



BOTANICAL RESEARCH
INSTITUTE OF TEXAS

BRIT LEAFLET

Our mission is to conserve our natural heritage by deepening our knowledge of the plant world and achieving public understanding of the value plants bring to life.

Plant Education: Who's Minding the Gap?

Please join us as Pat Harrison, BRIT's Senior Vice President and Director of Education, leads us in a round table discussion as we explore "Plant Education: Who's Minding the Gap?" With plant science education rapidly declining on all academic levels, from Pre-K through graduate school, there is concern that individuals don't have access to the training needed to fill essential jobs in science and resource management. Where are the gaps? How can organizations like BRIT and others in the community support not only the current and future workforce, but lifelong learners eager to better understand the plant world? Join the conversation as we explore solutions from within our community.



July 5, 2016, noon - 1 p.m.

Win a Free Membership in Exchange of Your Best Photograph

We want to challenge you to snap a photo and submit it to BRIT to be used as a new header for this newsletter. It has to be a photo you've taken that best represents in your mind **BRIT's mission to conserve our natural heritage by deepening our knowledge of the plant world and achieving public understanding of the value plants bring to life.**

Every month there will be one photo selected to use as the header for this publication and we will explain why the photo was chosen. Your photo will be featured on this publication and in our social media and you will receive a free BRIT membership (one photo per entrant).



Please send us your photo with a creative description and the location photo was taken to Membership@BRIT.org to be considered.

The photo above was taken by Gary Logan at our pond during Prairie Day. The email header is a Morus alba and was taken by Tiana Rehman.

Playful **by nature.**



What's Happening with Bella at BRIT

Somebody has to do the Dirty Work!

"Play is often talked about as if it were a relief from serious learning. But for children play is serious learning. Play is really the work of childhood." Fred Rogers

Bella Goes to Camp is preschool children ages 4 and 5 began in June with our youngest scientists continuing their exploration of the natural world with extensive research in the properties of soil! This is the second camp in a series of three camps that focus on a deeper understanding of the importance of water, soil, and energy to plants and people. From sand castles to mud painting to creating terrariums, the little researchers observed and tested the properties of sand, clay, and living loam. It is really dirty work but somebody has to do it!

Bella's Book and Nature Club

Children and families enjoyed a read-aloud in the Burk Children's Library of Leo Lionni's imaginative and colorful book, *Fish is Fish*. Dr. Brooke Best accompanied families while they collected colorful wildflowers abundantly growing in our BRITscape. Bella is carefully keeping the collections so that they will be ready for mounting during August's Bella's Book and Nature Club on Tuesday, August 2. See you there!



New Publication by Peter Fritsch

Peter Fritsch published a paper this month in the journal *Phytotaxa* with two co-authors from the New York Botanical Garden and the California Academy of Sciences entitled "A taxonomic revision of Mexican and Central American *Symplocos* (Symplocaceae)." This 115-page work is a taxonomic monograph of the sweetleaf genus in Mexico and Central America, a group that until now was poorly understood taxonomically in the treatment region. The authors revised the entire group with descriptions, illustrations, photographs, distribution maps, and many specimens cited. They also assessed the conservation status of all 32 species in the paper, and conclude that ten of

them should be considered threatened or endangered, some critically. Most other species have restricted distributions as well and should be monitored for change of status. Studies such as this are critical for scientifically accurate documentation of biodiversity and provide baseline data for downstream floristic, ecological, and evolutionary studies. You can see the entire paper [here](#).

2016 International Award of Excellence in Conservation

October 20, 2016

Honorary Hosts Ed Bass, Ramona and Lee Bass, and Laura and Greg Bird, along with Event Chair Grant James, cordially invite you to the International Award of Excellence in Conservation gala and dinner. Carter Smith, Executive Director of the Texas Parks and Wildlife Department, and his contributions to conservation will be recognized with this prestigious award. A fabulous celebration is being planned, and your support will help sustain and grow BRIT.

Save the Date for an evening to remember. For more information and reservations, contact Sara Richardson at srichardson@brit.org or 817.332.2748.



