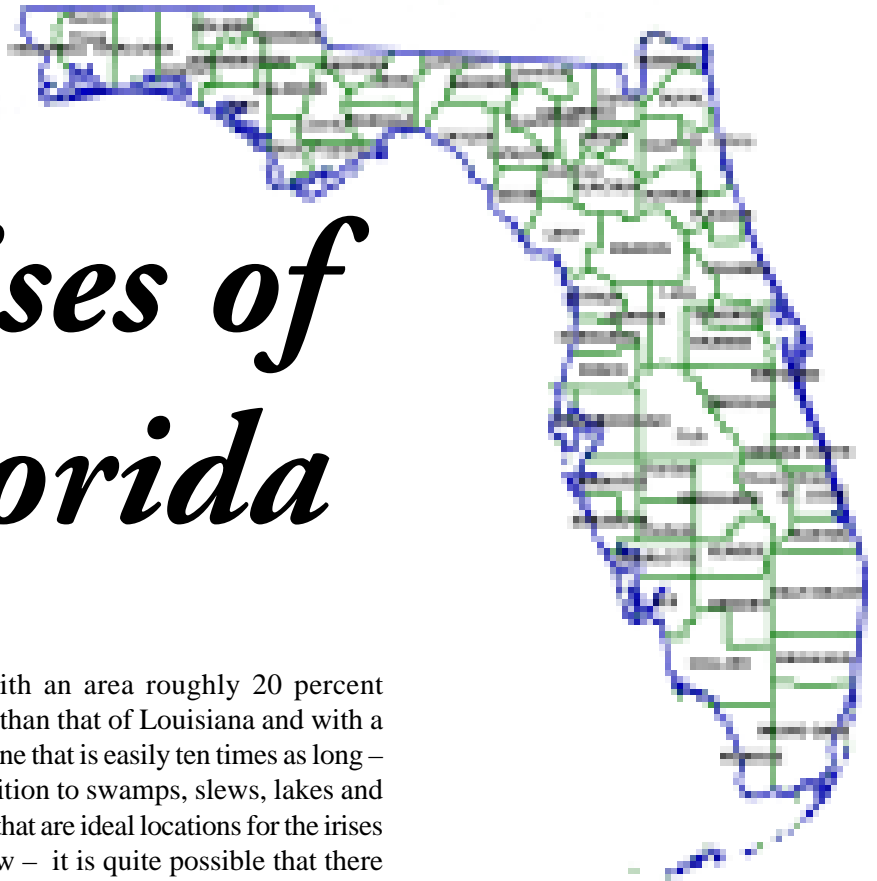


The Irises of Florida



The Florida Hexagonae

BY SAM NORRIS

The second edition of *The Louisiana Iris* arrived a few days ago* and I am very favorably impressed by it. A letter from Marie Caillet indicated that she was worried about some mistakes that had been included in the book. Admittedly, if a person looks hard enough for mistakes one or two may be found, but these are very minor compared to the quality of the book. One thing I particularly liked was the photographs of the different cultivars, especially since the only two of mine that have been introduced were included!

Florida Ignored

One thing that was conspicuous by its absence was an almost complete lack of any reference to the irises growing in Florida. This has been the pattern in most publications of the Society for Louisiana Irises, but it certainly isn't because the irises are not growing there.

**The late Sam Norris of Owensboro, KY wrote this article a year and a half ago. He also contributed short pieces to SIGNA about the Florida irises.*

With an area roughly 20 percent larger than that of Louisiana and with a coastline that is easily ten times as long – in addition to swamps, sloughs, lakes and rivers that are ideal locations for the irises to grow – it is quite possible that there are more irises growing in Florida right now than were ever growing in Louisiana. I wonder if anyone has ever made a survey in an effort to determine how extensive the iris growth really is.

Masses of Irises

The SLI Fiftieth Anniversary Publication has a picture showing a field of “*I. savannarum*” in bloom, and speaks of them being there by the acre and going out of sight in the distance; so the lack of irises isn't the problem.

I never realized how extensive the iris fields were in Florida until Michael Gideon started corresponding with me. The new publication states “collecting Louisiana irises was an interesting and amazing part of American horticulture, but it is a part of the past.” Contrary to this statement, collecting the Florida irises is alive and well. Michael lives in Southern Florida, and he and his family have been collecting iris plants and seeds for a number of years. Last year he sent me some of his collected plants along with about 1,200 seeds for SIGNA. This year he did even better, more plants and twice as many seeds.

Michael's travels while collecting take him all the way from the Big Cy-

press National Preserve in the south to the St. Mary's river in the north. He has collected in the locations where Small gathered his samples, plus many to which Small never dreamed of going. Michael tells me that he has found every color and form that has been found growing in Louisiana, and there are probably many others that he has yet to collect.

Highlands Irises

One that really caught my attention was collected in Highlands County. What makes this one so special is the location where it was collected. The location was so dry that the irises collected there will not live if they are grown in the wet conditions in which the hexagonae normally thrive.

