrong dishes. At least you could tell that they were *Symphyotrichum* heads! These darned plants all look the same, purple rays and yellow disk flowers."
Student 4: "Thus the reason for this workshop."
And it continued on in the same vein…..

THANKS TO OUR HERBARIUM VOLUNTEERS!!!

Sunday volunteers Diane Velasco and Karen Kasuba. Photo: E. Dean

We have been curating our herbarium to bring it up to the taxonomic standards of the new *Jepson Manual II*. This has meant rearranging some of our plant families. Our undergraduate assistants lumped Aceraceae and Hippocastanaceae into Sapindaceae and made many smaller adjustments. However the larger rearrangements required more manpower, and we enlisted our Sunday volunteers to help.

At December's volunteer Sunday, we moved Sterculiaceae, Bombacaceae, and Tiliaceae into Malvaceae, which required pasting a new label (saying Malvaceae) over the replaced family on our genus folder tags. The Scrophulariaceae was much more difficult. At our October volunteer Sunday, we had to look up each genus and see what its current family assignment is (Scrophulariaceae, Orobanchaceae, Plantaginaceae, or Phrymaceae) and then redo the tag on the genus folder. At December's volunteer Sunday, we then rearranged the folders into their new families.

We could not have accomplished this task without our volunteers led by Kate Mawdsley. David Popp provided needed height. Roger Willmarth, Julie Yoshihara, Bill Haley, Diane Velasco, Karen Kasuba, Nancy Tyler, and Susie Nishio helped refolder and file. Thank you!!!

Volunteers Kate Mawdsley, David Popp, Susie Nishio, and Nancy Tyler rearrange the Scrophulariaceae. Photo: E. Dean

BILL B. FISCHER, WEED SCIENTIST, 1921 - 2012

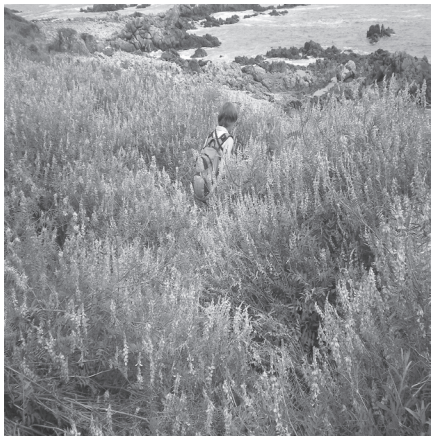
Bill Fischer, a Cooperative Extension weed advisor in Fresno County for 35 years, passed away January 30, 2012 at the age of 90. Bill was born in Czechoslovakia in 1921 and came to the U.S. when he was 18. He attended Ohio State and then UC Davis where he received a M.S. in horticulture. Fischer was devoted to helping growers fight weeds, and you could often see him in his pickup truck, driving along the shoulder of the back roads of the Central Valley, surveying orchards, vineyards and fields. He took a leadership role in weed science in California, especially in the identification of weeds.

Bill had strong ties to the Center for Plant Diversity herbarium through his work on the *Grower's Weed Identification Handbook*, which was the main resource for weed identification in California until the publication of DiTomaso and Healy's *Weeds of California and other Western States* in 2007. Bill began the *Handbook* project in 1968 and continued revising and adding to it until its final publication in 1998. He was helped greatly in his work by then herbarium curator June McCaskill, who identified many plants for Bill and co-wrote or edited many of the entries in the *Handbook* until her retirement in 1993. Although Bill retired in 1991, he continued to be interested in weeds for another 10 years, and he would often communicate with current herbarium curator Ellen Dean who arrived in 1995.

Bill is survived by his wife of 56 years, Jane. Donations in Bill's memory can be made to the Bill and Jane Fischer Vegetation Management Scholarship Fund, UC Cooperative Extension, 1720 South Maple Avenue, Fresno, CA 93702.