New BRIT Membership Benefits

We appreciate and thank you for your generous support from years past and want to show you our appreciation by sharing some exciting new benefits to your membership:

BRIT Membership Reciprocal Partners



- American Horticultural Society (AHS) Reciprocal Admissions Program (RAP), you receive **FREE** admission and/or additional benefits at 300 gardens throughout North America and the Cayman Islands. Visit ahs.org for directory gardens.
- American Public Gardens Association (APGA) you receive **FREE** twelve (12) issues, digital or by mail, of the Better Homes and Gardens magazine.

These new benefits are in addition to discounts on BRIT programs, merchandise, and services, and shopping discounts with these local partners: [Calloway's Nursery](#), [Marshall Grain Co.](#), [Redenta's Garden](#), and [The Tree Place](#). If you would like additional information, please contact [Tammie Crole](#), our Director of Membership and Grants Coordinator, at 817.332.7518.

Other Ways to Support the Work We Do at BRIT

- [Volunteer](#) at the coolest place in town all summer long to loan your skills, and learn at the same time!
- Give a gift of membership to a friend or honor a loved one with a tribute gift.
- Join BRIT's planned giving program, the [Shinners Society](#) by remembering BRIT in your estate plans. No matter the amount, including BRIT in your estate will leave a lasting legacy for future generations.
- If you own a company you could become a [Corporate Member](#), so you can show your appreciation to your staff by giving them individual memberships, while you stay connected to your local community.
- If you own a retail business, you could become a [Reciprocal Partner](#) by providing BRIT members discounts at your retail business. This can help drive more customers into your stores.
- Consider providing a gift in-kind of goods or services to BRIT.
- Become a sponsor or underwriter for events, programs, or activities.



When you make a gift to BRIT you join a select group of contributors who play a crucial role in helping our scientists and educators teach the importance of biodiversity to the next generation of thinkers and problem solvers. The Botanical Research Institute of Texas (BRIT) is a 501(c)(3) organization with tax-exempt status. so all gifts are 100% tax deductible. For more information on any of these programs, please contact our Director of Membership, [Tammie Crole](#) at 817.332.7518.

Meet BRIT's Newest Staff Members

In March, an important new Development position was created, a Director of Corporate Relations & Events, and was promptly filled by **Sara Richardson** (not pictured), Sara has a B.S. from TCU and comes to us highly recommended, and her proven success in fundraising and event planning, grant proposal writing, social media, and building brand recognition will significantly impact our ability to grow corporate partnerships and raise funds for our mission. Welcome to the team, Sara!



Hannah Kuhns, has a B.A. in Journalism and History, TCU. She is a life-long advocate of volunteerism and community involvement; Hannah is so excited to join BRIT as the Visitor Services Coordinator. Growing up in Texas allowed Hannah to experience all the beautiful wildlife that this state has to offer, and she feels so lucky to be surrounded by it every day at BRIT. Hannah is BRIT's Visitor Services Coordinator and will be the first person you see when visiting BRIT. Welcome to the team, Hannah!

Casey Carter, has a B.A. in English Literature and Writing, UT Austin. Casey was born and raised North Texas. In the years following the completion of his education, Casey worked in the Rocky Mountains as an Outdoor Educator and Backcountry Guide. It was during these experiences that Casey's interest in the stewardship and conservation of Earth's wildernesses evolved into a passion. Casey is our Rental and Meeting Coordinator and he will be working with our facility rentals. Welcome to the team, Casey!



Haley Rylander has a B.S. in Environmental Science from TCU. From her experiences growing up in North Texas and her travels to beautiful places and national parks both in the states and around the world, she has always had a passion for the outdoors and sustainability and is thrilled to be working at BRIT after her internship here last summer. Haley is our Operations and Research Assistant and works primarily with the BRIT Press and research projects.



Discovery in the High Elevation Meadows of the Sierra San Pedro Martir

In June of this year, BRIT Biodiversity Explorer Dr. Sula Vanderplank visited the southernmost meadow of the Sierra San Pedro Martir, at Santa Rosa. This road has historically been very inaccessible, but a new road, and the permission of some friendly land owners, allowed the team to drive up to the edge of the meadow and access the perennial water source at the Santo Tomas valley using pack animals for their gear and hiking in. In August of 1967, botanists Reid Moran and Bob Thorne passed through the region en-route to another area. They spent less than 4 hours at the meadow, collecting in the rain, and since it was already summer, many of the meadow species were not in flower and could not be

documented. The trip documented a wealth of range extensions for a suite of meadow species that were previously only known from other high elevation meadows to the north, including particularly rare species such as *Physaria peninsularis* (Brassicaceae) and elusive species such as the miniature monkeyflowers (*Erythranthe* spp.). This trip was not only fruitful botanically, but also revealed significant new populations of mammals and herps (amphibians and reptiles). One species that was particularly exciting to see in the pools of deep water was the aquatic garter snakes, who presumably eat a lot of frogs!