Michael sent me a start of this plant along with some others. If all goes well they should bloom this next spring. It remains to be seen if they can take my cold weather, but they are well mulched which should help out. The particular Highlands plant he sent me is a white, but there are probably other colors.

If this plant is so well adapted to the dryer conditions that too much water will kill it, it probably is far enough away from the norm that it should be classified as a

new species.

From what Michael has found, I would conclude that the majority of irises in Florida should be classed as a hybrid swarm. Small reported hexagona growing in the northern part of Florida, but to have the hybrid swarm there must be something for hexagona to hybridize with, if it is indeed one of the parents. Anyway you want to look at it, it seems very unlikely that any of the species growing in Louisiana is the other parent, so that means there is at least one other species growing in Florida that has never been recognized, possibly one that Small described and named.

Michael Gideon has been trying to interest some others in making the same kind of test on the Florida irises that Michael Arnold and Bobby Bennett made on the irises in Louisiana. Hopefully, those efforts will prove successful and new scientific evidence will become available about Florida irises.

Editor's Note: Michael Gideon makes no claims as to the species status of irises. He has worked to encourage scientific testing, and hopefully results will be available soon.



A View from the 1930s

The Distribution of Iris in Florida

BY H. HAROLD HUME

The seven species of iris native in Florida, as classified by John K. Small, fall naturally into four groups represented by (1) *Iris hexagona* Walt., (2) *I. savannarum* Small, *I. rivularis* Small, *I. albispirtus* Small, *I. Kimballiae* Small, (3) *I. virginica* L. and (4) *I. tripetala* Walt. Of these, the four constituting the second group are not known to occur outside the state, excepting *I. rivularis*, reported from Georgia close to the Florida boundary, while those representing the other three groups are found far outside Florida. Within the state the native species are widely distributed. *I. savannarum* is the most abundant and in some sections occurs in great colonies while *I. hexagona* and *I. virginica* are found in fair sized colonies in a few localities. The remaining four species are quite limited both in numbers and in distribution.

All are moisture and humus loving plants but, although water is essential to their distribution and the establishment of young plants, yet it is not always present in surplus throughout the year. Often iris plants are in shallow standing water continuously for weeks or months, but at other seasons there is no standing water where they grow. Water in optimum or in large amounts is most beneficial during their growing season. It is an interesting fact that all of them adapt themselves to ordinary garden conditions and can be grown success-

fully if particular attention is given to watering, indicating that the abundance of water so often present where they grow naturally, although not inimical to, is actually not necessary for the welfare of established plants.

Presumably either the irises now growing in Florida came from regions farther north or their progenitors did. Some, as *I. hexagona*, *I. virginica* and *I. tripetala*, still have their northern connections. Since their seeds are commonly water borne, they came in on the flood waters of long ago, moving from north to south, even as they may be brought in still from time to time on the floods of the rivers that originate to the northward and flow through western Florida. Under natural conditions they grow in locations where moisture below the ground surface, and at times above, is suited to their needs. Since they require ample supplies of water at certain seasons of the year for their well being, conditions best suited to their growth are found in the coastal plains areas, along streams and rivers, more particularly the St. Marys and St. Johns, and in the southern and western parts of the state where the land falls away south and west from the interior highlands. Seventy-five feet

*Dr. H. Harold Hume was a prominent horticultural author and an agriculture dean, provost for agriculture and acting president at the University of Florida over the period 1930 to 1949. This article is reprinted from the AIS Bulletin No. 47, April 1933. With the exception of *I. hexagona* and *I. virginica*, none of the species mentioned by Hume are any longer recognized.*

or thereabouts is the maximum elevation and by far the greatest numbers of plants are found at elevations only a few feet above sea-level. Among the highest points at which colonies of iris grow are the ones east of Chipley (*I. virginica*), south of Leesburg and north of Newnans Lake (*I. savannarum*).

The absence of irises from certain areas may be accounted for in part on the basis of soil reactions. They will flourish on soils that are quite acid, but it is equally true that apparently they also grow well on soils that are neutral or even alkaline in their reaction. Still it is undoubtedly a fact that soils may be so alkaline as to interfere with or check their growth. This may explain why they do not occur on the lower east coast of the state, for there none apparently are to be found much south of the Fort Pierce-Okechobee line, even though soils unquestionably adapted to their growth are to be found much farther south. Hence, while soil reaction may be to some extent a controlling factor in their distribution and may account for the presence or absence of plants in given areas, it is apparently not the only one and it is entirely possible that what took place affecting their distribution during geologic ages accounts for their absence from certain localities. Naturally, one would think that the Everglades would be adapted to their growth, yet none are found native in the Everglades proper. It may be that the general trend of drainage waters did not distribute them in that area. Certain mineral elements necessary for their growth may be absent from Everglade soils, and again they may have been crowded out by the rank growth of other plants. Irises native in Louisiana and those from other parts of Florida however are being grown successfully under cultivation when provided with mineral supplements.

