

PROGRESS REPORT ON THE ICPS CONSERVATION PROGRAM

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Keywords: Conservation: reports, seed bank.

The ICPS has “conservation” as one of its key goals. How has it been encouraging conservation, and especially, just how has it been spending the portion of your membership dues budgeted for conservation?

Perhaps some history will help to set the stage. The ICPS has always been friendly and receptive to conservation, but in 1997 when I joined the core group of volunteers that run the society I hoped to enhance this. Little did I know what an interesting challenge it would be!

The ICPS had worked on various conservation projects in the past (most notably with the IUCN), but I wanted to see the ICPS involved in land stewardship. In my day job I work in land conservation issues, and my goals with the ICPS reflected my professional interests. Unfortunately, during those early years (1997-2000) the ICPS was on financially rocky shores, so there was little I could in my new position except be an advocate for conservation. Another hurdle, and ultimately the most difficult to overcome, came when I discovered that decades of poaching by carnivorous plant enthusiasts had distanced conservation workers from the ICPS. Conservation workers in the major organizations and agencies would become very cagey if I mentioned I was representing the ICPS. Even my most harmless of phone calls would not be returned.

A breakthrough occurred in 2000, when I was contacted by Carlen Emanuel, a staffer I knew from the Alabama Natural Heritage Program. Carlen was trying to organize a meeting to be attended by everyone who was managing *Sarracenia oreophila* sites. The goal was to create a forum where participants could meet, exchange stories, and share notes. Carlen did not have the money to support the meeting, but she felt she could trust and work with me, even though I was from the ICPS. I organized a fundraising drive, and ultimately the ICPS membership donated enough money to make the meeting happen. I attended the meeting (paying for the travel expenses myself) and was pleased with its outcome (Meyers-Rice 2001).

I recall in particular an evening chat I had with Ron Determann from Atlanta Botanical Garden (ABG) on the wooden porch of a rustic cabin on the grounds of the meeting facility. I had expressed to Ron my concerns that perhaps I should resign from the ICPS since it had such a bad reputation among conservationists. After all, conservation was my career, and I had no interest in tarnishing my reputation. Under the starry skies of northern Alabama, Ron advised me to continue my work within the ICPS. That is what I did, and that night I hatched the idea of the ICPS grant program.

Georgia, USA: 2002-2007

A year after the *Sarracenia oreophila* meeting, I was traveling in the southeastern USA. Ron Determann had time to botanize northern Georgia with me, and he took me to a site where ABG had been working to steward one of the only places that *Sarracenia purpurea* occurs in the state. Ron showed me the site, and described how he was cutting back the encroaching trees, propagating plants from the site for reintroduction to the site, and in general improving the plant population (Rice 2003c). I was impressed and hooked! A few weeks later I wrote a stewardship check to ABG for \$1000, the first grant the ICPS had ever done! Amazingly, ABG was the only conservation organization I found that would accept my offer of a grant; all the others were concerned that accepting a grant would mean the ICPS would demand access to the site, or even the right to collect plants!

The work supported by this grant has been a success, and the populations of plants have been enhanced each year. Furthermore, continued grant support by the ICPS has enabled ABG to steward other rare carnivorous plant populations throughout the southeastern USA, such as the only Georgia population of *Sarracenia leucophylla*. The ICPS has supported ABG's conservation work with renewed grants in 2004, 2005, 2006, and 2007 for \$2000 each year. In total, the ICPS has been able to grant ABG \$9000!

North Carolina, USA: 2003-2007

At a conservation meeting I attended in 2002, I met Beth Bockoven, a highly motivated and enthusiastic land steward for The Nature Conservancy (TNC). Beth worked for TNC's program in the mountains of far western North Carolina. She faced a big challenge, because one of the sites she was responsible for was a bog with serious invasive species problems. Woody vegetation, both native and non-native, was encroaching on the bog and displacing the natives. Some of the natives at this bog were carnivorous plants, including *Sarracenia jonesii* and *Sarracenia purpurea*. *Sarracenia jonesii* occurs at only ten sites in the wild. In fact, this site is the only place where the anthocyanin-free *Sarracenia jonesii* naturally occurred, although this form of the plant no longer occurs there because of poachers.

