

Wild Louisianas

*Still Out There, Still Beautiful,
More Endangered Than Ever*

BY BENNY TRAHAN, SR.

Like many in South Louisiana, I was growing Louisiana irises before I really knew what they were. These plants are in many gardens, get traded around and often are a total surprise when they first bloom. In my case some seventeen years ago, plants dug because of their interesting foliage from the yard of my father-in-law's deceased aunt produced beautiful purplish blue flowers so impressive that I went to the library to find out something about them.

From my reading I discovered that the unidentified plants were irises, and specifically Louisiana irises. I found it exciting to learn that so spectacular a plant grows wild in the very state where I live. Research on the Louisiana iris species eventually led me back to the swamps and marshes but for reasons other than hunting and fishing. It has become a passion of mine to seek out and study the remaining wild irises populations.

Exploration

Every year since 1997, I have made many trips into the field to see Louisianas growing in their native habitat. Occasionally I travel great distances, but most excursions are two to five hours from my home in Slidell, Louisiana. A few are just an hour away.

My longest trip involved two weeks searching throughout Florida for *I. hexagona*.

I often go alone on these trips, but I enjoy it when my wife Kathy accompanies me. Kathy

some of the shorter trips. They enjoy seeing snakes, turtles, alligators, ducks and the irises.

We make no rigid plans as to when or where to go, and I am always searching for new areas



Iris nelsonii in its home near Abbeville, Louisiana.

does not enter the swamps, but it is nice to know someone is waiting. My oldest son Benny Jr. and his wife Debbie almost always make one trip each year with Kathy and me to the Abbeville area. We time it to take advantage of peak bloom and to coincide with the Society for Louisiana Irises show in Lafayette. My grandchildren like to participate in

to explore. I utilize road and topographical maps and like to Google "Earth" on the Internet to view aerial images of the sites I plan to visit and to search for promising new ones.

We enjoy looking for natural hybrids as well as the species and are always on the lookout for the rare white or yellow iris. We pay close attention to changes in

the quantity of bloom and whether the irises are increasing, decreasing or even disappearing from certain areas.

Over the years, we have explored a large portion of the southern part of Louisiana. With a few exceptions, Louisiana irises are no longer found in great numbers at any one location. Though plentiful at one time, only small patches remain here or there in remote locations or in sparsely scattered spots along the sides of roadways. Very few areas offer a view of more than a thousand plants. Most of the large patches either are on private property or they are very difficult to approach.

Habitats

There's a lot to be learned from getting out to see the irises in their native habitats, especially over a number of years. It helps clarify the niche of each species, although to some extent their habitats overlap. But the natural landscape has been irrevocably altered by the construction of roadways, buildings, oil patches, drainage canals, and irrigation ditches.

No species has adapted better to these changes than *I. fulva*. Fulvas are found primarily in low lying open areas such as the rights of way (servitudes) of utility companies cut through woodlands, or along the sides of roadways and streams running through wooded areas. They grow along the edges of, and to a lesser degree into, wooded areas for a short distance.

Most fulvas occur in and along the sides of shallow ditches adjacent to roadways and highways. These ditches usually con-



tain significant water for only brief periods of time during and after a rain. Fulvas do not like to remain in standing water for long periods, but they do like their "feet"

planted in moist to saturated soil conditions. *I. fulva* is found in open areas, but seem to prefer a location near trees, which offer partial shade or filtered sunlight.



The White Castle mystery red: a nelsonii form in fulva territory.

Because man has unknowingly created drainage areas ideal as habitat for *I. fulva*, it is now the least endangered of the five Louisiana species.

I. giganteaerulea loves water more than the other species. I have visited many sites where colonies existed on floating vegetation with their rhizomes and roots not anchored to the muddy bottom of the swamp. Along some roadways built through swamplands, I have witnessed *giganticaeruleas* extending out three or more feet from the bank where the water was several feet deep. These irises do best in standing water all year long. They like full sun to achieve best bloom, but when surrounded by trees they can attain their greatest height. Some grow to over six feet tall.

I. giganteaerulea can be found within a few miles of the Gulf of Mexico where they are

making their “last stand” for survival. They do not face good odds for continued existence due to the loss of fresh water marshlands resulting from erosion, saltwater intrusion, and past and future hurricanes. There are other populations of *I. giganteaerulea* in areas of South Louisiana further inland from the coast that appear to be holding their

own at least for the present.

I. brevicaulis seems to survive well in either wooded, shady areas or in full sun. I have found them in pastures among short grasses where cattle graze and within deep woods under old live oak trees. *Brevicaulis* can't tolerate as much moisture as the other species, so they are typically seen on higher ground with good drainage.