***Iris albispiritus*.** The northern limit of this form appears to be on the old Lakeland-Auburndale road at telephone pole 276, about four miles east of Lakeland. It is associated with willow and cypress on the north side of the road. The type locality is near LaBelle. It is

found in the LaBelle-Fort Myers area, on the west side of Lake Okechobee and west of Wauchula. Over this general area it is widely scattered, but not abundant in any one place. Usually it is mixed with *I. savannarum* and perhaps some times difficult to distinguish from the albino form of that species. White irises probably belonging here have been found at Red Level, but whether they are *Albispiritus* or only an albino of *I. savannarum* is not known. Further study and exploration is needed for this species.

Iris hexagona is confined to the northern portion of the state and apparently is not present south of a line drawn from Jacksonville to the mouth of the Suwannee. There is a small colony in Callahan, another small one a few miles west of Jacksonville near Hart Havenon

dance and in some localities there are large colonies. Compared with *I. virginica* and *I. savannarum* its range is quite limited.

***Iris Kimballiae*.** Although reported by Small¹ as occurring on both sides of the upper peninsula, this species has been seen only at Appalachicola. As compared with *I. savannarum*, to which it is doubtless related, it is a less robust plant with smaller flowers and erect rapier-like leaves. North of the town the Sheip Lumber Manufacturing Plant is located. Near it a little creek or stream comes in from the west to join the Appalachicola River on which the plant is situated. This stream is crossed by a bridge for the railroad. Right at the south end of the bridge on the east side there is a small colony of *I. Kimballiae*. It is associated with *I. virginica*, willows, sawgrass, lizard's tail



“*Iris albispiritus*”, scanned from a copy of the Hume article that appeared in the AIS Bulletin in 1933.

State Road No. 1, and a larger one south of Magville on State Road No. 13. It is probable that there are others in the Hart Haven-Maxville area. On the west side of the upper part of the peninsula, it is to be found in limited numbers at Cross City from whence it extends northward into LaFayette County and westward toward Perry and St. Marks. It is in this general area that it is to be found in greatest abun-

and buttonbush. Across the bridge (on the north side), it occurs among sawgrass on the west side of the track. On the east side a short path leads from the railroad to a boat cache inside a fenced area. Just after crossing the fence, close to the edge of the stream, *I. Kimballiae* grows in St. Augustine grass and it is also found nearer the boats. Farther out away from the bridge there is a small patch on the

east side of the railroad track. In the lumber yard there are a few clumps between the westernmost lumber piles and the wooded area that separates them from the railroad. Farther south, too, where there is a lot of *I. virginica* there are one or two clumps. The tallest flower stem measured forty inches. Here and there plants were in bloom when the location was visited (March 11, 1932). Had it not been for the frost of the previous night (March 10), which injured many flowers there would have been quite a showing.

Iris rivularis has been reported only from the general type locality in northeastern Florida and the writer has not been able to collect it although three attempts have been made. Small,² who described and named it as a new species, states that it occurs along streams flowing into the St. Marys River, but whether it occurs elsewhere than in the watershed of that river as it approaches its outlet is not known. There is every reason to believe it is quite local in distribution, but until additional collections are made its area cannot be delimited.

Iris savannarum. There are more plants of *I. savannarum* in Florida than of all other irises counted together. It also occurs more or less abundantly over a greater area in the state than any other species. It is found from the St. Johns River, where it turns eastward to the sea, south to Fort Pierce and Okeechobee on the eastern side of the state, and on the western side from the southern watershed of the Suwannee to the Big Cypress southeast of Fort Myers. Its distribution throughout these areas is, of course, not continuous. In the central portion of the state the northernmost point at which it has been found is almost north of Newnans Lake on the short road from Gainesville to Orange Heights. South of a line that may be drawn from the Suwannee to the St. Johns through the point just mentioned, *I. savannarum* is to be found here and there in comparatively small colonies in many different places. In the northern section it is not abundant, though there are fairly large colonies in the vicinity of

Otter Creek, but the great area in which *I. savannarum* occurs in countless numbers extends around the north side of Lake Okeechobee, southward around the west side and southwestward to LaBelle and Fort Myers. In that vast area, which extends from Wauchula westward to Bradenton and southward, it is to be found growing in colonies of many, many acres, while in the Okeechobee prairie section it is so abundant that one may look out across patches of *I. savannarum* of such size that their farthest sides can scarcely be seen. When in bloom these colonies are wonderful sight. There are goodly sized areas on State Roads Numbers 22 and 24 where they approach the immediate vicinity of the St. Johns River. Definite locations at which it has been collected are almost too numerous to list.

Iris tripetala. Apparently, *I. tripetala* is found in Florida only west of the Appalachian River in the flatwoods in proximity to the Gulf of Mexico. Here, too, a lovely white form is occasionally found. The exact area for this species has not been determined, but it has been collected north of Appalachian, west of Wewahitchka and north of St. Andrews Bay. A careful survey of the area west of the latter point will probably result in extending its known area of distribution. It is a month to six weeks later in flowering than *I. Kimballiae*. Its usual blooming season begins about April 15th.