E. Dean

GOAT'S RUE (*GALEGA OFFICINALIS*) A POTENTIALLY IMPORTANT INVADER IN CALIFORNIA



Dense stand of goat's rue on the coast of Chile at Quintay, 80 km west of Santiago. Photo: Marcel Rejmanek

There are only a few invasive (i.e., alien and spreading) plant species in Mediterranean-climate areas of South America that are not present in California. One of them is *Galega officinalis* L. (Fabaceae). Its common name, "goat's rue," indicates its toxicity to goats. Other common names are "professor –weed" and "French lilac." This species is native to the Middle East and, due to its use as a green manure and ornamental, it is now naturalized in many parts of Europe and Asia. It is also naturalized in Peru, Argentina, and Chile, where it has been known since 1893. In 1891, *G. officinalis* was introduced to Cache County, Utah, for use as a forage crop. It escaped cultivation there and is now on the Federal Noxious Weed List in the United States.

This species is a common agricultural and environmental weed in seven out of 13 bioregions in continental Chile. Driving on Ruta 5 from Santiago to Temuco, you will frequently see it lining both sides of the highway. It is particularly common in some coastal areas with habitats similar to those in California. Besides Utah, *G. officinalis* has been reported as escaping in CO, CT, MA, ME, NY, PA, RI, VT, and WA. So far, surprisingly, this species has not become naturalized or even reported as a waif in California.

Goat's rue is a robust herbaceous perennial, 40 – 140 cm tall, with odd-pinnate leaves, persistent sagittate stipules, and light blue, blue-purple, or white corollas (Fig. 2).

Each plant produces many fruits, each with +/- 8 seeds. It differs from some superficially similar species of *Astragalus* and *Sphaerophysa* by its monadelphous stamens (all 10 stamens are united by the filaments). As with most legumes, it is likely that this species forms a long-lasting seed bank. Thus, once established in California, this toxic and highly competitive species will be difficult to control or eradicate. If it should be found somewhere in California, its occurrence should be immediately reported to the California Department of Food and Agriculture, either through the local county agricultural commissioner's office, or directly by sending a specimen to the Botany Laboratory, 3294 Meadowview Rd., Sacramento 95832 (be sure to include a contact and information as to where and when the plant was found). The smaller the discovered infestation of any noxious weed, the greater is the chance of its eradication.

Goat's rue flowering and fruiting near Valdivia, Chile. Photo: Marcel Rejmanek

M. Rejmanek

BIODIVERSITY OF MEKONGGA MOUNTAIN

Editor's note: The lead story of the Winter 2009 issue of Lasthenia reported on the awarding of a grant to the campus museums for field explorations on the island of Sulawesi, Indonesia. The plant portion of that grant has been carried out by Elizabeth Widjaja of the herbarium at the Museum Bogoriense. In this article, Lynn Kimsey, Director of the UC Davis Bohart Museum of Entomology, reports on the project and the vegetation of Sulawesi.

Since 2009, the staff of the Bohart Museum of Entomology have been working in Sulawesi as collaborators on a grant managed by the U.S. National Institutes of Health. The grant is focused on a broad biodiversity survey (plants, invertebrates, and vertebrates) of Mekongga Mountain and bioprospecting for microbes producing compounds of pharmaceutical or industrial importance.

The biodiversity component of the grant is a collaboration between collections and museums at UC Davis and the Indonesian Institute of Science (LIPI). LIPI is the home of the Museum Bogoriense, which has world class collections of Indonesian plants and animals.

Sulawesi was formed by the collision of the Australian, Indian and Eurasian geological plates and limited volcanic activity. The island looks somewhat like a five-legged starfish. Each of the different "legs" of the island has different geological origins and biota. The northern "leg" of the island, which has been collected to some extent, shares many faunal and floral elements with the island of Borneo. The southeastern "leg", where we've been working, is poorly surveyed. The insect fauna at least seems to share some limited relationships with New Guinea.

Sulawesi dominates the region known as Wallacea and is the third largest of Indonesia's roughly 17,000 islands. The island has one of the highest percentages of endemic species in the world, rivaling the floras and faunas of Australia, New Guinea, and Madagascar. More than 60% of the plants and animals are found nowhere else on earth, and the number of new animal species is probably more than 30% of the fauna.

