SARRACENIA - TOUR DELUXE

by Dave Kutt

It was September 19th and autumn was well on its way. Ed Orris joined me in southern Illinois and we departed for along ride to Waycross, Georgia and the Luara S. Walker State Park. This facility has always provided a conveniently close campground for an overnight stay near the borderlines of the Okefenokee Swamp Park itself. This time it was no exception.

Upon arriving at the Waycross area we first noticed *Pinguicula caerulea* plants growing on grassy, sunny, slanted banks which usually bordered drainage ditch areas. Along with the *Pinguicula* but less conspicuous at a fast glance were two small members of the *Utricularia fibrosa* complex. One type displayed a 1/4" wide yellow flower on a six or eight inch tall scape. The other type, probably *Utricularia olivacea*, was very tiny, perhaps 1/4 to one inch tall, and had a very tiny pale yellow flower. In the shallow drainage ditch waters, we also noticed the pale purple flecks of *Utricularia purpurea* flowers. The opposite side of those same drainage ditches contained *Sarracenia minor* plants of the Okefenokee area which grow much larger than *S. minor* found anywhere else. The plants were entering their dormancy and displayed ripe seed pods. Some had solid red pitcher coloration and most of them had dark red hues on the underside of the pitcher hood and on the pitcher "lip". Many of them also approached or even exceeded three feet in height! These plants grow with a vertical rhizome terminating in an apex. Often, clonal clusters form and grow up out of the shallow water. *Sarracenia minor* found elsewhere do not characteristically grow in water. Instead, they usually occur in well-drained situations. All of the "Okee" *S. minor* that we saw were in saturated mud and often were submerged to just above their apex. All of the larger plants grew with their apex submerged. The banks themselves, in addition to the *Pinguicula*, were covered everywhere with *Drosera capillaris*. These plants were all positioned to receive full sun most of the day.

We visited the Okefenokee Swamp Park to see their pavillion with a room dedicated primarily to the insectivorous plants of the swamp. An interesting group of pavillions and displays show much about the swamp's natural ecology and wildlife, and among other things, it features freeze-dried, airbrush painted *Sarracenia* plants! We were eager to boat back into the depths of the swamps for a closer look.

To do this, it was necessary to drive 26 miles south to the Okefenokee National Wildlife Refuge near Folkston at the southeast end of the swamp. There you can rent a canoe or motor boat (we chose the latter) for a day at a reasonable cost. As we motored into the humid swamp, we were constantly on the lookout for alligators and poisonous snakes, but we saw very little of the reptile life other than an alligator or two. Several areas on the swamp map provided are designated as prairies and we headed for "Chesser" and "Grand Prairie" which were known areas of the giant *Sarracenia minor*. Several times, floating detached masses of *Utricularia purpurea* almost clogged our engine's cooling-water intake port. I never thought I'd be scared by a *Utricularia* but Ed and I were warned that a clog could soon blow a headgasket and we were 14 miles into the swamp! It all turned out without mishap though, and we did find large *Sarracenia minor* sparsely populating the border areas of deep swamp grasses in "Grand Prairie". We were unable to deeply penetrate any of the semi-solid land (floating vegetative masses) on foot, but it all appeared to be basically suitable habitat for this pitcher plant. Although, we were also looking for *Sarracenia psittacina* and possible *S.* x *formosa* hybrids, these didn't turn up until later that day along solid land areas adjacent to Chesser Island. Before leaving the swamp area, we climbed an observation tower for an overhead view of the swamp and saw more *S. minor*, sphagnum moss and bog plants as well as an alligator nest from the scenic "boardwalk into the swamp" at Chesser Island. It was all very interesting and unique enough to be well worth our additional time.

As we continued our trip south and west into eastern Florida, we saw no *Sarracenias* for a while. We noticed a lot of *Pinguicula caerulea* and always the *Drosera capillaris* growing everywhere. One place had a massive display of *Utricularia purpurea* growing very profusely in a roadside drainage ditch along route 121. Eventually, we saw *Sarracenia minor* again in sparse patches amongst the grass and weeds by the roadside. This time it was the typical, rather small type, quite different from the huge Okefenokee plants seen earlier. They grew in moist to wet coastal plain soil comprised of mostly white silica sand with a small percentage of organic debris. These plants also occurred in full sun. Finally, we camped for the night in Lake City, Florida.

