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Drummondii is the newsletter of the North American *Sarracenia* Conservancy. For more information, visit our website: <u>http://nasarracenia.org</u>



Sarracenia purpurea at Cedar Mountain Bog in Transylvania County, North Carolina. Photo by Victor Holland.

The 2014 NASC Benefit Auction

The NASC is pleased to announce that the 2014 benefit auction will be held this year from **Saturday, March 29 to Saturday, April 12** on <u>TerraForums.com</u>. We have selected earlier auction dates again this year to make it easier to ship your winnings – dormant *Sarracenia* or sensitive highland species.



The official auction rules will be posted at TerraForums and anyone can participate by donating or bidding on an item. But principally we want everyone to have fun! For those that have not participated in this event before, it is often one of the best places to find great plants grown by experienced and knowledgeable horticulturalists, many of whom are expert in their particular genus of interest. Generous donors create new threads on the forum for each item they donate – seed, plants, art, supplies, etc. – and then other users bid on that item. Occasionally bidding wars occur on the more desirable plants. The final total paid by the bidder goes directly to the NASC, a 501(c)(3) non-profit, and the bidder receives the item, usually reimbursing the donor for shipping costs unless noted otherwise.

Every year we thank the generosity of our donors for supporting this event as our main source of fundraising to keep our organization running. Half of the funds collected

go directly to the identified beneficiary. Past recipients have included Boiling Spring Lakes, North Carolina for land acquisition; Myrtle Head Savanna, North Carolina for a controlled burn; and Splinter Hill bog in Alabama for land acquisition. Last year we were happy to support a controlled burn in Old Dock Savanna in North Carolina and replacement equipment at Tarkiln Bayou Preserve State Park in Florida.

Fire in the Lakes Festival, 2013

Heather Williams, NASC Secretary

It was a chilly early morning in March last year. I made my way down to Vic's car outside of the hotel in Leland, North Carolina. Mark and Sheila met us in the parking lot as we made a small caravan to the Boiling Spring Lakes Community Center.

I was representing both NASC and the new group that I had co-founded, the Carolina Carnivorous Plant Society at the Fire in the Lakes Festival. When we arrived Vic ran the Flytrap 5k while Mark, Sheila, and I were joined by members from the CCPS to walk in the one mile fun run; our reward was an amazing flytrap t-shirt. When a muddy Vic emerged from the finish line, we began setting up our tables for the community event that emphasizes the importance of controlled burns for protected areas land management.

The clouds of the morning never left us and it began pouring just as the event began, however the event was still well-attended. Everyone had smiles on their faces as they made their way around to every table.

I did not actually get to see the burn that was the focus of the day, but I am sure it was spectacular! We were busy at the NASC and CCPS tables, answering a lot of questions and doing our best to convey the importance of conservation. Vic sold tissue-cultured flytraps and answered concerns about poaching. The community seemed incredibly concerned about poaching and protective of these increasingly rare plants.

After the festival ended we packed up the cars and Mark took us on a short side trip to see some nearby wild carnivorous plants. I was quite excited as it was my first time seeing these plants in the wild. They were simply beautiful!

It was a day that I won't forget.