Mekongga Mountain is part of an extensive mountain range north of the city of Kolaka. The mountain rises to an altitude of nearly 3000m. The range is drained by the Mesembo River. Local villagers grow coconut palms, coffee and chocolate. They have also started growing patchouli (*Pogostemon cablin*) beneath the coconut palms. Patchouli is a high cash crop because of its use in medical applications. Unfortunately, patchouli rapidly exhausts soil nutrients.

This is a very wet site. Mekongga Mountain receives about 400 inches (10m) of rain annually. We have surveyed twice a year for 3 years, and each trip it rained nearly every day. When I asked my Sulawesi colleagues about seasonality, dry season versus wet, they explained that the difference between wet season and dry season in the area was that during the dry season it only rained in the afternoon.

Mekongga Mountain is not easy to get to. Each of our survey sites takes the better part of a day to reach on foot. We had to carry in all of our supplies and equipment. Each expedition consisted of about 12 scientists, 6 Chitaka guides and up to 40 porters. The trail followed the Mesembo River, which we had to ford six times to reach the first site.

We sampled five transects at each of six sites, at altitudes of 100m, 600m, 900m, 1500m, 2000m and 2700m. Each transect was surveyed for the plant species and had four malaise traps to collect insects, mist nets to sample birds and bats, and drift lines to sample reptiles and rodents. We also net collected insects and did visual bird counts.

The mountain was extensively logged forty years ago, so the forest below 2500m is second growth. The only remaining large diameter trees in this forest are strangler figs. Even so the vegetation changes dramatically by altitude. Below 900m the forest has extensive and expanding cocoa plantations. The forest is dominated by about 30 species of figs and 12 species of bamboo. There are few if any epiphytes in this forest. The large number of figs supports a diversity of large birds and mammals, including several species of macaque monkey, two hornbills, two species of wild pigs and numerous fruit bat species. We also discovered that the dominant ectoparasites are chigger mites. The understory is dominated by weedy members of the mint family and a diversity of species in the aroid family. We also found what appears to be a new genus of bamboo, but this can't be confirmed by our bamboo specialist from LIPI, Elizabeth Widjaja, until flowers are collected.

Gaultheria celiba, a salal species endemic to the high elevation forest of the island of Sulawesi. Photo: Lynn Kimsey

The vegetation changes dramatically at 1000m, and the climate becomes cooler and wetter. The forest is dominated by tanoak (*Lithocarpus*), ratan palm, and several species of screw pine (*Pandanus*). The dominant ectoparasites are leeches.

At 1700m the forest is cool and wet. We actually wore jackets most days, and at night everyone huddled around the exhaust from the generator used to run black light traps for insects. Much of the forest floor and lower trunks are covered with a thick layer of moss. We found evidence of wild Anoa cows, a species native to Sulawesi, everywhere. We also found droppings left by a native civet, which was not known from this region of Sulawesi. The ectoparasites changed from leeches to Anoa ticks.

From 2000-2700m the forest changes again. It is dominated by tanoak, rhododendron and other boreal elements, including a species of salal (*Gaultheria celebica*). The understory in this elevational range is dominated by species in the melastome family, terrestrial orchids and the pitcher plant, *Nepenthes maxima*. Our 2000m camp was also located next to a 2-acre sphagnum bog.

Over the course of the project we have made many good friends and have collected more than 250,000 insect specimens and thousands of herbarium specimens. To date we estimate that Mekongga Mountain is home to 1000 species of plants and 100,000 insect species. As many as half the insects are new to science!

L. Kimsey

TEACHING AND LEARNING ABOUT ETHNOBOTANY

Although I am a systematist, I have a long-standing interest in Ethnobotany, which I define broadly as the study of direct relationships between plants and people, including past and present human perceptions, uses, and management of plants. My interest was nurtured when, as an undergraduate, I was fortunate enough to take the course "Plants and Human Civilization," taught by Harvard's Richard Evans Schultes. Schultes is often considered "the father of modern Ethnobotany," and one the T.A.s was Wade Davis, one of Schultes's best-known Ph.D. students. Later, I incorporated ethnobotanical perspectives in my Ph.D. dissertation research on systematics and origins of the African yam bean (*Sphenostylis stenocarpa*) and its wild relatives.