This bog has many other problems too, including large changes in hydrology, fire regime, and grazing. And it is not clear how many of these changes can be fixed since the site is bound on all sides by human development. Still, it was critical to slow, stop, and reverse the invasion of woody plants that was choking out the bog.

Beth sent me a work plan explaining what she wanted to do at the bog, including a budget and clear set of goals. Although at the time the only grant the ICPS had funded was the 2002 ABG grant for \$1000, I found Beth's arguments so compelling that the ICPS granted her \$2000 for 2003. Using ambitious and energetic interns, Beth's program was a success in creating weed-free zones within the bog.

The ICPS has continued to fund work at this bog, and over the years the habitat available to the carnivorous plants has enlarged from only four small zones, each 30 meters in diameter, to a current area of more than three times as large! I visited this site before and after the work began (at my own expense), and was dazzled by the improvement (Rice 2005).

Unfortunately, Beth has since left TNC, but the ICPS has continued to provide grant funds to her successor. Work at this mountain bog continues. The ICPS granted \$2000 in 2003, 2004; \$2500 in 2005; \$2000 in 2006; and \$1500 in 2007. (The large grant in 2005 was to provide funds to replace the money when another agency failed to provide support that year.) The total amount of ICPS support at this site has been \$12000!

Alabama, USA: 2005-2007

It was becoming easier for me to find conservation partners for the ICPS. Word was getting out that the ICPS was not publishing locations of rare plants. Also it became clear that the ICPS did not demand access to preserves, or propagules such as seeds or plants.

In 2005, I started talking about grant possibilities with Keith Tassin, a conservation land manager in Alabama (again a staff member of TNC). Keith managed Splinter Hill Bog, a site that is home to one of the largest remaining intact stands of *Sarracenia leucophylla*. Photographs from the site also showed many other species of carnivorous plants including *Sarracenia rosea*, *S. psittacina*, *Drosera capillaris*, *D. intermedia*, *D. filiformis*, *Pinguicula lutea*, *P. planifolia*, and *Utricularia*. It is a carnivorous plant gold mine! I have never seen Splinter Hill Bog—but boy do I want to! You can read about this site on line at:

<http://www.nature.org/wherewework/northamerica/states/alabama/preserves/art12813.html>

Unfortunately, TNC was strapped for the money to conduct key management activities such as planning and conducting prescribed burns. The ICPS stepped in, and with grants of \$1500 in 2005 and \$2000 in 2006, the site's management has been enhanced. In 2007 TNC decided to



Figure 1: *Sarracenia oreophila* in North Carolina, just after a burn.

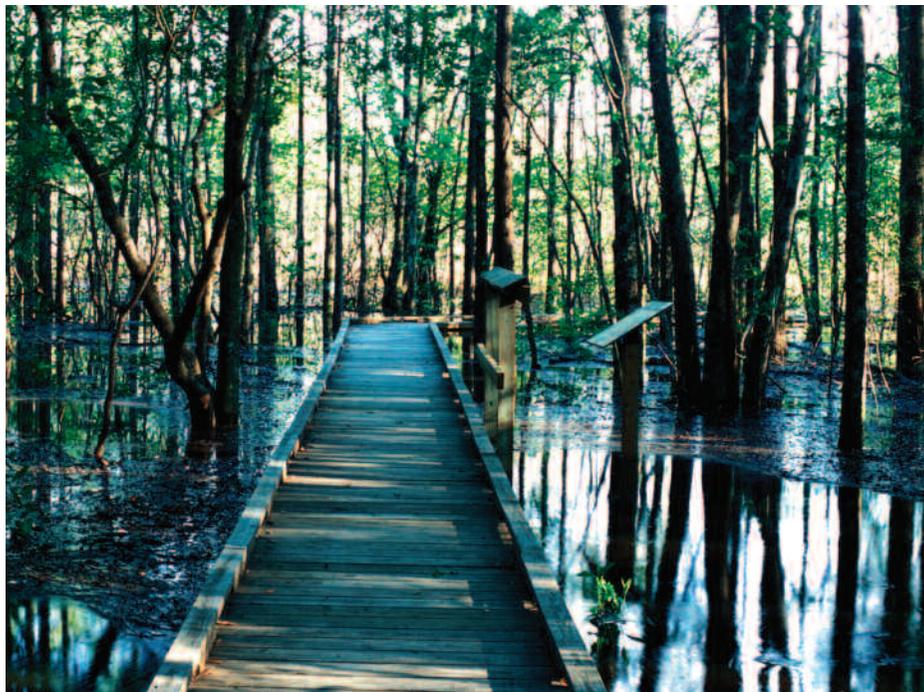


Figure 2: The boardwalk trail at Abita Creek Flatwoods Preserve (Louisiana), during a flood.