I. nelsonii is found in a very limited area mostly south of Abbeville, Louisiana (hence the old name “Abbeville reds”). The *nelsonii* habitat today is virtually surrounded by sugar cane fields and is on private property. What is left of these beauties is within swamps of Cypress and gum trees located in small depressions that appear to be two to four feet lower in elevation than the surrounding cane fields. These are narrow bands of swamp usually a half mile or less in width and

one mile or so in length. The *nelsoniis* are found in standing shallow water that may remain present all year. Sunlight still penetrates the defoliated tree canopy during growing season and reaches the irises below.

I have not been able to obtain information on the size or the exact locations of the Abbeville collecting sites of the 1960's. I can only speculate that a much larger area was available to those searching a mere fifty years ago. The remaining wild *nelsoniis* have not yet been destroyed by cane farming because of the expense required to fill in the natural depressions in which they grow. They also are in prime deer hunting areas. I have no doubt that, unfortunately, the *I. nelsonii* remaining in its wild habitat will become extinct in the very near future.

Some refer to areas around Abbeville as “iris heaven.” I certainly do. Four of the five species can be found within a two mile radius. The conditions are perfect for this meeting. The large blue coastal iris, *I. giganteaerulea*, is located along roads to the shores of the Gulf of Mexico, less than 15 miles from Abbeville. The Vermilion River runs through the town of Abbeville heading south towards the Gulf of Mexico. The winding river's course includes swamps and marshes. I am not sure if some of the land in that area is higher due to the river overflowing its banks and silting over or the possibility of underground salt domes that cause certain areas to be higher in elevation. In any scenario, *I.*



varieties we have found in the past include white and double branched *I. giganteaerulea* and a nearly six foot tall *I. nelsonii*. There are *fulvas* in a far wider range of colors than generally appreciated, including not only yellow *fulva*, but also examples that are orange, pink/purple, and a yellow with a pink blush. Yellow *I. fulva* is very rare. I have only found them in three different locations. I have not encountered any yellow *I. nelsonii* but it was found in the past.

The more time I spend with Louisiana irises in the wild, the more unanswered ques-

brevicaulis has taken advantage of this circumstance and used the higher ground to make a home. *I. fulva* can be found throughout this area where moisture is present in the soil, but water does not collect on the ground for long periods of time. The prolific presence of these three irises in their individual but adjacent niches supports the conclusion that *I. nelsonii* was born as a hybrid. *I. nelsonii* was strong enough and fortunate enough to find a niche of its own.

What's Out There

There is more variety of form and color among the Louisiana iris species than many realize and, despite extensive destruction of habitat, there is much still there to be seen. Some of the

tions I have. I do not know why there is so much variation within all the species. Each new location of a species seems to have at least some characteristics different from the plants in a previous setting, sometimes prompting questions about their origins. The color of the flower, the number of buds, and the height of the scape are all different. *I. fulva* is reported to be 24 to 36 inches tall. However, I have observed them in natural locations reaching heights taller than 48 inches. *Fulvas* in one spot may have no branching, while in others the majority will have one or more branches. The bud count in some places is normally three or four, but others have produced five and six buds per scape. In some lo-

Hunting Irises Not For Wimps

My son Benny, Jr. and I have encountered many types of wildlife while searching for iris in the wild. Some are beautiful and harmless like herons, wood ducks, pileated woodpeckers, deer, indigo buntings, and blue birds, to name a few. Others are in another category, like alligators and poisonous snakes.

We both have had water moccasins strike at us and miss, but Benny, Jr. has had the closest calls. On one occasion we were walking along the bank of a bayou looking far ahead for irises. My son was leading and stepped right over a coiled up moccasin sunning itself. He was lucky not to get bit. Another time he was looking down at some *I. fulva*, and a nonpoisonous rat snake struck at his face from the tree above. In our searches we have seen hundreds of alligators, once Benny, Jr. was knee deep in murky water trying to get to some *I. giganteaerulea* growing in a clearing when he noticed an alligator about seven feet in length floating approximately forty feet away. The alligator submerged and subsequently reappeared about twenty feet from him. There was no way for him to quickly escape the muddy bottom swamp to a safe place, and he thought the splashing might give the alligator the idea he was wounded prey. After a few minutes of staring at each other the alligator turned and swam away. When he thought the gator was a safe distance from him, he continued on to the *I. giganteaerulea*, which turned out to be nearly seven feet tall.

cales, the fulva scape has little or no zigzag pattern, while in others it is much more pronounced.