BRIT Reads Book Club *The Worst Hard Time* by Timothy Egan

Join us on Monday, July 18 from noon – 1 p.m. in the BRIT Library as the BRIT Reads Book Club dives into the 'dirty thirties' via Timothy Egan's award winning book *The Worst Hard Time: The Untold Story of Those Who Survived The Great American Dust Bowl*. Egan's book has been called "can't-put-it-down-history" and praised for capturing "the story of our nation's greatest environmental disaster". Bring your lunch and bring a friend for an hour of what is sure to be lively discussion about this fascinating, cautionary period in our recent history.

For more information about the BRIT Reads Book Club please visit our [webpage](#).

The Flora of Sardinia

In May, BRIT Biodiversity Explorer Dr. Sula Vanderplank traveled to Sardinia (Italy), as part of ongoing research into the Mediterranean areas of the world, which strives to understand **why** these regions have come to have such elevated levels of biodiversity. The Sardinian team included several local botanists, as well as international researchers from Germany, Ukraine, and northern China. The team is looking to compare traits of the vegetation in Mediterranean-climate regions around the world, using relevé techniques that assess all of the plants in a 5 x 5m plot, and record all their characteristics. They also took leaf samples for the dominant shrubs and trees in each plot, to later assess leaf surface area and other key leaf features. The team took advantage of the long hours of daylight and worked long field days documenting the plants in a series of quadrats that sample the different thermotypes of vegetation in the shrub-lands of Sardinia. Comparative studies like this are particularly valuable when looking to understand global patterns of endemism and biodiversity, and understanding evolution to give context to long term conservation endeavors. Botanical highlights from the trip included large wild populations of *Cyclamen repandum*, and the stunning bulb *Pancratium ilyricum* in the *Amaryllidaceae*.



Pancretium ilyricum growing at Monte Limbarra, Sardinia

Vegetation scientists layout a relevé to study shrub-land



Biosurvey of J.A. Brite Ranch

BRIT researchers visited the J.A. Brite Ranch on Wednesday, June 8th to conduct a biosurvey of a rocky hill slope on the property. BRIT staff and Research Associates documented the diversity of plants, lichens, mosses, and fungi growing on and among the rocky boulders. The team collected approximately 150 plant specimens which will be identified, mounted on archival paper, and deposited in the BRIT herbarium. Biosurveys are an important research activity used to document the biodiversity of an area. It is these baseline surveys that allow us to better understand how natural and human influences change an environment over time.



Unlocking Rare Plant Data in Herbaria

Earlier this month, Biodiversity Explorer Dr. Sula Vanderplank visited the University of California, [Berkeley's Jepson Herbarium](#) and the [Herbarium of the California Academy of Sciences](#), with Dr. Jon Rebman of the San Diego Natural History Museum. These institutions are all part of a broader consortium working to database all specimens of the rare and endemic plants of NW Baja California. Sula and Jon spent 8 days correcting and confirming the identity of all the specimens held at the state's two largest herbarium with 2.2 and 3 million specimens respectively. They annotated an estimated 10,000 specimens during this project! The NW portion of the state is part of the California Floristic Province – one of the world's biodiversity hotspots, with 5% of the province found in Mexico, where floristic resources have been much scarcer than in the US. Unlocking the wealth of data from NW Baja California that is held in California herbaria will greatly further our knowledge of the plants of the region, and our understanding of how rare California plants are outside the state. This research and the publication of the data online through the Consortium of California [herbaria](#) and the Baja California Botanical Consortium's specimen portal ([bajaflorea.org](#)), is supported by the National Science Foundation.

