### March 2019

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# LOUISIANA NATIVE PLANT SOCIETY



# Louisiana Native Plant Society Meeting Field Trip on February 3, 2019 by Bonnie LaBorde Johnson

A group of LNPS Annual Meeting attendees went on an exciting hike on Sunday morning after the meeting. Brian Sean Early led the group into the Kisatchie forest. In winter, the Forest floor becomes more prominent. We notice the undulating lay of the land from relatively high ridges to small creeks below the trail. Seed pods from flowering plants are of interest and serve as a critical source of food for wildlife throughout Winter. We noticed many unique mushrooms, and native mosses and lichens were a standout. There is a different sound in the Forest in Winter and is perhaps related to the loss of so many leaves from the deciduous trees. No matter what season, a trek into the Forest is exciting and fulfilling to the spirit of nature lovers and native plant enthusiasts.



PHOTOS FROM THE MEETING WILL BE IN THE NEXT ISSUE

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ra and wildlife

# Beechnut Nature Retreat by Craig Marks

In early September, 2018, Linda Auld, New Orleans' famous "BugLady," invited me to a "Bug Field Day" at Beechnut Nature Retreat near Tylertown MS on Saturday, September 29. Coincidentally, I had plans to be in the Jackson MS area that weekend so I seized the opportunity and accepted her invitation. At 8:00 that Saturday morning, the weather was somewhat threatening, but I started south from Clinton to Tylertown anyway. The further south I drove the more the skies cleared. By the time I got to Tylertown at about 10:00, it was a pretty day.

Beechnut Nature Retreat is a privately-owned property comprised of 38 acres in southern Mississippi, between the Pearl and Bogue Chitto Rivers in Walthall county, 90 miles North of New Orleans, La. The Eastern portion of the Beechnut property is bordered by Magee's Creek. This creek is a cool water, year-round, sandy-bottom, spring-fed water -way that travels through bottomland hardwood forest on the edge of the Beechnut property for a distance of at least one-half mile. This part of the property has mature American beech, southern magnolia, water oak, red oak, willow oak, laurel oak, Ilex opaca, ironwood, American elm, sourwood, black gum, holly, native azaleas and many native understory woody plants like Florida anise, devilwood, Virginia willow. Water hickory occurs along,



Magee's Creek at Beechnut (T. Baumgarten)

sometimes in the stream also. Herbaceous plants include many ferns, asters, crownbeard and many vines including several varieties of Smilax, wild grapes, *Passiflora lutea*, introduced and native Wisterias and honeysuckles as well as many ferns and aquatic plants in or at the creek edges.

Moving up from the creek towards where the property's three cottages and ornamental gardens are, one comes through dense spruce pine forest mixed with basket or cow oaks, water oak, black gum, tulip poplar, yaupon holly, ironwood, *Halesia*, witchhazel, sumac, *Aralia spinosa* and *Callicarpa*, with sunnier openings full of asters, *Eupatorium*s, *Solidagos*, grasses and sedges. The path up from the creek crosses deep sloughs that may be relic passageways of the creek having changed course over time. These create minor oxbows and deep ravines that are intermittently immersed and/or wet for periods of time and are populated with many aquatic plants like lizard's tail, bald cypress, tupelo, black willow, and many wet grasses and sedges.

The three cottages are surrounded by ornamental and pollinator gardens overflowing with flowering annuals during the warm season. Porterweed, *Tithonia, Zinnias, Pentas, Lantana,* and *Cupheas* intersperse with perennial herbaceous plants like *Echinacea*, asters, *Boltonia, Ratibida*, vitex, bush clover *Lespedeza*, cultivated goldenrods like 'Fireworks',





One of three cottages at Beechnut (T. Baumgarten)

Joe Pye Weed, ironweed, salvias of various kinds, various Phloxes like "Robert Poore" and 'John Fannick', 'Minnie Pearl', Louisiana woodland blue phlox, *Monarda*s, and violets underneath all fill out the cottage gardens along with the requisite evergreen sasanquas, azaleas, gardenias, and such of a southern garden.

Large swaths of garden and the entire field, three acres in size, across from the cabins are given over to yellow waves partridge pea in September, fol-