enlarge Splinter Hill Bog by buying an additional 40 acres of carnivorous plant and pine flatwoods; an ICPS grant of \$2000 was important seed money for TNC's fundraising efforts. In 2008 the ICPS helped in fundraising at the bog with a matching donation program. How much money will be donated to Splinter Hill Bog by the ICPS fundraising campaign is yet to be determined. You will determine it!

Factoring out the 2008 fundraising, during the 2005-2007 period the ICPS has invested \$5500 in maintaining the carnivorous plants at Splinter Hill Bog!

Louisiana, USA: 2005-2007

In April 2005, my wife and I were vacationing in coastal Louisiana. A few of the places we visited were beautiful natural areas that had been set aside as preserves. We saw many fine stands of *Sarracenia alata*, *Drosera*, and *Utricularia*. The sites managed by TNC were particularly well-maintained, and had excellent trails and signage. We particularly enjoyed Abita Creek Flatwoods Preserve and Lake Ramsay Preserve. The signs at Abita Creek Flatwoods Preserve even mentioned that useful resources were available at the ICPS web site! I goggled when I saw this, and tried to imagine the ICPS (once viewed as a nest of poachers) being mentioned in such signage just a decade earlier.

A few months later, Hurricane Katrina struck Louisiana, bringing its attendant catastrophes. For the most part, wild lands were not as damaged as were human structures, as much of the affects of Hurricane Katrina were within the range of phenomena the habitats have evolved to withstand. However, at Abita Creek Flatwoods Preserve 10-30% of the trees were knocked down; the trails were impassable and the signage was heavily damaged. The ICPS helped the cleanup efforts with a grant of \$2000. In 2006, TNC staff in Louisiana continued their restoration work and with ICPS funding organized a *Sarracenia alata* rescue to save plants being killed in a local development. In 2007, ICPS funding helped improve signage at the nearby Lake Ramsay Preserve, home to many more carnivorous plants including *Sarracenia alata*. You can read about these sites on line at:

<http://www.nature.org/wherewework/northamerica/states/louisiana/preserves/art6859.html>

<http://www.nature.org/wherewework/northamerica/states/louisiana/preserves/art6860.html>

All in all, the ICPS has helped the Louisiana carnivorous plants with \$6000!

North Carolina, USA: 2006-2007

In the fall of 2003, I visited the only two known *Sarracenia oreophila* sites that are not within the state of Alabama. At the time, I felt that the Georgia site was in need of help, while the nearby North Carolina site seemed fine. In early 2006 I contacted the manager maintaining the Georgia plants, and asked if the ICPS could help. He told me, in a remarkable show of broad vision, that while he could certainly use the money, he thought it might be even more desperately needed at the North Carolina site. I contacted the folks in North Carolina. Yes, they needed to burn the site, but were short on cash to do this.

This initiated the ICPS involvement at this site. In 2006 we provided a mere \$1000 so the burn could be planned and conducted. And in 2007 another \$1000 was sent to continue the management at this site.

I visited this site before and after the burn, and saw that the plants have rebounded with vigor. I also observed interesting mountain populations of *Drosera capillaris* and *Drosera intermedia* and *Utricularia*. Although the ICPS has not contributed much to this site, its donations have been well received and are fulfilling the ICPS mission.

And that, my dear member, is a complete accounting of the ICPS grant program from 2002 to 2007. I am happy to report that, because of its work, the ICPS has directed \$34,500 towards conservation. Read that again: \$34,500! And that is something we can all be proud of!