Iris virginica is peculiarly an iris of the watersheds of the St. Marys and St. Johns Rivers. It is found here and there along the banks of both. Usually it occurs in rather small colonies and nowhere does it cover great areas. The places where it is found in greatest numbers are along the Seaboard Air Line and the Atlantic Coast Line railroads north and northeastward from Callahan and along the Florida East Coast railroad from Bayard toward St. Augustine and west of St. Augustine toward the St. Johns River. It is not known to occur in peninsular Florida along the Gulf of Mexico, and it has not been found in the central portion of the state. It is present in a few places in western Florida, more particularly at the estuaries of several rivers

that, having their origin outside the state in areas to the northward, flow through Florida into the Gulf of Mexico. For the most part it is not found along State Road No. 1 in western Florida, only one small colony having been noted east of Chipley. It grows on the Ochlockonee River where the road from East Port (State Road No. 10) crosses it. The southernmost location as reported by Small³ is in the Big Cypress, southeast of Fort Myers. As this is an isolated patch, having no connection with any other to the northward, its presence there may be due to seeds carried by waterfowl or other birds. Localities for the species checked by the writer are: Black Creek, Green Cove Springs, Dun's Creek and Rice Creek at the St. Johns River, Ortega, Jacksonville (Willow Branch), Orange Park, Bayard, West Tocoli, Hastings, Palatka, Kingsland, Chipley, south of Glen St. Mary on the south prong of the St. Marys, Appalachian, Ochlockonee River (near mouth). It has also been reported from Lake City.

Iris colonies

In so many instances the iris species of Florida grow in unmixed pure groups that the occurrence of more than one species in a group or colony or even in close proximity is always interesting. Combinations, however are found at times. *I. virginica* and *I. Kimballiae* are to be found both together and in close proximity at Appalachian. In one large colony of *I. virginica* near the Sheip Lumber Manufacturing Plant a single clump of *I. Kimballiae* has been noted. In the railroad ditch the two were close together and near the lumber piles (between them and the railroad) they also occupy the same area. In this latter case *I. virginica* was numerous with only a few clumps of *I. Kimballiae* visible here and there.

At the edge of Green Cove Springs on the road from Shands Bridge, the ground is low and the ditches filled with a growth of such plants as crinum, sedges, lizard's tail, peltandra and iris. Here both *I. virginica* and *I. savannarum* occur in close proximity. In some cases the plants are intermixed.



An *Iris hexagona* specimen from the Carolinas showing the form typically associated with the species. It is blue but shorter than *I. giganteaerulea*. The falls appear rounded, an effect created because the hafts, the portion beneath the style arms, are very narrow.

At the north end of the bridge across Doctor's Inlet, *I. virginica* and *I. savannarum* grow together; the colonies are so mixed that care has to be taken in securing plants of the two species separately. On the road from Jacksonville to St. Augustine there occurs an interesting division of locations of species. About twenty-five miles from the ferry in South Jacksonville the highway crosses a ridge of higher land. It is about two miles wide and on either side of it the land is low. North of this ridge in the railroad ditches, *I. virginica* alone is found. South of the ridge it is replaced by *I. savannarum*. On State Road No. 48 (St. Augustine to Shands Bridge) about three miles west of St. Augustine, *I. virginica* and *I. savannarum* grow in the same general area. There is quite a large patch of the latter growing with willows at the beginning of the low lands.

At the east end of Shands Bridge on the north side in the flood area of the St. Johns there is a single little group of *Iris savannarum*. At the west end of the bridge *Iris virginica* only is found (on both sides of the road). The little group on the south side produces dark colored, delightfully sweet-scented flowers. These

scented blooms are rare, according to the writer's observations.

I. albispirtus is usually associated with or adjacent to *I. savannarum* wherever found in the great iris areas of South Florida from Lake Okeechobee to LaBelle and from Wauchula to Bradenton. Since there is an albino form of the latter, *I. albispirtus* is not easy to differentiate.

Notes

¹ Addisonia. 9: 59-60. pl. 318. D: 1924.

² Addisonia. 12: 11-12. Pl. 390. Mar. 1927.

³ Journal of the New York Botanical Garden, 32: p. 62. 1931.

Right: The plates at right and on page 13 are reproduced from the Society's Fiftieth Anniversary Publication, 1999. These plates were originally published in Addisonia in 1925-29 to illustrate the research of Dr. John K. Small, Curator of the New York Botanical Garden, in Florida, Louisiana and other areas.



I. hexagona



"*I. savannarum*"



"*I. Kimballiae*"

Discovering New Forms among the Hexagonae

Looking Hard in Florida

With almost all the former “species” now rejected and I. hexagona ascendant, what are we to make of the variety among Florida’s native irises?

BY PATRICK O’CONNOR

What we do not yet know, or is not documented, about the native irises of Florida apparently could fill volumes. The principal species attributed to peninsular Florida, *I. hexagona*, is believed by some to have company, and it is pretty clear regardless that the variety among the irises in the Series Hexagonae found in Florida far exceeds previous description.