Buddleia in front of one of the cabins (T. Baumgarten)

lowed by common goldenrod, narrow-leaf sunflower, wild blue ageratum, Agalinis, blue praeltus asters, white Boltonia. Late-flowering thoroughwort, boneset and dog fennel. Here and there are grass-leafed asters, rayless goldenrod, and Pseudognaphalium, host for the Painted Lady, all punctuated by pine trees, wax myrtle, native persimmon, buttonbush and yaupon. Wetter areas bloom with large areas of smartweed and cardinal flowers, some native milkweeds like A. perennis and A. incarnata having been planted here also. Native maypops grow in the field and pop up in many of the gardens along with cultivated varieties P. lutea, P. cerulea, 'Lady Margaret' and 'Incense'. Native clematis grows amongst arrowwood viburnums and Cliftonia in the part shade of the oaks near the houses. Some trials with hop vines are being conducted hoping to attract E. Commas and other like species. Pea vines, both edible and ornamental, are allowed to clamber over metal arches in the large raised-bed vegetable

garden for the many skippers. The hoops and fences also support morning glory vines, and lots of cardinal creeper vines. Crossvine and coral honeysuckle vines are also cultivated on the property. *Sida rhombilfolia* is allowed to grow in various areas in order to attract checkered-skippers. Mowing is kept to a minimum throughout except to keep walking paths clear for observation.



A portion of the field adjacent to cottages, filled with wildflowers (T. Baumgarten)

Red maples, southern red cedar, parsley hawthorn, white leaf mountain mint and American wahoo grow wild near the far cottage where sassafras and Mexican buckeye have been added. Mexican plum and several Vaccineum species have been identified in this area also. A large wet area nearer the highway is full of very mature sweet bay trees and the fields flanking the exit/entrance road are likewise populated with Eupatoriums, mistflower and goldenrod late in the season



and dotted with thistle and fleabanes earlier on. Lead plant has recently been found here also.

The owner of Beechnut, Tammany Baumgarten, is a professional Horticulturist, Master Gardener and lecturer on the importance of native plantings and gardening for wildlife. I first met Tammany at the 2018 NABA 4th of July Count at Allen Acres, and was impressed with her keen eye for butterflies. In advance of Linda's Bug Field Day, Tammany and Linda had combined to generate a list of butterfly species previously seen there at Beechnut. That list includes:

# Swallowtails:

- Black Swallowtail
- Giant Swallowtail
- Palamedes Swallowtail
- Pipevine Swallowtail
- Spicebush Swallowtail
- Eastern Tiger Swallowtail

# Whites & Sulphurs:

Cabbage White

- Great Southern White
- Cloudless Sulphur
- Little Sulphur
- Orange Sulphur
- Sleepy Orange

# Hairstreaks:

- Gray Hairstreak
- Great Purple Hairstreak
- Red Banded Hairstreak

### **Blues:**

Spring Azure

#### Milkweed Butterflies:

Monarch

### **Brushfoots:**

- American Painted Lady
- American Snout
- Common Buckeye
- Gulf Fritillary
- Mourning Cloak
- Painted Lady
- Pearl Crescent
- Question Mark
- Red Admiral
- Red Spotted Purple
- Silvery Checkerspot
- Variegated Fritillary
- Viceroy

# Satyrs:

- Carolina Satyr
- Little Wood Satyr

## Spreadwing Skippers:

- Long Tailed Skipper
- Silver-spotted Skipper
- Southern Cloudywing
- Horace's Duskywing
- Common Checkered Skipper
- Tropical Checkered Skipper

## **Grass Skippers:**

- Clouded Skipper
- Dun Skipper
- Fiery Skipper
- Ocola Skipper
- Sachem
- Southern Skipperling
- Whirlabout

I was able to document 30 species on September 29. Several spots on the property have native cane, and at one we were able to witness a female S. Pearly Eye ovipositing, the first time I've actually seen that species do so. Another highlight was two extremely fresh Great Purple Hairstreaks (the first was a male, the second a female) docilely feeding at goldenrod, allowing for numerous photo ops. Down by Magee's Creek we sighted a Silvery Checkerspot, a late season sighting.

There were three species of sulphurs present in great profusion, a combined result of the numerous larval food plants and nectar sources. The same was true for the large



Another section of the fields around the cabins (T. Baumgarten)

numbers of Gulf and Variegated Fritillaries. As the day warmed, I found the most activity at the numerous nectar sources around the cabins. Rather than walk the trails, I simply circled those cabins. I do not recall every finding so many Whirlabouts in one concentrated location. At the end of the day, we drove to the front of the property where there was a stand of cane, and it was there the female So. Pearly-eye was located. Along the access road were several thick stands of blooming Eupatorium. The number of skippers in this area was impressive. In addition to the So. Pearly-eye, we were able to add two other species to the property list, Swarthy and Tawnyedged Skippers.

The property is continuously being developed to increase diversity and wildlife value. Recent additions include *Ptelia*, sassafras, *Eryngium yuccifolium*, several *Liatris* species, *Baptisia*s, big blue stem and Panicum grasses, New Jersey tea, Clethras, additional Eupatorium species, additional pycanthemum species, hackberry and hop vines. I intend to return in the spring and early summer. I anticipate surveys conducted during those seasons will continue to expand the property's butterfly species list, adding anticipated species such as Zebra Swallowtails, Juniper and Banded Hairstreaks, Eastern Tailed Blues, Goatweed Leafwings, Hackberry and Tawny Emperors and Juvenal Duskywings. I want to explore the sedge areas for possible Duke's and/or Dion Skippers. Other possible species include Henry's Elfins, White M Hairstreaks, Gemmed Satyrs, Least Skippers, the two Brokendashes, Pepper and Salt and Lace-winged Roadside Skippers.