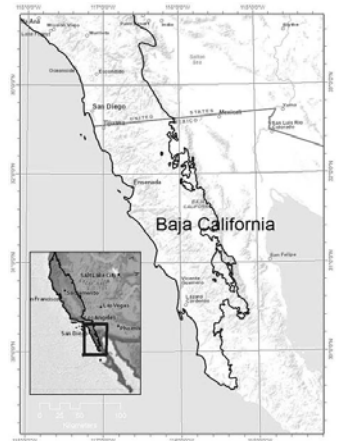


Image: The extent of the California Floristic Province in Baja California, Mexico. Home to many rare and endemic species (including 172 plants found nowhere else in the world).

Survey of BRIT's Tarrant County Bryophyte Collection

While the majority of BRIT's bryophyte collection has been scanned and packet label information entered into the Symbiota database, detailed and qualitative data is lacking. Volunteer bryophyte specialist, Charles Gardner, and summer intern and biology student, Hanna Liebermann, have tackled this project by evaluating the herbarium's 144 moss specimens collected in Tarrant County. The project aims to verify and expand upon the data accessible to researchers while providing high definition photos of the specimens and their critical structures. These efforts benefit the herbarium by solidifying our knowledge of what the collection includes and has also been an educational experience for Hanna in examining morphological characteristics of bryophytes and other organisms found in the collection. Throughout this project, Hanna has studied 46 unique taxa; learned different techniques and tools used in collecting, processing, and observing bryophytes; and discovered the endearing quirks and beauty of working with these smaller plants.



Join us for Fall Gallery Night at BRIT with Deborah Paris

BRIT is pleased to welcome back well-known Texas artist Deborah Paris to the Madeline R. Samples Exhibit Hall. Paris' exciting new exhibit of paintings and drawings, *The Nature of Things: Daphne Prairie*, will give the Fort Worth public a rare opportunity to see depictions of the untouched and historic Daphne Prairie located in east Texas. The exhibition will hang September 10–October 20 at the Botanical Research Institute of Texas. An opening reception with live music, hors d'oeuvres and libations will be held on Fall Gallery Night, Saturday, September 10, from 4:00 to 9:00 p.m. A gallery talk by the artist will take place September 10 at 6:00 p.m.

BRIT's Fall Rain Barrel and Compost Bin Sale Begins July 15

BRIT and the City of Fort Worth will offer heavy-duty 55-gallon rain barrels and 55-gallon tumbling compost bins for their fall online sale beginning July 15, and running through Sept. 2. Upcycle Products, Inc. of Morris, Illinois is the city's new supplier and all online sales will be through its easy to use web site at upcycle-products.com/britfw. Rain barrel and compost bin pick-up day is Saturday, Sept. 10, from 9 a.m. to noon at BRIT.

Both the rain barrel and tumbling compost bin are repurposed, food quality, high density poly ethylene barrels that were previously used to ship food overseas. Each barrel has been washed and cleaned with a pH neutral soap before shipping.

The repurposed rain barrels come in four different colors to help blend into the homeowner's landscape - black, terra-cotta, grey, and light blue. Black barrels work well for installation behind a tree or large bush. The terra cotta color blends nicely with red brick homes. For people who prefer to decorate their barrel, then blue is an excellent choice. The tumbling compost bin comes in black only.

The sale is open to all North Texas-area residents at reduced prices. The rain barrel sale price is \$75. The price of the tumbling compost bin is \$130. Both can be purchased online with a credit card at: upcycle-products.com/britfw.



The Mid-South Prairie Symposium

The Mid-South Prairie Symposium, recently co-hosted by BRIT and Austin Peay State University in Clarksville, Tennessee, was organized and moderated by Dr. Dwayne Estes, BRIT Biodiversity Explorer. The event, held May 25-27, was attended by 175 professionals from across the eastern U.S. and included nearly 30 speakers. Topics covered included re-creation of prairie from agricultural landscapes, restoration of oak and pine savanna, and importance of small, privately owned grassland remnants to regional biodiversity. The Symposium was a huge success, and feedback was very positive, with many people recommending that we host another symposium in 2018.

JULY

2nd-4th - BRIT will be CLOSED

11-14th - Little BIT Camp & My Plants, My Place Camp

14th - BRIT Thought Walk 7-9am

18th - BRIT Reads Book Club

Every Thursday - BRIT tours at 1:30 p.m.

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Adventurous **by nature.**