My most surprising find was near White Castle, Louisiana, on the West bank of the River about 30 miles due south of Baton Rouge. One of my friends told me he remembered some irises growing in a ditch while working in an oil field about 20 years ago. The irises in that area should be *I. fulva*. When I found these irises, some were nearly five feet tall and some had multiple branches with as many as nineteen flowers on a single scape. The color range was from red to orange with yellow infusion.

The White Castle irises are similar to *I. nelsonii*, but they were well over one hundred miles from the *nelsonii*'s Abbeville home. The location is in a ditch on the side of a sugar cane field. A house is situated a little beyond where the ditch ends, and there are a few hunting camps down a dirt road. The irises there are so unique as compared to any other site that I have visited that I inquired at the nearby house, and an elderly lady who had lived there for 30 years reported that she knew nothing of the irises other than that they had always been there.

As to their origin, I can only speculate that they were collected from another place and transplanted somewhere along the drainage path of this ditch. If transplanted, they may have originated around Abbeville. In support of this theory, there is an oil pipeline in that area, and the town of Abbeville has a great deal of

oil-related activity. It is possible that an oil field employee relocated from the Abbeville area with his family, and some *I. nelsonii* accompanied him. I will never know with certainty the origin of the White Castle irises, but the stand remains of significant interest, prompting a few trips there

each year during bloom season.

Is there a clear dividing line between *fulva* and *nelsonii*? There is a great amount of variation within *I. fulva* and a lesser amount within *I. nelsonii*, but *fulvas* are so much numerous and widespread that is not a surprise. There is not as much purple in



A Gallery of Amazing Fulvas



The color of fulvas in the that have been found in the wild goes well beyond the range associated with the "copper iris."

the color range of *I. fulva*, and not as much brick red in *nelsonii*. *Fulva* exhibits a yellow infusion (copper appearance) that I have not seen in *nelsonii*. *I. nelsonii* can have a long narrow conspicuous spear signal, or, like most *fulvas*, it can exhibit no visible signal at all.

Small differences in coloration aside, I have observed no clear distinction between these two species. Specimens considered *I. nelsonii* could be regarded as exceptional *fulvas*, or weaker specimens of *I. nelsonii* might be seen as *fulvas*. The two usually are not found growing immediately next to each other, so one can easily identify them in their natural environment. But if they were mixed together, it would be a different story.

Whether the currently named species are the best categories or whether revisions should be considered, I will leave to the experts for debate. I do have reservations as to the species status of *I. nelsonii*. What I have observed is a very good natural hybrid. The two species, *I. giganteaerulea* and the *I. hexagona* that I observed in Florida, are very similar in nature, though there are variations in both groupings in the wild. With the very liberal parameters used to determine species status, I would not be surprised to find in the future one, two, or more species added to the list of Louisiana iris under the series *hexagonae*.

Natural Hybrids

We have encountered greatest number of natural hybrids around Abbeville. Considering the proximity of four of the spe-

A Note on Florida Irises

I. hexagona is the one Louisiana species that I have not observed anywhere in Louisiana. The reason I ventured on a two week search for irises throughout Florida was curiosity stimulated by what I read in the Society's Fiftieth Anniversary publication from 1991.

Throughout the small book, especially in articles by John K. Small reprinted from the 1930s, Florida cities and towns were mentioned as the location of many of the then-designated species of iris. These irises are now classified as *I. hexagona*, although some do recognize *I. hexagona savannarum* as a separable variety within the species *hexagona*. (*I. savannarum* was one of the old, discarded species names). Even though all the East Coast irises are today considered to be *I. hexagona*, there had to have been sufficient variety among them to induce Small to extend several different species designations.

On a Florida map, I highlighted all the places mentioned in the book and planned the best routes to visit each one of them. I found and collected samples of iris in all the sites, except the white *I. albispiritus* that was reported to be near the Caloosahatchee east of Fort Meyers. The book described the location to be about 12 miles up the Caloosahatchee River but, I could not secure a boat to reach this site.

On my trip through the interior of Florida I saw the variety *I. hexagona savannarum* growing in moist soil in very large fields of several acres. These fields did not appear to hold water so the irises grow under conditions similar to *I. brevicaulis* in Louisiana. In most of the sites in Florida, the irises were growing next to canals, ditches and streams, similar to the places where *I. fulva* is found in Louisiana. Irises do not occur in the Everglades, and I did not see settings that resemble the cypress swamps of South Louisiana. [*Benny: is this correct?*]

Overall, the Florida irises do favor *I. giganteaerulea* in many ways, but with some differences. The forms I saw are shorter, their color generally is a darker blue, and the leaves appear to be stiffer. I did not see a single white iris in Florida on either of the trips there.