Two of the three cottages are occasionally available to rent for overnight stays, sleeping four and three respectively. Camping is allowed and welcome on the premises. If camping is not your style, the clean and well-run Liberty Inn, (601) 876-4444, is five minutes away with reasonable rates for overnight stays in single or double rooms with minifridge, Cable TV, and Wi-Fi. Tylertown has multiple fast food options, a couple of restaurants, and two grocery stores all within minutes Beechnut. For more information, to arrange a visit, or see species lists for the retreat, visit the website beechnutms.life. Three to four times a year, Beechnut hosts Outdoor Classroom-style events for naturalists and the general public by registration. Information about these events will likewise be posted on the website periodically.

I would like to thank Tammany for her hospitality and the information she provided for inclusion in this article. I also would thank Linda for the invitation and her previous work on compiling a species list for this location. Finally, I would thank Dr. Charles Allen for his editing assistance.

No. 4

Southern Louisiana From the Car-Window by Roland M. Harper, Torreya, Vol. 20, No. 4 (July-August, 1920), pp. 67-76, URL: https://www.jstor.org/ stable/40596088

# TORREYA

Vol. 20

July-August, 1920

SOUTHERN LOUISIANA FROM THE CAR-WINDOW

BY ROLAND M. HARPER

Louisiana is one of the two states in the Union that is all coastal plain (Florida being the other). The southern half of the state, although essentially flat and hardly anywhere more than 150 feet above sea-level, has considerable diversity of soil, which is reflected in the vegetation as well as in the population and agricultural features. The agricultural regions of the state were well mapped and described by Dr. E. W. Hilgard in the fifth volume of the Tenth Census, 1884, and the same divisions with slight modifications were used in a report on forest conditions in Louisiana by J. H. Foster (U. S. Forest Service Bull. 114. 1912\*), and in a colored "Phytogeographic map of Louisiana," on a scale of about 18 miles to the inch, which has been issued in several editions in recent years by the State Department of Agriculture and Immigration. Additional geographical details can be found in the soil surveys of several parishes and similar areas published by the U. S. Department of Agriculture, and in Water Supply and Irrigation Paper 101 of the U.S. Geological Survey, on the underground waters of southern Louisiana, by G. D. Harris and others (1004), which contains among other things a map showing the distribution of forests, prairies and marshes in the neighborhood of Lake Charles.

Existing descriptions of the vegetation of southern Louisiana are not very numerous or voluminous. There are of course a few local lists of plants, and monographic works that cite Louis-

\* Reviewed, with a reduced copy of the map, in Geog. Review 2: 475-476. Dec. 1916.

[No. 3, Vol. 20, of TORREYA, comprising pp. 37-65, was issued 18 July 1920.] 67

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iana specimens, but those are of little interest to the plant sociologist. The vegetation of the several regions of the state was sketched by Hilgard in the census report above mentioned and in one or two preliminary papers that preceded it. Nearly fifty years ago Prof. A. Featherman of the Louisiana State University published two or three official reports on botanical surveys in Louisiana, and that for 1781 contains an interesting description of the prairies in the southern part of the state.

Prof. S. M. Tracy, in Bulletin 15 of the Division of Agrostology of the U. S. Department of Agriculture, 1898 (pp. 10–11), published some notes on prairie grasses of southern Louisiana, with a list of about 19 species, including several weeds. Andrew Allison, in a paper on the birds of West Baton Rouge Parish, in the Auk (21:472-483) for October, 1904, devoted about two pages to vegetation, giving technical names of several of the most characteristic plants. In the same magazine for January, 1906, the same author and two others sketched the geography of the whole state, with a regional map patterned after Hilgard's, and a few notes on vegetation. In Torreya (6:201-203) for October, 1906, I described the vegetation of some swamps near New Orleans as it appeared in midwinter.

Prof. R. S. Cocks, in Bulletin 7 of the Gulf Biologic Station at Cameron, La., published by the State Board of Agriculture and Immigration in 1907, entitled The Flora of the Gulf Biologic Station, devoted about two pages (out of 42) to classifying the plants in the vicinity of the station by habitat, and more than six pages to the flora of the prairies west of Lafayette. Two other papers by the same author, namely, Grasses of Louisiana (Bull. 10, Gulf Biol. Sta., 1908), and Leguminosae of Louisiana (Bull. 1, La. Nat. Hist. Surv., 1910), have assisted me in identifying the plants seen on the trips described below. Another interesting contribution by Prof. Cocks, dealing with a part of southern Louisiana that I have not seen, is the first of a projected series of "Notes on the Flora of Louisiana," in the Plant World (17: 186–191) for June, 1914, which describes the fertile loess hills north of Baton Rouge from a floristic standpoint.