When I came to Davis in 1996, I was given the opportunity to develop a course in Ethnobotany; Plant Sciences 141, "Principles and Methods of Ethnobotany," is now offered every other year in the winter quarter. Ellen Dean began co-teaching the course with me in 2000. Ellen expanded the lab portion of the course and helped to acquire a collection of ethnobotanical artifacts previously used in a course taught by Dr. Herbert Baker at UC Berkeley. Those materials, combined with collections of ethnobotanical objects previously used in courses here at UC Davis, formed the basis for our Ethnobotany collection, and we have added many more items over the last 15 years.

Our Ethnobotany collection now has nearly 500 items and is housed in the Center for Plant Diversity. These materials comprise an impressive array of plant products and/or the containers in which such products were originally marketed, including, to name a few: jojoba wax candles, bark cloth from both the New and Old Worlds, blocks of myrrh, and vials containing a remarkable variety of beans and grains. The collection has abundant examples of plant-derived foods, flavorings, fibers, medicines, stimulants, sedatives, oils, gums, and resins, which originate from all corners of the globe and from a diversity of plant structures. If you haven't had a chance to see some of these items, please stop by and take a look.

We display these items in the labs for PLS 141, where we supplement them with herbarium specimens from the main collection, live plants borrowed from the UCD Botanical Conservatory, and, if available, fresh samples, including edible and drinkable samples (all legal, of course) for students to try. Ellen always cooks up a marvelous assortment of edible roots and tubers for the "starchy domesticates" lab, and students discover that true yams (*Dioscorea* spp.) are quite another thing from the sometimes marshmallow-adorned vegetables found on Thanksgiving dinner tables (which are sweet potatoes, *Ipomea batatas*).

We also use materials from the Ethnobotany collection in demonstrations and exhibits for open houses, tours of the herbarium, and other classes. At our recent Museum Day in February, I enjoyed quizzing people about the kind of plant, and the plant part, from which a loofa sponge was derived; very few knew that it is the dried fruit of a species of the genus *Luffa*, a member of the cucumber or squash family. Displaying these items presents outstanding opportunities to discuss the importance of plants to people.

Teaching Ethnobotany over the last 15 years has been tremendously rewarding and lots of fun. The students who have taken the course over the years have included undergraduates and graduate students from a range of majors, who bring a wonderful diversity of perspectives. Students are required to complete two research projects during the quarter. In the first, groups of students conduct original field studies in which they investigate ethnobotanical questions on a local scale, such as the products sold in African and West Indian markets in the Bay Area. The second project is an individual paper in which each student gathers botanical, taxonomic, ecological, historical, and cultural information about an economically important plant. The last lab meeting of the quarter is a pot-luck to which each student brings an edible product related to the plant he or she researched.

Ethnobotany is a field of study that powerfully captures the imaginations of many students. It is also a field of great interest to many researchers and educators, including a rather small but dedicated group who make ethnobiology a primary focus of their professional activities. Over the last six months, I participated in two meetings of the Open Science Network in Ethnobiology (OSN), an NSF-funded project. The goal of the network is to promote education in ethnobiology by providing opportunities for educators and students to share information and ideas through in-person meetings and the use of web-based technologies.

At each of the two meetings, the first held in Baltimore in November, the second in Fort Worth in February, a group of about 25 faculty members who teach ethnobiology at universities throughout the US spent a weekend discussing approaches to delivering and assessing such courses. Participants shared ideas gained from their individual teaching experiences. Two of my favorites came from Gail Wagner at the University of South Carolina. Students in her Ethnoecology course design and produce YouTube videos in lieu of term papers and they also contribute to an online repository of information on bio-cultural diversity, consisting of ethnobiological accounts gleaned from interviews with family and community members. Access to this repository will soon be opened up to classes at universities worldwide, and I hope to use it in PLS 141.

It was inspiring to engage in discussions with this very motivated group of ethnobiologists. I look forward to continued communications with them and using some of the ideas that are being generated by OSN participants. I also welcome suggestions, ideas, and contributions of ethnobiological stories, images, objects, and insights from any and all Davis Botanical Society members.

D. Potter