I am singularly unqualified to offer opinions on these irises, having no first-hand knowledge of them. I certainly am not prepared to deal with whether there are more species out there than those that have been designated; or fewer, with the exceptional forms simply representing intraspecies variation. It seems that someone always wants to tinker with species designations, and why not? They are manmade categories useful to the degree that they encapsulate but do not obscure important characteristics.

Bruce Hanson, Curator of the Herbarium in the Department of Biology at the University of South Florida at Tampa, cautions that “true that species vary with habitat, with geography, with microclimatic conditions, et cetera. And in my opinion, horticultural hobbyists seem always to make too much of minor differences in color and stature.”

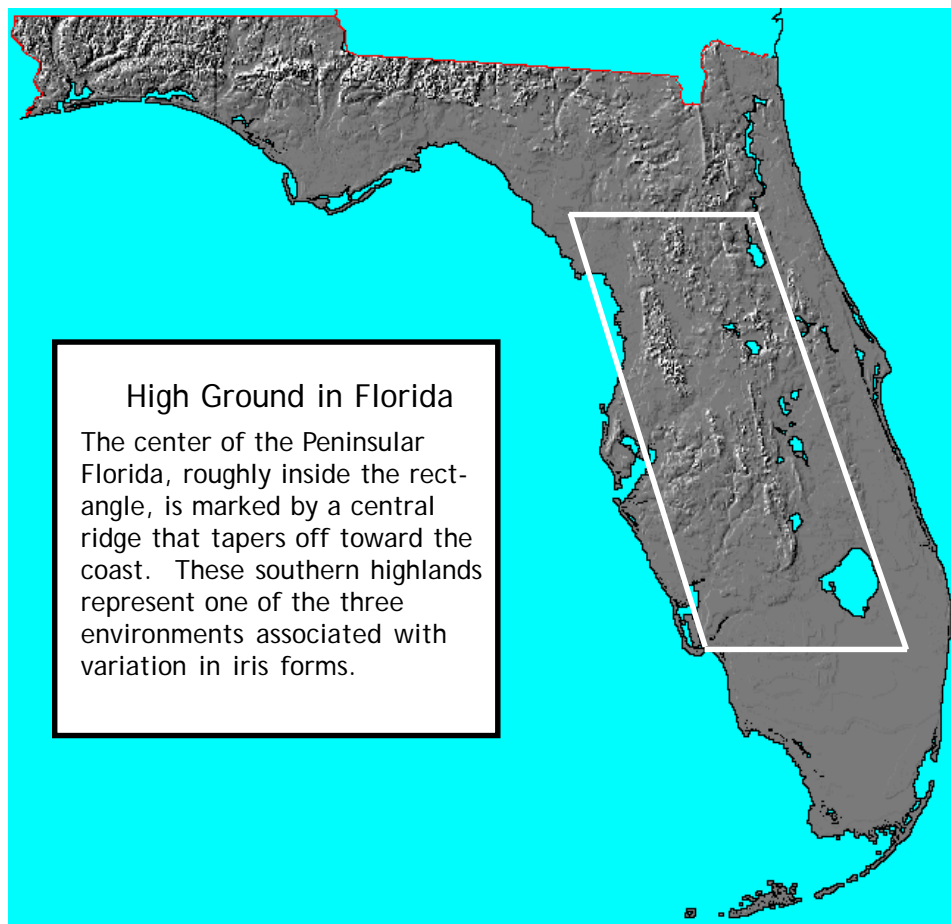
The widely accepted view today, unlike in the time of Small or Hume, is

that the indigenous hexagonae in Florida are limited to two or perhaps three species. *I. brevicaulis* has exceedingly limited distribution and is reported only from Jackson County, which abuts Georgia. *I. fulva* is reported only in Santa Rosa County, also in the panhandle and only a county away from Alabama. One source asserts that *fulva* actually was introduced to the state. The irises in the rest of the Florida, from the Georgia border to the southern tip, are *I. hexagona*. Bruce Hanson indicates that, barring taxonomic research to the contrary, *I. hexagona* will continue to be the designation of the Florida irises.

But Wait

Fair enough. But consider the work and observations of Michael Gideon and his family.

Michael Gideon lives in South Florida. He has devoted as much time and effort to the recognition and understanding of the Florida irises as any of the early collectors did with respect to Louisiana’s irises during the discovery days from the 1930s to the 1950s. Over several years, Michael and his family have systematically sought out the locations of native irises, collected samples, and observed them in garden culture. Based on the unexpected variety found, he has



The relief map was developed by Ray Sterner of the Johns Hopkins University Applied Physics Laboratory and used with permission. Additional information is available at <http://fermi.jhuapl.edu/states/>.



From top: A pale violet from Levy County; two views of a nice, veined purple collected by the Vestrands. Photos by Steve Shepard.

Hopefully, knowledge of what has been discovered so far will stimulate future work, including taxonomic analysis, to understand and appreciate these overlooked plants.

Geography

Michael Gideon has observed three different habitats in Florida that broadly correspond to variations in irises. The first is based on a north-south dimension. Florida is an elongated state stretching 447 miles from the St. Marys River to Key West.