My first opportunity to see any part of Louisiana west of New

Orleans came in July, 1915, when on the way from Florida to California. Leaving New Orleans shortly before midnight of the thirteenth on the main line of the Southern Pacific system (which operates in Louisiana under the aliases of Morgan's Louisiana & Texas R. R., and Louisiana Western), I traveled in a day coach so as to be able to begin taking notes as soon as there was light enough, although that deprived me of any protection from mosquitoes (for it would hardly be worth while to put screens on a car that runs all the way from New Orleans to Los Angeles and is exposed to mosquitoes only about one tenth of the distance). Daybreak (about 4:30 a.m.) on the 14th found me at Lafayette, 145 miles from New Orleans and just west of the alluvial bottoms of the Mississippi delta. The mosquitoes which had made sleep impossible during the night soon disappeared, and as the locomotive used oil for fuel there was nothing to interfere with botanical observations except the speed of the train and my unfamiliarity with some of the plants. Lake Charles, the metropolis of southwestern Louisiana, was passed a little before 7 o'clock, and the Sabine River at the western border of the state about 7:45.

A little over three years later, when on the way to Texas on an errand for the U. S. Bureau of Plant Industry, I crossed Louisiana by a different route, a little farther north. On the afternoon of August 19, 1918, I went from New Orleans to Baton Rouge by the Yazoo & Mississippi Valley R. R., and on the 20th from Baton Rouge westward to the Sabine River and beyond by the New Orleans, Texas & Mexico Ry. (Gulf Coast Lines, formerly a part of the Frisco System), which uses the Y. & M. V. tracks southeast of Baton Rouge and the Kansas City Southern from DeQuincy, La., to Beaumont, Tex., and burn oil like the Southern Pacific and several other southwestern railroads. The two trips together took me through four or five different kinds of country, whose vegetation will be sketched below.

The flood-plain and delta of the Mississippi River have generally been mapped as a unit in Louisiana, except for the separation of the treeless marshes near the coast from the originally densely wooded portion farther inland. There are some sig-

nificant differences, however, between the alluvial lands at the northern edge of the state and those in the latitude of New Orleans. The soil of extreme northeastern Louisiana is hardly surpassed in productiveness anywhere in the world; but there is a progressive decrease in fertility going downstream from there, for two different-but not wholly independent-reasons. First, on approaching the mouth of the river the seasonal fluctuation of the water diminishes, and with it the opportunities of the soil for aëration;\* and second, because of the pronounced increase of late summer rainfall toward the Gulf coast, the soils in that direction must be more thoroughly leached.† The variations in soil fertility are brought out very well by census statistics on the use of commercial fertilizers.<sup>‡</sup> In 1909 the farmers in the alluvial parishes above Baton Rouge spent only 7 cents for fertilizers for every acre of improved land in 1910, those between Baton Rouge and New Orleans \$1.23, and those below New Orleans \$2.22.

In northern Louisiana the alluvial lands are largely devoted to cotton, while about Baton Rouge sugar-cane becomes the leading crop, and that gradually gives way to rice below New Orleans. A northeast-southwest line drawn across the delta a little above Baton Rouge separates the cotton and sugar-cane regions pretty well, and the difference is reflected in the vegetation, as will be shown farther on.

#### THE SUGAR-CANE REGION

From New Orleans to Baton Rouge (88 miles) and about ten miles west of the latter place, or about to the boundary between the parishes of West Baton Rouge and Pointe Coupee, I was in the sugar-cane region, where vast fields of cane, hiding all but the roofs of the one-story houses, are the most conspicuous feature of the late summer landscape. Corn and rice rank next to cane in acreage, the former often planted with velvet beans or sugar-cane in alternate rows. Rice was being threshed at the time I passed by, and the piles of chaff were often burned to get

\* See Torreya 11: 223. 1911.

† See Science II. 48: 208-211. Aug. 30, 1918.

‡ See Science II. 42: 500-503. Oct. 8. 1915.

rid of them. The houses are mostly aggregated in villages, each village with its sugar-mill. Water for domestic purposes is generally taken from cisterns; as in numerous other fertile regions. The forests are reduced to scattered remnants, mostly along streams. The commonest trees seem to be Salix nigra (?), Populus deltoides, Liquidambar, Platanus, Taxodium distichum, Ulmus americana, and Celtis sp., in the order named. There are hardly any erect shrubs, but three woody vines, Rhus radicans, Tecoma radicans, and Ampelopsis arborea are fairly common. The epiphyte Tillandsia usneoides is the only native herb that is at all conspicuous, the other herbs noted being mostly weeds, such as Ambrosia trifida and Paspalum Vaseyanum.