We headed for the western Florida panhandle along U.S. route 98 and soon saw several areas containing *Drosera filiformis tracyi* and a very large form of *Pinguicula lutea* which could easily be mistaken for *P. caerulea* should it be found when not in flower. They were not in flower in late September but on a previous trip with Rich Sivertsen,

I have seen them in flower in late April. As for the *Drosera tracyii*, when heading west in Florida, this plant is seen fairly often in many habitat areas all the way through Mississippi. Later near Carabelle, Florida, we found large succulent *Pinguicula ionantha* plants growing in black mud and even under water! Some of these plants were huge--some in excess of six inches in diameter and proved to be larger than any other *Pinguicula* species we saw on our trip. They were often overgrown partially by grasses, but were otherwise growing in full sun. The very wet ground conditions in addition to the sparse grass cover provided very high humidity levels near the ground, thus providing a super-humid "micro-environment" for the *Pinguicula* plants. There was no evidence of *Pinguicula planifolia* seen here only two years earlier.

We continued on a south-west course on Florida Rt. 98/319 until we reached Florida Rt. 71 North. Along route 71, more *P. ionantha* were seen on back roads along with *S. psittacina*. There were also savannah areas containing *Sarracenia flava* very near-by and we were disgusted with what we saw there. A large, deep drainage ditch surrounded the grassy moist *Sarracenia* savannah. One half of the habitat area had been drained and plowed under already and was completely dried and lifeless. The other adjacent half had the remainder of a once large *Sarracenia flava* population. Some of the plants were huge and yellow-green with only the Florida-typical maroon patch at the throat. Others were smaller with red veins and large lids. Still others seemed to combine all these qualities. Most of the plants were large, nearly three feet tall, and were mostly very bright yellow or browned out depicting various stages into dormancy. It seemed to be a doomed habitat, as drainage was already in process for this station too.

We got off U.S. Rt. 71 and headed north for U.S. Rt. 90 on a random exploratory course using smaller roads. There we found our first traces of *Sarracenia leucophylla* growing with *S. psittacina* in wet roadside areas. The *Sarracenia psittacina* was very profuse in all stages of development from seedling to adult. Later, we camped in Marianna for the night.

The next morning, we went west on U.S. Rt. 90 where after a short walk we located an isolated bog near Crestview not visible from the road. This hidden area was a good example of a natural insectivorous garden. Here in one small area we found *S. purpurea venosa*, *S. psittacina*, *S. flava* (the vast majority), *S. rubra* and *S. leucophylla*. The F-1 hybrids were *S. rubra* x *leucophylla*, *S. purpurea* x *flava*, *S. flava* x *leucophylla* and *S. psittacina* x *rubra*. Other hybrids that were mainly backcrosses were present also. This same area also contained *Drosera tracyi*, *D. capillaris*, *D. intermedia*, *Utricularia purpurea* and *Pinguicula caerulea*. All plants grew in nearly pure white silica sand, moist to wet and in full sun. Some of the *Pinguicula* here seemed to back out of the direct sunlight into the mottled shade provided by pine trees at this habitat's outer border. This site seemed to be a meeting point for the habitat ranges of many *Sarracenia* species.

A bit further west at the Yellow River we observed primarily *S. leucophylla* and its many hybrids with *S. rubra* and *S. flava*. The lower levels of the wet, tall grass were occupied by *S. rubra* and *S. psittacina*, *S. rubra* hybrids and *Pinguicula planifolia* with beautiful maroon colored foliage. Scattered *S. flava* were a definite minority here, but a few were present. Many other hybrid backcrosses were again evident here in various shapes and sizes.

The following day we went to Alabama where we found huge *S. purpurea venosa* plants growing with *S. leucophylla* and *mitchelliana* hybrids amongst the tall grass in flat dished areas. Then in Baldwin Co., Alabama, we witness almost solitary stands of *S. leucophylla* which literally covered acres of land. A very close examination revealed also *S. psittacina* which took advantage of the ground-level insect life.