Variation in climate as well as topography over this distance is associated with significant differences in iris bloom time. This creates separate niches in which irises have developed independently. Michael places the border of this north-south division at “an imaginary line running from Cross City in the west through Gainesville and east to Palatoka.” He says, “There’s a weather difference at this line with six weeks earlier winter and six weeks later spring. This keeps the southern forms in the south.”

Above the line grow the “northern forms”, which are generally the same as the irises found in Georgia. I gather that these are more typical of the original *I. hexagona*, named from specimens collected, I believe, from the Carolinas.

Within the southern region of peninsular Florida, and below the Cross City-to-Palatoka line, there is an additional division based on elevation and characteristics associated with highland versus coastal terrain. Not having firsthand familiarity with Florida, the notion of highlands came as a surprise, but the relief map on the previous page clearly reflects the central ridge.

Distinct differences have been observed between highland and coastal irises, and both differ from the northern forms. The highland forms are most interesting because they have been largely overlooked. Michael Gideon describes the highland habitat in this way:

“In many locations in the interior it’s almost desert like, the soil is pure silica sand and the sun burns off the surface moisture. One would

never imagine iris growing here and that’s why no one ever looked in the highlands. At some point the rainwater seeps out downslope. This is where the highland form exists. These seeps are usually not connected to any river and are land-locked. You must learn where to look. Usually, it’s a good hike in to these isolated bogs”

He also observes that these sites often are on private cattle land. Many acres not devoted to cattle have been transformed by the phosphate industry into a landscape inhospitable to irises. Cattlemen actually have protected these irises from destruction.

The highland forms are often white, but not always. Blues, purples and other color variants with the characteristics of highland irises are also found. These irises are shorter than the coastal forms, never taller than three feet, and with a flower smaller than the coastal irises, more on the order of *I. fulva* in size. The flower is spidery and the petals recurve, although exceptions are found. Interestingly, the highland form is not fond of over-wet situations. Perhaps it resembles *I. brevicaulis* in this trait.

The coastal irises have been described as “giant blues,” a phrase familiar in South Louisiana. The northern forms are also generally blue but shorter, and they sound like the originally described *I. hexagona*.

Michael sent me a large number of plants several years ago. Only two have bloomed, both blues that show no apparent difference from *I. giganteaerulea*. They were tall and robust. One was a coastal form from near Sarasota notable for its vigor and the monstrous rhizomes it produces. They match those of some *giganteaeruleas* that I once dug out of a freshwater marsh in Cameron Parish, Louisiana, each very stout and easily a foot or more in length.

Other plants sent from the highlands, and the northern forms, do not grow nearly that vigorously or produce such prodigious rhizomes, even while growing for me in identical garden conditions.



"I. albispirtus", named by Small. Compare to 'Cass White', right.

Except for the coastal forms, which thrive in the New Orleans area, the irises that Michael sent so far have not bloomed. They do survive, however.

Apparently some of the Florida irises are better adapted to the particular climate and soil of their niches in Florida than to the rest of the Gulf Coast. Or, perhaps my mistake was not knowing how to accommodate their origins. They probably deserve better treatment than I have afforded them.

Overlap and Variation

The observation of three generally distinct habitats should not imply that all Florida hexagonae fall clearly into one

grouping or another. In fact, one of the major observations made is that there is unexpected variation among the Florida irises that seems to extend well beyond three groupings.

Part of the reason for variation is that in places where the different environments intersect, as with the natural hybrids found in Louisiana, intermediate forms are produced. And, since seeds float downward (barring the effects of hurricanes), there is a tendency for some of the characteristics of the highland irises to drift downward also, so that there is a mix in the adjoining areas. The reverse does not generally occur since water and seed are not inclined to flow upstream unless pushed. Michael adds that, "Even now the rivers that drain out of the highlands usually go dry and that's what keeps the coastal forms out of the highlands."

In areas where plants with both highland and coastal characteristics are found, it was observed that the highland forms tended to be up on a levee, the coastals down in the water.

Another conditioning factor promoting variation is isolation. Many highland bogs are isolated from one another with little chance of cross contamination. That being the case, the irises in one area are free to interbreed over the years, many hundreds of them, and to develop unique and stable characteristics. This is not unlike what may have happened in Louisiana around Abbeville, where *I. nelsonii* developed, the product originally of other species.

It should not be surprising that, with time, a localized population could develop unique characteristics. The work of



'Cass White', collected by Kenneth Cass in 1985 in Lee County in the same area where Dr. John Small collected specimens from which "I. albispirtus" was named. 'Cass White' was registered by Robert Turley in 1996.