#### THE COTTON REGION

From about Westover to Opelousas, 49 miles, on the Gulf Coast Lines, the country is still flat and alluvial, but about half wooded, with less cane and more cotton than had been seen the day before. Several sawmills were passed, and the forests had been damaged a good deal by lumbering, draining, grazing, etc. The commonest plants in that distance, which is through the cotton region of the Mississippi bottoms, seem to be as follows:

### TREES

Liquidambar Styraciflua	Quercus texana (?)
Salix nigra (?)*	Gleditsia triacanthos
Taxodium distichum	Fraxinus americana (?)
Acer Drummondü (?)	Quercus nigra
Celtis sp.	Hicoria aquatica (?)
Populus deltoides	Acer Negundo

#### SHRUBS AND VINES

Ampelopsis arborea	Cephalanthus occidentalis
Rhus radicans	Tecoma radicans
Sabal glabra	Brunnichia cirrhosa

\* If this is S. nigra it grows taller and straighter here than it usually does elsewhere.

HERBS (all weeds)

Chamaecrista robusta (?) Verl Helenium tenuifolium Piar Croton capitatus

Verbena angustifolia (?) Piaropus crassipes

#### THE PRAIRIES

Dr. Hilgard distinguished three kinds of prairie in southern Louisiana, all contiguous, namely, brown loam on the northeast, gray silt on the west, and black calcareous on the south, next to the coast marshes. I crossed all three, but on account of the relatively small extent of natural vegetation remaining and the inherent difficulty of identifying herbs from a fast train, on a route traversed only once, I will not attempt to separate them at this time. On the more southerly route the ground-water level is pretty close to the surface, and the railroad is built on a low embankment most of the way, while on the other route, 15 or 20 miles farther north, the prairies are comparatively high and dry (though not over 75 feet above sea-level), which probably makes as much difference in the vegetation as the composition of the soil does.

The prairie country stretches westward from Opelousas and Lafayette at the edge of the Mississippi bottoms to the bottoms of the Calcasieu River, and like most prairies is almost perfectly level. Toward the western edge, however, in the gray silt prairies, there are numerous low mounds rising a foot or so above the general level, which make the vegetation a little more diversified than it would be otherwise. There are also quite a number of strips and patches of timber, mostly along streams, so that one hardly ever has an unobstructed view of more than two or three miles in any direction. Eastward the trees are all deciduous, but toward the west pines appear in increasing numbers, mostly Pinus Taeda on the northern route and P. palustris on the southern route. Where the prairie is bordered by deciduous forests the boundary is sharp, but the edge of the pine forest is illdefined, probably on account of fire, as on the Hempstead Plains of Long Island.\*

\* See Mem. Torrey Club 17: 271. 1918.

The original prairie vegetation is now nearly all replaced by fields and pastures. In St. Landry Parish sometimes as many as fifty farm-houses can be seen at once, between stations, each with a few trees around it, and most of them with "French" chimneys of sticks and mud. Water is usually obtained from cisterns, as in the delta. Rice, corn and cotton are the leading crops, in order of acreage. The commonest native and naturalized plants seem to be as follows:

#### TREES

Hicoria alba

Nyssa sylvatica (?) Quercus falcata

Quercus Michauxii

Taxodium distichum

Liquidambar Styraciflua Pinus Taeda Quercus stellata Pinus palustris Quercus Phellos

Shrubs

Myrica pumila Cephalanthus occidentalis Baccharis halimifolia

#### HERBS

Paspalum Vaseyanum Gaura Lindheimeri Baptisia leucophaea\* Panicum hemitomon Dracopis amplexicaulis (?) Helenium tenuifolium Eryngium yuccifolium Croton capitatus Mesadenia lanceolata Silphium laciniatum Typha latifolia Tillandsia usneoides Hibiscus incanus (?) Baptisia sp. Sesbania macrocarpa (?) Nama ovata (?)

The trees are mostly along streams, as above stated, and Myrica pumila occurs near the pine forests, especially on mounds, where it can keep its roots reasonably dry. The first and third herbs listed are obnoxious weeds, and the second grows in wet places

\* In Robinson & Fernald's Manual this is treated as synonymous with *B. bracteata* Ell., a species known only from dry woods in Georgia and Alabama (see Buil. Torrey Club 33: 533. 1906), but the range attributed to it excludes those two states entirely.

and may be more characteristic of the marshes south of the prairies.

Outside of Louisiana and Texas these prairies probably have their nearest counterpart in the Grand Prairie of Arkansas,\* which although considerably nearer to centers of ecological activity is even less known botanically than the Gulf coast prairies.