The largest color difference is in the irises on the west coast of Florida in Dixie and Levy counties. The irises there are the darkest blue I have seen, darker than any *giganteaerulea* that I have encountered in Louisiana.

The shorter height of the Florida irises compared to *giganteaerulea* could be due to the soil. Florida has a siliceous sand, coarse base, while Louisiana has a rich black mud. This appears to be the most significant environmental difference between Louisiana and Florida, and it could account for the smaller size of Florida irises. On the other hand

There is a good deal of variation among the Florida irises, but I leave it to the experts to determine whether they should all be lumped into *I. hexagona*. I personally did not find enough variation to warrant the naming of new species.

The performance of Florida irises in Louisiana is very poor for the first year or two; then, they seem to acclimate and begin to bloom.



cies, this is to be expected. I have found only three or four natural hybrids from this area that I felt worthy of further study and preservation. Perhaps there are many more to be found on private property, but many more undoubtedly have disappeared as agriculture took over the land. We are indeed indebted to the work of the early collectors.

The possibility of hybrids from *I. giganteaerulea* and *I. brevicaulis* is not very good. *I.*

giganticaerulea blooms early, while *I. brevicaulis* blooms late. If there were a hybrid, I think it would be unlikely to find a habitat for its long term survival.

The Dim Future

I have always believed that the Louisiana iris species are on a death march. Their seeds can only float downstream towards the salty Gulf. They cannot advance very far to the north by rhizome multiplication.

Katrina had a huge impact on the Southeast portion of the State. The two or three weeks of standing salty water killed many of the rhizomes. I feel Hurricane Rita had a greater impact on the Louisiana iris species than Katrina. My son, Benny, Jr., and I visited the Cameron area during the 2006 bloom season of *I. giganteaerulea* to determine the condition of this species. We did find some small stands in bloom, but not nearly as many as seen in years past. This species is very tough and could temporarily rebound. If the missing iris or their seeds survived, they should be found a mile or so further north where much of the marsh grasses and mud settled.

Many years ago, and to a lesser degree today, urban sprawl claimed and is claiming large amounts of the wild Louisiana iris habi-

tat. I have read articles recounting the once vast iris fields surrounding parts of New Orleans. Large deposits of wild iris could once be found on the outskirts of small towns all over South Louisiana. However, residential development expanded into the surrounding areas and the once large masses of iris vanished. Additionally, the oil industry excavated canals from the Gulf of Mexico through coastal roadways to oil-related business locales in an effort to gain shorter and quicker routes to supply offshore drilling. These canals dissected swamps and marshes, allowing salt water



from the Gulf to enter into iris habitat, destroying the iris in those areas. Natural disasters like hurricanes also drive salt water into the marshes, killing large populations of iris. Swamps were and are being drained to create land more suitable for agriculture. Airplanes spraying herbicides very often over spray the intended fields, killing the iris growing adjacent to them.

Development of roadways and highways also destroys iris habitat. In an effort to save time and money, herbicides are used to control the growth of weeds along roadways ditches. It seems as though the decision has been made that it is easier and more cost effective to poison grass once every three months, rather than cut the grass once each month, and the iris generally do not survive the poisonous solutions.

There are too many reasons why the naturally growing Louisiana iris species will be extinct in the near future. I predict that the first to disappear from the wild will be *I. nelsonii*, followed by *I. brevicaulis*, *I. giganteaerulea*, *I. hexagona*, and finally, *I. fulva*.

I do not think anything can be done to protect the Louisiana species iris in their natural habitat. Their habitat is disappearing, and purchase of some of the remaining land is cost prohibitive. More of the species iris should be grown by iris lovers, and as the plantings multiply, when division occurs, replanting should be aggressively pursued in wild areas that could support them. We could give them a new start.

Even this approach is risky and did not work for me. For

years I had been planting species irises in the swamps of Bayou Sauvage East of New Orleans. They were developing into fairly large colonies of red, white, blue, and purple blooms. Each year I looked for natural hybrids in my planted areas. Unfortunately, in the year 2006, they were totally destroyed by Katrina.

From my involvement with the species Louisiana irises, I have gained a greater appreciation for the swamps and marshes of our State. The serenity and beauty as well as the dangers are an attraction that beckons me to return year after year. I cannot adequately describe the scene of moss-draped Cypress trees with their knees protruding from the dark, murky water with clumps of large blue or red flowered iris in the background. I wish everyone could witness this iris in its natural habitat.