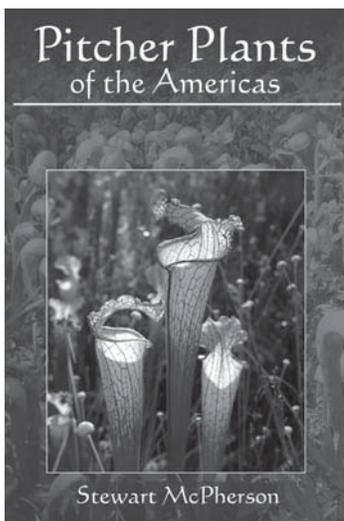


The Quarterly Journal of the Florida Native Plant Society

# Palmetto





The cover of McPherson's book features our own white-top pitcher plant (*Sarracenia leucophylla*).

## BOOK REVIEW: *Pitcher Plants of the Americas*

Review by Gil Nelson

***Pitcher Plants of the Americas* by Stewart McPherson  
McDonald & Woodward  
Publishing Company,  
Blacksburg, VA  
320 pages.  
Hardcover: \$44.95  
Softcover: \$34.95**

*Pitcher Plants of the Americas* by Stewart McPherson is an excellent example of an increasingly popular genre of nature books that treat a small group of related organisms in greater detail than possible in the average field guide.

The book features hundreds of excellent, high quality pictures (with only a few exceptions), several detailed and very helpful illustrations of pitcher plant morphology, and a number of range maps. The content begins with an introduction to the genera, ecology, and worldwide distributions of pitcher plants, followed by a global overview of the genera of carnivorous plants and a chapter on American pitcher plant evolution. McPherson then treats the five pitcher plant genera that occur in the Americas before turning to a chapter on habitat loss and the threat of extinction, and another on cultivation and horticulture. The chapter on pitcher plants horticulture includes recommended carnivorous plant vendors, all of which McPherson has hand selected because of their conservation ethic and their dedication to carnivorous plant preservation.

McPherson takes the broad view of pitcher plants, including within his circumscription any plant with "modified leaves that form hollow, water-containing vessels that are adapted to trapping and digesting animal prey." This is a rather expansive definition that incorporates genera not often tagged with the pitcher plant moniker. Florida plant lovers, for example, might be surprised to find our own powdery strap airplant (*Catopsis berteroniana*), an epiphytic tank bromeliad of tropical rockland hammocks and bayheads in southern Florida, among the plants in McPherson's species list. McPherson reports that there are 21 species of *Catopsis* worldwide and that the powdery strap airplant is the only one definitively known to rely on carnivory for a large part of its nutrition. Although insectivory is suspected in other species, McPherson points out that *Catopsis berteroniana* traps more than 20 times the number of insects of other tank bromeliads and derives much of its sustenance from trapped prey.

Of course, powdery airplant's insectivorous habit is not a new discovery. It was reported in the literature in the late 1970s and was extensively described by Dan Ward and Durland Fish in 1978 in *Rare and Endangered Biota of Florida, Volume 5, Plants*. Nevertheless, it is not a species that typically springs to mind with the mention of pitcher plants. McPherson's decision to include it underscores the breadth of his book.

Other genera treated include *Brocchinia*, another group of tank bromeliads from South America's Guiana Highlands, the Californian *Darlingtonia* (similar in many ways to our own *Sarracenia*), the relatively large and interesting genus *Heliamphora*, and, of course, *Sarracenia*.

Impatient readers might be tempted to hurry past the nearly 100 pages detailing the fifteen species of *Heliamphora*. This is a mostly South American genus that graces the summits of Argentinean and Brazilian *tepui*s, magnificent flat-topped mesas that rise hundreds of meters above the surrounding lowlands. However, skipping this section risks the loss of a delightful adventure. Few American pitcher plants have a more interesting or beautiful leaf and a more fascinating structural adaptation for ensuring that they stay upright when filled with rain water. One species – *Heliamphora sarracenioides* – is even named for the resemblance of its leaves to those of our own *Sarracenia*.

*Heliamphora* leaves are equipped with a small pore or slit about halfway up their length. In rainy weather these tiny pores serve to release excess rain water. As rising water in the leaf's interior reaches the level of the pores, it drains out the side of the leaf, preventing the leaves from becoming top heavy and toppling over.

My particular interest was the *Sarracenia* chapter, due to the preponderance of *Sarracenia* species in the East Gulf Coastal Plain and the Florida panhandle where I botanize. McPherson treats all of our taxa, including the numerous varieties, subspecies, and horticultural selections. His treatment of the *Sarracenia* is one of the few, if not the only, comprehensive sources of information about the numerous forms noted by horticulturists and carnivorous plant aficionados, and it will likely find a place among my favorite references to the southeastern *Sarracenia*.

My only disappointment in this section was the omission of our own little Gulf purple pitcherplant under its more recent name, *Sarracenia rosea*. McPherson includes the taxon as well as a nice image of it, but under the name *S. purpurea* subsp. *venosa* var. *burkii*. Rob Naczi of Delaware State University raised the plant to species level in the pages of *Sida* in 1999. McPherson's 2007 copyright date would seem to provide plenty of time to include at least a reference to Naczi's work, even if he didn't accept Naczi's argument.

Nevertheless, McPherson's book gets outstanding marks and is an excellent read: detailed and replete with useful information. No carnivorous plant enthusiast will want to be without it.

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### **The purpose of the Florida Native Plant Society**

is to conserve, preserve, and restore the native plants and native plant communities of Florida.

### **Official definition of native plant:**

For most purposes, the phrase Florida native plant refers to those species occurring within the state boundaries prior to European contact, according to the best available scientific and historical documentation. More specifically, it includes those species understood as indigenous, occurring in natural associations in habitats that existed prior to significant human impacts and alterations of the landscape.

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### **Editorial Content**

We welcome articles on native plant species and related conservation topics, as well as high-quality botanical illustrations and photographs. Contact the editor for guidelines, deadlines and other information.

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