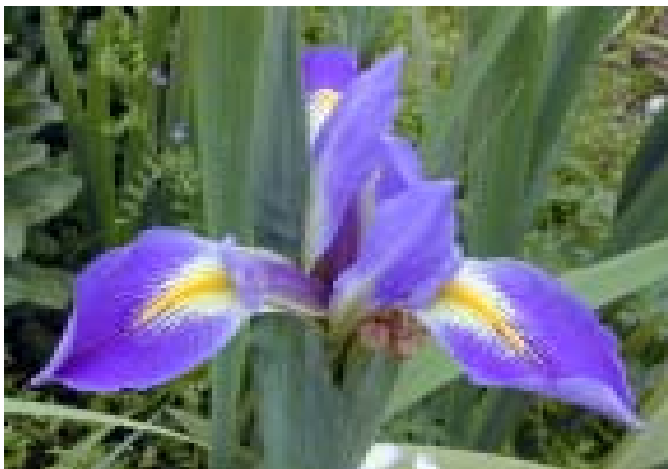
hybridizers has vividly demonstrated how much change in plant characteristics is possible very quickly through controlled crosses, so different characteristics might well pop up and then come to dominate an isolated population left alone to interbreed over a long period.

Michael feels that Small's white "*I. albispirtus*" is a cross between highland and coastal forms. Once thought to have disappeared, he rediscovered the so-called "Ghost Iris" after deciding to look inland and upland. He has now found it in numerous locations, but in wetter sites than the habitat of a pure highland form.

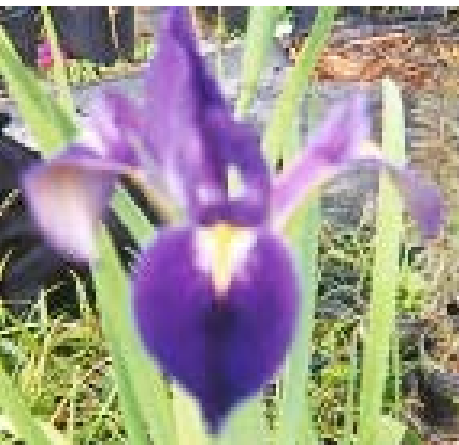
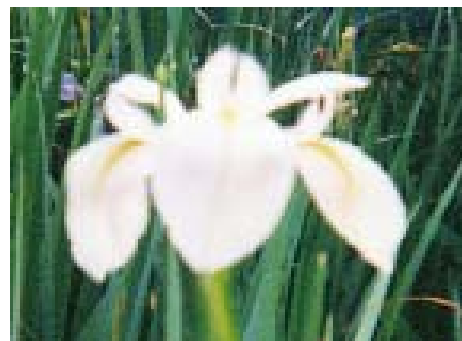
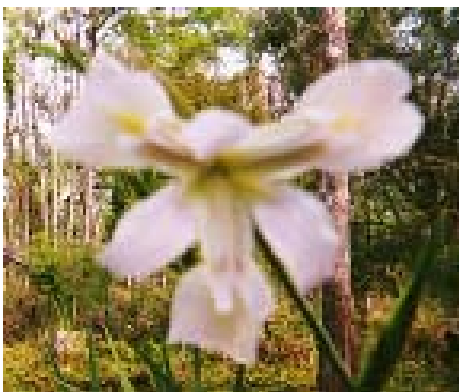
Michael cites the collected and registered 'Cass White' as an example of "*I. albispirtus*." It was, in fact, collected by Kenneth Cass in 1985 at the site where Small found "*I. albispirtus*."

Colors

One of the principal variations found is the existence of irises other than the blues and whites associated with *I. hexagona*. In a letter a couple of years ago, Michael reported yellows, reds, and other colors, and added, "The yellows and reds are only found in the highland form.



A "giant blue" from near Sarasota growing in a New Orleans garden.



Left, from top: spidery blue coastal form from near Sarasota; I. hexagona sample under study by Alan Meerow; a pale violet from Hillsborough county; and a deep purple from Polk County, showing the recurvature associated with the highlands form. Middle, from top: a Highlands County burgundy-violet; a Manatee County white; another white collected west of Palatka; and a very short I. hexagona, around two feet; Right, from top: a violet northern form from the Pinhook Swamp; a Polk County blue-purple.

The interior folks all speak of a bright yellow. So far we've found pale yellows and the opaque yellow with a violet flush. Kenneth Cass found a real nice

bicolor last spring." Apparently, many of the whites found in Florida are actually more of a cream color, which suggests the presence of yellow. More re-

cently, Michael indicated that the bright yellow has now been found.

The photographic evidence is interesting, although Michael has not had the time to emphasize creation of perfect pictures. His photography has been motivated by the need to create a record for himself of what he has found rather than creating sharp images of single blossoms.

I have seen quite a few of the pictures, and indeed there is a surprising degree of color variation. And, they supply clear documentation of the observed

differences in flower form. Other photos of Florida irises by Steve Shepard add supporting evidence.

My understanding is that the “reds” found in Florida are not on the order of *I. fulva* or *I. nelsonii*. Occasionally an iris has been found with a distinct reddish influence, but it would be incorrect to say that they are comparable to the two indisputably red species.

It is difficult to grasp and characterize differences in Florida irises in terms of color. My appreciation of it is that there are unexpected color variations, although not in great numbers. White is a predominant color in some localities, but that has been reported (and it is an interesting difference from Louisiana where whites are only occasional finds).