New England Carnivorous Plant Society Show, 2013

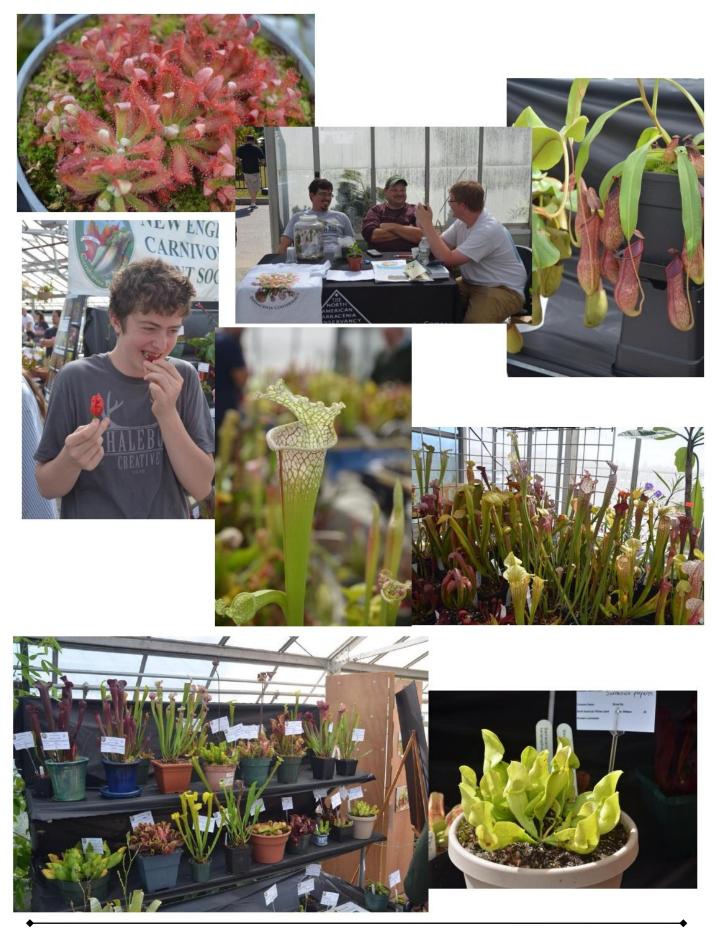
Shane Myers, NASC Vice President

The annual New England Carnivorous Plant Society (NECPS) show was held in Cranston, Rhode Island on September 28 and 29, 2013. As we have in the past, NASC representatives were available to discuss conservation at our table in the greenhouse. Both Saturday and Sunday we talked to show attendees about the plight of the carnivorous plants of North America and the desperate need for conservation efforts to protect what's left of these incredible plants. The weekend was full of workshops, the impressive plant show, and vendors. Boy, were there a lot of vendors. I can't speak for everyone, but I went over budget and was lucky enough to be able to smuggle my new plants home safely in my carryon luggage. While I didn't ask everyone, there were many representatives from the New England states, several from the Carolinas, Mississippi, Ohio, and Colorado. Following are pictures taken by Jeremiah Harris, for whom I thank for permission to use his photos.



Sheila Stewart, Mark Todd (Director of Conservation), Emily Troiano (President), and Shane Myers (Vice President) at the NECPS show in September, 2013.

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The 2013 NASC benefit auction in review: \$4,252 raised for conservation

Ryan Kitko, NASC Treasurer

As always, The North American *Sarracenia* Conservancy would like to thank all of the members, donors, and bidders that supported the Conservancy during the annual benefit auction, held this year from March 30 to April 13, 2013 online, hosted by TerraForums.com and FlyTrapShop.com. This year we are happy to announce we have raised a grand total of \$4,252 from your generous donations and eager bidding.



Old Dock Savanna, a longleaf pine marl savanna in the southeast coastal plain of North Carolina, will get the prescribed burn it needs in 2014 thanks to the NASC auction. (Photo: Mark Todd)

In addition to the \$1,250 earmarked for a 2014 growing season burn of The Nature Conservancy's Old Dock Savanna – for more information on that, see our Spring 2013 newsletter – the money raised during the auction will help continue our *ex-situ* conservation efforts in the growing program as well as fund the organization's basic needs. Because the auction was so successful, we were able to designate a second beneficiary and awarded \$750 to Tarkiln Bayou Preserve State Park in Pensacola, Florida. Originally purchased by the state fifteen years ago as the Perdido Pitcher Plant Prairie, the preserve has expanded rapidly through land acquisition. We recognize that managing a relatively new preserve has challenges and the funds to acquire land can be

uncoupled from those required to maintain it. Your donations will, through the Help Our State Parks program, fund machinery replacements necessary to maintain the prescribed burn equipment so that the beautiful *Sarracenia* populations in this preserve may continue to thrive.