#### THE LONG-LEAF PINE REGION

West of the prairies are the long-leaf pine forests, about fifty miles wide on my northern route, but hardly extending south of Lake Charles at all. The topography where I crossed is gently rolling (doubtless a little more hilly farther north), with grayish loamy soil and clayey subsoil, and very few streams (unlike most of the pine-barrens of the Atlantic slope, where the sandy soil holds considerable water which seeps out in the valleys gradually throughout the year). Mosquitoes were rather abundant, though, strange to say. The region is very sparsely settled, and even yet lumbering seems to be more important than farming.

*Pinus palustris* outnumbers all other trees by a large majority, and on uplands where the lumberman has not yet begun operations it makes a pure stand with no woody undergrowth of any kind. These pine forests are denser than most of those east of the Mississippi River, as observed long ago by Dr. Mohr,† who found, probably in what is now Beauregard Parish, 35,000 board feet on a single acre,—which is several times the average for the southeastern pine forests.

Just two weeks before my 1918 visit southwestern Louisiana had been swept by a hurricane, and in some places as many as 10 per cent. of the pines had been blown down, and many leaves and branches stripped from the deciduous trees. The commonest trees besides the long-leaf pine seem to be Nyssa biflora (?), Liquidambar, Pinus Taeda, Magnolia grandiflora, Quercus Michauxii, Fagus, Nyssa uniflora, Quercus falcata, Q. alba, Taxodium distichum, and Ilex opaca, in the order named. These

\* See Plant World 17: 40-44. 1914.

† See page 45 of the revised edition of his "Timber pines of the southern United States" (U. S. Forestry Bull. 13), 1897.

are chiefly confined to the vicinity of streams, like the trees in the prairies. The only common shrubs seem to be Callicarpa Americana and Myrica cerifera. The herbaceous flora was difficult to identify from a moving train, but it seems decidedly poorer in species than that of the southeastern pine-barrens, and not many plants were in bloom in August. The most abundant herb is a coarse grass, presumably an Andropogon, and the most conspicuous were two species of Laciniaria, which I have guessed to be L. pycnostachya and L. acidota. (A little later I had opportunity to examine the pine-barrens more closely in eastern Texas, and the results are published in the Bulletin for July, 1920.\*

#### THE HAMMOCK FORESTS

Within a few miles of the Sabine River the country is low and clayey and probably occasionally inundated, though the soil would hardly be classed as alluvial. These conditions are unsuited to long-leaf pine, and the forests are comparatively dense and hammock-like, with approximately the following composition:

TREES

Pinus Taeda	Quercus Phellos
Liquidambar Styraciflua	Quercus falcata
Nyssa uniflora	Quercus stellata
Quercus Michauxii	Quercus Marylandica
Taxodium distichum	Hicoria aquatica (?)

#### SHRUBS

Cephalanthus occidentalis

Aralia spinosa

#### HERBS

#### Tillandsia usneoides

Most of these are the same species already noted as growing along streams in the pine-barrens, and this might be regarded as merely one of the strips of bottom-land timber, but for the fact that it is considerably wider on the Texas side, where it deserves to rank as a distinct region.

\* Bull. Torrey Club 47: 289-319. 1920.

The foregoing notes, incomplete as they are (being based on only about eleven hours of travel), may be useful to those who may hereafter study Louisiana vegetation more intensively; and they illustrate a method of making observations in comfort in an interesting area where mosquitoes and scarcity of water might make traveling on foot rather disagreeable in summer.

# THE VALUE OF NUTRIENT SOLUTIONS AS CULTURE MEDIA FOR FERN PROTHALLIA\*

#### BY ELIZABETH DOROTHY WUIST BROWN

The value of nutrient solutions as culture media for growing fern prothallia under experimental conditions being so well known, it is the purpose of this paper to emphasize the value of these solutions for growing prothallia for class use. Excellent cultures may be obtained by using soil, peat and various other media, but it has been the writer's experience that the work is greatly simplified by the use of the nutrient solution. For after the solutions have been prepared and the cultures set up under the best light conditions available, little attention need be paid to them.

Aside from the time-saving element in caring for the cultures is the advantage of having an abundance of material in various stages of development always at hand. In this way it is possible for the student to follow the development of the prothallia from the one-cell stage to the adult form bearing antheridia, archegonia and sporophytes. This may be accomplished by varying the time of sowing the spores in the different cultures. It is well to learn the length of time required for the germination of the spores and the development of the prothallia of the particular species used before setting up the cultures for class use. The time of germination varies somewhat in different species, being more rapid in the spores containing chlorophyll.

The following solutions, Beijerinck's, Borner and Lucanus's, Knop's, Prantl's and Sachs's, proved favorable for the germina-

\* Contribution from the Osborn Botanical Laboratory.