At least in comparison to Louisiana, the apparent absence of *I. fulva* in Florida appears to have suppressed the color range of “hybrid” forms found there. *Fulva* contributes both red and yellow to hybrid crosses. Still, interesting and unanticipated variety exists with the very real possibility that a full appreciation of Florida’s irises would reveal complexities in their backgrounds and relationships that we do not now understand.

Origins

Michael Gideon not only searches out native irises, but he has thought about them broadly and often in epochal terms. I am unable to do justice to these themes. He often refers to what Florida and the Gulf Coast were like before, during, and after the Ice Age. How the glaciers retreated, where the irises must have been deposited and how they developed. What the relationship is between Louisiana, Florida and other places along the Gulf Coast. Fascinating stuff with which I am ill-equipped to deal.

Another theme, equally fascinating, is the relationship between native irises and the native peoples of prehistoric times. There is clear evidence of the use of irises for their medicinal and other properties. It is plausible to entertain the idea that, to the extent that these plants were of value in the lives of these peoples, they were collected and planted near dwelling places or even traded.

Indeed, the pollen record in archeological sites clearly shows that irises were present. It is well documented that trade occurred over wide areas, with relationships between Florida, Louisiana and other areas northward into the Mississippi Valley. Perhaps some variation in Florida irises resulted from the intervention of man in ancient times. I am not sure where this leads specifically in terms of our understanding of what we find today, but it is a most interesting line of inquiry.

What Next?

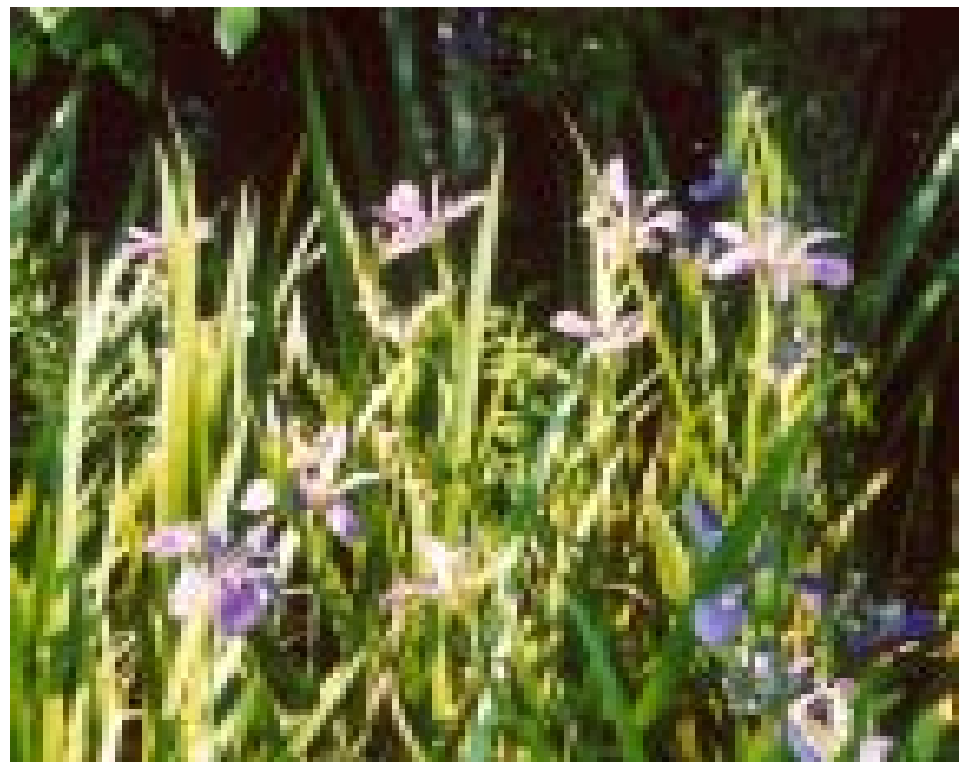
The discoveries of Michael Gideon and his family invite at least as many questions as they answer. Are variations in plant growth due to local conditions? What happens when a coastal form is grown under highland conditions, and vice versa? Dr. Alan Meerow of the USDA Agricultural Research Service in Miami is involved in DNA testing of the Florida irises. That should help nail down relationships among Florida irises and possibly their relationship with irises from elsewhere.

It is sometimes difficult to understand why the irises of Florida have not

attracted more notice in iris circles, including SLI. Small called our attention to them long ago. Certainly, people living in proximity to these plants have appreciated them, and not just in recent times. Iris distribution is widespread in Florida, even if they are not always accessible.

Benny Trahan of Slidell, Louisiana, who has systematically scoured the Louisiana countryside for new and different Louisianas still in the wild, also took a two week vacation to search among the Florida irises. In that time, he did not find great variation, but he was impressed that, if anything, the numbers of plants growing in Florida may easily exceed those in Louisiana, at least what is left today.

With such numbers of plants out there, spread widely over a varying climatic and topological field and often inaccessible, perhaps it should not be surprising that there is heretofore unappreciated variety in the irises of Florida. Hopefully, we are approaching a time when they will be more widely recognized and understood.



A clump of violet Taylor County irises. Photo by Steve Shepard.