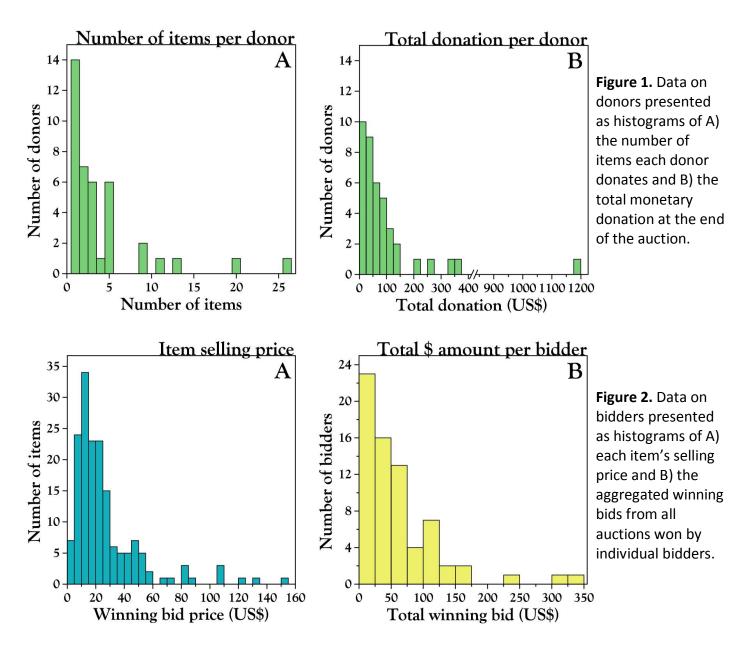
So – on to the auction stats! Of course, the auction would not be possible without our many donors *and* those willing to bid on the many excellent items offered up during the auction. So in honor of you, and because many of you are likely very curious (that is, if you're as much of a data geek as I am), we take some time every year to examine the NASC auction by the numbers.

We really do appreciate the time, effort, dedication, and patience our *forty* donors this year put in to planning, labeling, posting, PM'ing, packing, and shipping. Whether you donated just a few items, such as the *twenty-eight* donors that contributed less than five items (Fig. 1A) – representing *thirty percent* of all donations – or you were one of our top donors – TerraForums members with usernames RL7836 with 26 items for a total value of \$1,187, Av8tor1 with three items that sold for \$360, and kulamauiman who donated 20 items that sold for \$337 (Fig. 1B) – your donations will all help our *Sarracenia* conservation efforts. Dear donors, we are impressed every year with your kindness, patience, and generosity. *Thank you*.

NASC Auction: By the numbers

- > 4,252: Total amount raised
- > 1,250: Money donated to Old Dock Savanna (NC)
- > 1,187: Total value donated by highest donor
- > **750:** Money donated to Tarkiln Bayou (FL)
- > 171: Number of donated items
- > 150: Highest bid on an auction item
- > 106 ± 30: Average value of donation per donor
- > 70: Winning bidders
- > 40: Donors
- 25 ± 2: Average winning bid
- 1: Lowest winning bid

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This year 171 items were donated in all, of which 168 had bids. The diversity of items offered was astonishing. Donors listed various Drosera, Nepenthes, Utricularia, Cephalotus, Sarracenia, Darlingtonia, Pinguicula, Dionaea, Heliamphora, non-carnivores, and other items such as autographed posters and books.

Bidders: Your activity was just as impressive! There were *seventy* unique winning bidders. Here, again, small numbers in great quantities add up: the median item winning bid was just \$18.00 (Fig. 2A), and with so many items selling for low values, the donations quickly added up. The most expensive

item this year was a *Heliamphora nutans* offered for auction by Av8tor1. Because there were so many bidders active in the auction, each walked away with excellent acquisitions for a decent price; the median total each individual spent was only \$43 (Fig. 2B).

We hope everyone enjoyed the annual NASC benefit auction earlier this year. We would again like to thank our members, donors, and all of the people who bid on items in this year's auction. We will continue to update you on the progress of the projects you helped fund.

\$2000 Donated for management of Cedar Mountain Bog, North Carolina

Victor Holland, Administrator of Plant Materials

When the NASC received an urgent request for help funding proper management of Cedar Mountain Bog, we immediately donated the money necessary to help maintain a site that was in need of some TLC. Cedar Mountain Bog in Transylvania County, North Carolina required is certainly a beautiful site with the mountain purple pitcher plant, *Sarracenia purpurea*, and the mountain sweet pitcher plant, *S. jonesii*, which is federally endangered and is represented by only eight clumps present at Cedar Mountain Bog.

Our contribution assisted in the restoration and management of this site with the removal of vegetation, equipment rental to chip the brush and debris that was removed, and prescribed burn management. Thanks to your donations, work continues to conserve the exceedingly rare plants at this site.

With your continued help through fund raising, donations, and volunteer work with the NASC, we hope future generations will be able to observe these plants in the field. Our sincere thanks to our partners in this endeavor: the Friends of Plant Conservation (http://www.ncplantfriends.org) and the North Carolina Native Plant Society (http://www.ncwildflower.org) for their conservation and restoration work. The NASC plans continued support of these rare Southern Appalachian habitats.

Read more about the bog at the Friends of Plant Conservation <u>website</u>.