Other programs

Prior to 1997, the ICPS had been given conflicting reports on whether we could legally distribute seeds of Threatened and Endangered species (*Sarracenia alabamensis*, *S. jonesii*, *S. oreophila*, *Pinguicula ionantha*) via our seed bank. Upon my recommendation the ICPS stopped distributing such seeds—I saw little value in risking a Federal lawsuit! In 2002 the ICPS became a non-profit organization, and with that authority, I applied to the US Fish & Wildlife Service for the necessary permits. In 2003 we finally obtained them, and the ICPS has been distributing seeds (at least within the USA) ever since (Rice & Brittnacher 2003). I even obtained a short-term permit to distribute *Sarracenia alabamensis* plantlets to ICPS members in the USA (Rice 2003b; Rice & Brittnacher 2005). This effort was extremely involved and included labor by many volunteers, as well as support from the Botanical Conservatory (University of California, Davis), but was successful at establishing the plant in many collections throughout the USA. A follow-up program would be quite interesting, especially if it involved *S. oreophila*, as has often been suggested by ICPS members.

Another challenging topic was the creation of a set of guidelines for wild seed collection. We like to say, over and over, that wild collection is rarely justified. However, some times it is appropriate; in such conditions, what guidelines should the collector follow? To address this vacuum of reasoned opinion, I drafted a set of wild seed protocols, and had them reviewed by conservation partners including staff from TNC, US Fish & Wildlife Service, and Natural Heritage Programs. Since having been published in Carnivorous Plant Newsletter (Rice 2003a) and on our web site, these policies have been well received, and have been adopted by other organizations as well.

Finally, another major ICPS effort has been the *Nepenthes clipeata* Survival Program (Cantley *et al.* 2005). *Nepenthes clipeata* is likely to go extinct in the wild soon, and there are certainly more plants in cultivation than in the wild. The initial goal behind the *Nepenthes clipeata* Survival Program has been to catalogue all the known lineages of *Nepenthes clipeata* in cultivation, and the medium and long term goals are much more ambitious. This program has been slow to advance, and I would even say that despite some effort, it has been a failure. However, it was an innovative failure, and if you do not make risks and try new tactics, you are less likely to succeed.

Where now?

Managing the ICPS conservation program requires a diverse set of skills. I have had to be politically sensitive at all times. I have had to respond calmly to infuriatingly incendiary email. I have had to compose politic, yet firm letters on many issues; to organizations (that should know better) like a North Carolina Aquarium that would lead frequent expeditions to collect carnivorous plants for their displays; to politicians in New York who were proposing building on carnivorous plant habitat; to those stakeholders in North Carolina who think it would be sensible to fragment yet further the Green Swamp.

It is hard not to spring to the phone when you hear about possible mismanagement at a preserve in Georgia, or land destruction in New York, or possible poaching in Australia, or stolen plants surfacing in Japan. It is important to work rapidly and authoritatively, but not emotionally or stridently.

The paperwork can be deadly at times. I dread the annual seed bank report needed to maintain our US Fish & Wildlife Service permits. But the benefits are enormous. It is marvelous to hear about the on-the-ground benefits that the ICPS is having at carnivorous plant sites; sites that would be degrading if it were not for our work and support.

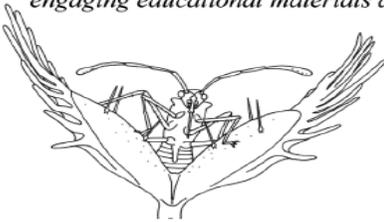
If you are interested in this kind of work, please contact me or the ICPS board. This will be my last year as Director of Conservation for the ICPS. It is time to let someone else lead this program, and to continue to foster its growth. During our current era of extinction, conservation programs like that of the ICPS are crucial.

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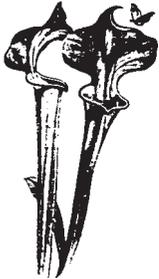
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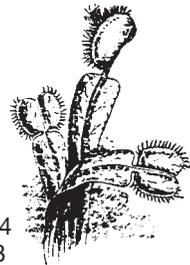
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Looking Back: CPN 25 years ago

ICPS member Glenn Hicks wrote about the dangers of sporotrichosis, the now well-known fungal infection that can be contracted from dried *Sphagnum* moss. I draw attention to this article primarily because I met Glenn when I was a graduate student in Arizona and had a single tiny carnivorous plant terrarium. Glenn was taking a break from carnivorous plant horticulture and needed someone to care for his greenhouse filled with carnivorous plants! I changed from growing ten plants to thousands! I am happy to report that Glenn is still growing carnivorous plants, and is still a member of the ICPS! (BR)