Our visit to southern Alabama was fairly brief and was terminated after examining a few grassy, flat bogs in the western portion along the coast. Here we turned up a lot of *Sarracenia alata* with a very few *S. purpurea* present and the resulting F-1 hybrids of *S. alata* x *purpurea* here and there in the tall grass. A few of the "Gulf" *S. rubra* were seen here as well and also a very interesting and very pale form of *P. planifolia*. The *S. alata* with the dark red inner lining was seen here as well as bright yellow forms and heavily veined forms. Many *S. alata* x *S. leucophylla* hybrids were seen here too. Indeed, once the *S. alata* range really begins, pure *S. leucophylla* is just about impossible to find!

Finally, we headed to north-eastern Alabama to view a remaining stand of the rare *Sarracenia oreophila*. This site is next to a small pond and once you get past the cows, the plants can be found amongst tall weeds at the far side. Wild daisies and very tall weeds had all but completely overgrown the now dormant *S. oreophila* plants. Many of the plants were attempting to grow up through the large woody shrubs. Their rhizomes were entangled in the shrubs root systems. We gathered

seed from some of the plants and rescued a very few plants from being choked out by the bushes. The *S. oreophila* plants here occur in a strange, hard clay soil containing very fine silica sand. The area was void of apparent pine bogs or savannahs or habitats which seemed typical of CP. In fact, the majority of the trees in the area were deciduous.

In summary, we travelled about 2,550 miles in our car and a few more on foot. Although some plant collecting was done, we collected sparingly and concentrated more on acquiring seed and good photographs. Don't let the descriptions in this report mislead you into believing that *Sarracenia* occurs everywhere in the south in great abundance. They do not. Throughout the coastal states only highly specialized habitat areas allow these plants to exist at all and these habitat areas are quickly vanishing forever for one reason or another. Many of the even recently CP populated areas are now void of these plants. The larger stands of these plants took many years to spread and establish and unfortunately, new habitat areas do not usually replace the ones that are lost.

DROSERAS OF THE NEW FOREST

by David W. Taylor

The New Forest in unique in the world for its historical interest, its rare animals and plants and its living traditions. It was created by William 1 about AD 1079, and it lies in the county of Hampshire down in the south west corner of England. It is an area of outstanding beauty which is visited by millions of people every year.

There are three distinct types of vegatation in this vast area of land: heathland with self sown Scots pine and birch, heather, gorse, and grasses: woodland containing many thousands of trees such as beech, oak, and yew; and last of all, marshlands with large wild areas of peat and sphagnum bogs.

The bogs are many in number, and have magical names such as Bishops Dyke, Black Gutter Bottom, and Duck Hole Bog. The forest itself is situated about one hundred miles from the center of London, and is easily reached by the modern motorway.

It was in late August when I drove with my wife Diana and four children down to Everton, which is a small country village which lies just outside the forest area. We are very fortunate in the fact that my wife's parents own a retirement cottage in Everton, and that we are able to go there for the occasional week-end. From this vantage point, it is only a short car ride to many of the beautiful forest attractions. As it happened, this particular week-end turned out to be a bank holiday, and there were many tourists and campers that had made the trip down with us. A good number of them were at the local carnival that was held on the Saturday.

The following day after a good breakfast, I set off with my packed lunch on the long awaited field trip in search of the three *Droseras* native to this country, and known to be found in the New Forest area. Earlier in the summer, I had been lucky enough to borrow a very old book from a botanist friend of mine. This was on the flora of Hampshire. Every major county in England has at one time or other had a county flora book published. Unfortunately, many of them are old and very much out of date, and the Hampshire book was a prime example. However, the book had told me of the colonies of *Drosera* that were growing in the forest bogs. My main interest was to find *D. anglica*, as I had already found *rotundifolia* and *intermedia* on an earlier visit. I was informed by the book that this plant was to be found in great numbers in an area of the forest known as the Rhinefield, and particularly in bogs under the names of Holmsley, Wiverley, and Hinchelsea. It was stated that *D. anglica* could be found in abundance in Hinchelsea bog way back in 1899. This bit of information did not deter me too much, as I knew that these wild boggy lands had probably remained unchanged for hundreds of years. Although I did not expect to find the abundance of plants as described in the book, I felt that I would find at least a few scattered here and there. The Rhinefield area was only a matter of about four miles from the cottage, and I soon arrived at the small stoney car-park. In all parts of the New Forest, there are special walks that are purposely planned by the forest authorities for the public's convenience. The walks are planned to take you through the most interesting parts of any one particular area so that anything of specific interest can clearly be seen.