# Around the State



The Herb Society of America, New Orleans Unit will hold their 2019 Spring Plant Sale Saturday March 30th, from 9 a.m. until 3:00 p.m. 8301 Olive St, New Orleans, LA, 70118. Just off S. Carrollton at the location of the former Hollygrove Market and future home of 14 Parishes Restaurant.

Members of the local Herb Society unit will be on hand to help gardeners select plants for culinary and ornamental use. Let the experts help you select herbs for your spring gardens or containers. Pop up presentations will show you how to grow, harvest & use herbs this season from the bounty of your herb garden. Bring your herb growing questions.

As a preview of their soon to be opened restaurant, 14 Parishes will have food for purchase.

The sale will benefit projects of the New Orleans Botanical Gardens, Longue Vue Gardens, the Herb Society of America, New Orleans Unit's educational programs and other local gardening initiatives.

For further information contact our unit chair Linda Franzo at lindafranzo57@gmail.com; or email the unit at herbsno@gmail.com

Note: Due to growing conditions, quantities may be limited. Cash or checks accepted. Native plants will be available

The Herb Society of America is dedicated to promoting the knowledge, use and delight of herbs through educational programs, research and sharing the experience of its members with the community.

Medical disclaimer: It is the policy of The Herb Society of America and the Herb Society of America, New Orleans Unit not to advise or recommend herbs for medicinal or health use.



Thanks to the generosity of Baton Rouge General, the work of the City-Parish Department of Public Works (DPW), and the persistence of Baton Rouge Green, a section of roadway in Mid City is being revitalized.

The center median on Acadian Thruway between Government Street and North Boulevard is being remodeled and landscaped with about 40 new understory trees, grasses and groundcover. "I firmly believe that a better Baton Rouge, one in which quality of place is at the center of development, requires the creation of a sense of neighborhood at the local level," said Edgardo Tenreiro, President and CEO of Baton Rouge General. "We are creating that sense of neighborhood in Baton Rouge, together with our partners, with projects like the Acadian Thruway beautification."

Last year DPW's Department of Maintenance removed the ailing Bradford Pear trees that had stood in tree wells in these medians, originally planted by Baton Rouge Green in the late 80s. Since then, Department of Maintenance staff has removed the concrete that filled the medians, remediated the soil, and installed root barrier to protect existing curbs and roadway in preparation for the new landscaping.

With a generous donation from Baton Rouge General, Baton Rouge Green will be able to install Dahoon hollies, mayhaw trees and wax myrtles, complemented by rushes, grasses and groundcover. The project, designed by Baton Rouge Green's Robert Seemann, is intended to perform like other Baton Rouge Green plantings with minimal maintenance necessary and without irrigation infrastructure.

"We work hard to assemble plant palettes that stimulate local ecology while being durable, relatively low maintenance,



and aesthetically pleasing," says Seemann, a certified arborist and landscape architect, and Director of Operations for Baton Rouge Green.

Baton Rouge Green credits Department of Maintenance staff, especially Director Kyle Huffstickler, with helping bring this plan to fruition. "Even with the tremendous generosity of Baton Rouge General, we wouldn't have gotten far on this project if the City had not performed the hard work of converting concrete medians to functional planting space. They provided labor, heavy machinery and materials to transform the space into a habitat plants can thrive in," says Seemann.

"The beautification of Baton Rouge is always a priority, and thanks to the collaboration of the public and private sector, this project will also improve the culture of health," said Mayor Sharon Broome. "For over 30 years, Baton Rouge Green has cared for and planted trees throughout the city. Their partnership with Baton Rouge General Healthcare and the City of Baton Rouge's Department of Public Works goes above and beyond to ensure the peace, prosperity, and progress of this community for all residents."

"P-3 (Public-Private Partnership) is a buzz word that people like to use. This is a real life example of making it work. A city government agency, a local industry leader, and a nonprofit all bringing their resources together to improve a corner of our city. Baton Rouge Green is grateful to have passionate local partners like Baton Rouge General and DPW, and without them we couldn't make an impact," says Sage Foley, Baton Rouge Green's Executive Director.

The Mid-City Redevelopment Alliance (MCRA) and the Baton Rouge Health District also helped push the project along and were part of the planning.

"MCRA is excited to be a part of this public-private partnership that highlights the power of collaboration as we all strive to enhance creative placemaking in Mid City. We are pairing our mini grant programs to residents and businesses in this area to help leverage the impact of this project led by Baton Rouge Green and funded by Baton Rouge General and the City-Parish," commented Sam Sanders, Executive Director of Mid City Redevelopment Alliance.

Sanders added that residents in the area can contact MCRA for more information.