The following photos are from Cedar Mountain Bog in 2013; all photos by Victor Holland.



Sarracenia purpurea at Cedar Mountain Bog in 2013. Photo by Victor Holland.



Beautiful colors on these plants at Cedar Mountain Bog in 2013. Photo by Victor Holland.

Sarracenia alata variation reveals importance of conservation

Ryan Kitko, NASC Treasurer

Sarracenia alata, the pale pitcher plant, may not be the most sought-after or attractive North American pitcher plant, but it has certainly drawn recent attention from scientists for its interesting phylogeography. As early as the late 1970s (and perhaps earlier), the disjunct distribution of S. alata on either side of the Atchafalaya and Mississippi River basin was noted by botanists.^[4,5,6] These two populations – present in 20 counties in eastern Texas and western Louisiana for the western range and extant in 16 counties in eastern Louisiana, southern Mississippi, and southern Alabama^[6] – are separated by swampy habitat generally unsuitable for S. alata, which tends to prefer wet savannahs or seepage bogs. (Records for the appearance of S. alata in McPherson & Schnell (2011) vary somewhat; they also note that the species has been extirpated from four counties in Texas.) This barrier is approximately 200 km wide, likely large enough to prevent seed dispersal and long-distance pollination.^[8] This geographic barrier has been acknowledged as significant in a number of taxa,^[7] thus it is not surprising central Louisiana has been identified as a significant barrier to gene flow in *S. alata*.^[1]

In the past few years, several studies have reinforced the idea that the eastern and western populations are indeed separate species. While Koopman & Carstens (2010) did not find enough support for the split in their population genetics data, later studies analyses.^[1,8] broad support in their found Specifically, Carstens & Satler (2013) recommended elevating the western populations to species status on the basis of strong genetic divergence; the type specimen of S. alata likely represents an eastern population and thus retains the existing specific epithet. However, they stopped short in that publication of completing the taxonomic work required to validly publish the new species, though I understand this may be completed soon. This may prove to be difficult since no large-scale, rigorous study of morphological differences between the populations has been completed and to date any study investigating *S. alata* has failed to identify a significant morphological feature that clearly distinguishes the western and eastern populations.^[6]

Each study has noted that individual populations of S. alata are typically restricted by their habitat specialization and varieties based on color or form can be found in some locations. This remains an important reason why ex-situ conservation, coupled with *in-situ* conservation by habitat preservation and management, is necessary to preserve genetic diversity within the species. The presence of this cryptic species that has restricted or absent gene flow with the eastern species and as of yet no discernible morphological features that can clearly separate the two reinforces this need for ex-situ conservation from as many populations as possible. Once the western population is elevated to species status, it will likely be classified as rare or threatened as it is restricted to eastern Texas and a few counties in western Louisiana. This also reveals the importance of taxonomic work; by identifying and naming taxa, government agencies and conservation organizations can allocate funds to preserve the newly-recognized rare taxon, hopefully preventing further degradation of its habitat.

To that end, the NASC here presents a few of the *S*. *alata* specimens we have in cultivation from both the eastern and western populations.

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Photos, page 8 by Ryan Kitko Continued on page 8...

A Sarracenia alata mugshot



Membership & Contact Information

Membership with the NASC, a 501(c)(3) non-profit organization is only \$10.00 a year and it's easy to set up a recurring membership via PayPal on our website at <u>http://nasarracenia.org/join</u>. If you have any talents that you would like to donate to the NASC, such as illustrations, web design, experience growing *Sarracenia*, public relations experience, etc., please contact the relevant Board members below or ask to sit in on one of our weekly meetings, which are held on Skype.

2014 NASC Board of Directors

President Vice President Secretary Treasurer Director of Conservation Head of Public Relations & Education Administrator of Plant Materials Member-At-Large Member-At-Large

Emily Troiano Shane Myers Heather Williams Ryan Kitko Mark Todd Ben Rush Victor Holland Yann Rodenas Matt Kaelin

When are the NASC meetings?

NASC Board meetings are held every Thursday evening at 9:00 PM Eastern on Skype. To join, e-mail the President or Vice President with your Skype screen name and be online a few minutes before the meeting is scheduled to begin. You will be invited to the group chat. Visitors and members are always welcome!

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NASC at the 2013 New England Carnivorous Plant Society Show: (from left to right) Sheila Stewart, Mark Todd, Emily Troiano, and Shane Myers.