With the ongoing Government Street road diet and landscaping planned, Mid City boosters are excited for another step in the ongoing progress in the area. "This project will improve the visual character of one of Mid City's most highly traversed corridors while providing health benefits to the citizens of the surrounding neighborhoods. Projects like this dovetail into the planning that we at Mid City Merchants are undertaking to complement the road diet currently under construction on Government Street," said Justin Lemoine, landscape architect, Board Vice-President of Mid City Merchants and Baton Rouge Green Board Member.

The new planting will not only be a beautiful addition to Mid City, but the trees installed will go on to aid citizens and the environment by removing pollutants from the air, preventing stormwater runoff, lowering temperatures around them, and sequestering carbon, as well as producing oxygen for their human neighbors. Studies show that landscaping near roadways has a calming effect on drivers and reduces the number of motor vehicle accidents.

"Green infrastructure like this is more than pretty. It's crucial to human health and safety, and a critical part of protecting homes and infrastructure. On both cost and effectiveness, engineered concrete solutions simply cannot compete with what trees can do to prevent stormwater runoff, and relieves the stress on our storm drains and sewers," adds Foley.

# 2018 LNPS OFFICERS

Peggy Cox, Immediate Past President

Marc Pastorek, President

Brian Early, Vice President

Jackie Duncan, Treasurer

**Chris Doffitt, Secretary** 

Dawn McMillian, Webmaster and Newsletter Editor

Margot Addison, CANPS

#### LNPS BOARD MEMBERS

Terms expire 2022 Charles Allen Annette Parker Teresa Shapley

Terms expire 2021: Andrea Mattison Peter Loos Gloria McClure

Terms expire 2020: Bob Dillemuth, Roselie Overby Rick Webb Jackie Duncan, LNPS Treasurer, 114 Harper Ferry, Boyce, Louisiana 71409

Mark Your Calendars!! Next Louisiana Native Plant Society Meeting is February 7-9, 2020

# BE SURE TO CHECK OUT OUR WEBSITE!!

# Annual LNPS Dues

Circle one: Individual, \$10. Student/S \$100.	Senior, \$5. Family, \$1	5. Organization,	\$25. Sustaining,	\$50. Corporate,
NAME				
ADDRESS				
CITY	ZIP			

EMAIL \_\_\_\_\_\_
PHONE \_\_\_\_\_\_

Checks payable to LNPS.

Mail to: Jackie Duncan, Treasurer

114 Harpers Ferry Road

Boyce, LA 71409

Or, memberships and donations may be paid online at: www.lnps.org





www.lnps.org

Louisiana Native Plant Society Minutes 2019

The Louisiana Native Plant Society held the annual Winter Meeting at the Wesley Center in Woodworth, LA on 02 February 2019.

The meeting was called to order by President Marc Pastorek.

A motion to dismiss the reading of the minutes was made by Charles Allen, this motion was seconded by Peter Loos and therefore approved.

Treasurer's report was given by Jackie Duncan (report is provided below). A motion to approve the budget report was given by Peter Loos and seconded by Wendy Allstot. All were in favor.

Bob Dillemuth gave update on Capital Area Native Plant Society and provided financial report for that chapter. (See Attached).

President Marc Pastorek brought discussion of 2020 meeting date to the floor. Jackie Duncan proposed keeping it at the Wesley Center on the first weekend of February. Discussion of this topic was put on hold until the dates of several other societal meetings could be determined to avoid potential conflicts. Following the meeting after consulting with other members it was determined that next year's meeting would be held the weekend of Feb 7-9, 2020.

President Marc Pastorek to recognize any deceased members of LNPS from the previous year and there were no deceased members.

President Marc Pastorek opened the floor to any new business.

First order of business Tammany Baumgarten announced the formation of the Native Plant Initiative of Greater New Orleans.

Second order of business, Tammany made an announcement on behalf of Linda Auld a project called Geaux Grow Natives which has identified six native nectar plants and six native host plants that growers have agreed to grow for nurseries and identified nurseries that would be willing to carry these plants. This project begins 04 May 2019.

President Marc Pastorek asked if the grant committee had anything to report, Brian Early indicated that the grant committee had nothing to report.

Betty Miley was given the floor to make an announcement to request a list of people interested in speaking about native plants and gardening.

The following board members were elected to the board of directors:

Board members terms expire in 2020:

Bob Dillemuth, Rick Webb, replaced Matthew Herron with Roselie Overby

Board members terms expire in 2021:

Andrea Mattison, Peter Loos, Gloria McClure

Board members terms expiring in 2022:

Charles Allen, Teresa Shapley, Annette Parker

Thank you to expiring board members Jim Foret, Patrick O'Connor, and Helen Pebbles.

Brian Early made an announcement about the afternoon field trip and the Sunday morning Forest walk.

Dr. Charles Allen presented Loice Kendrick-Lacy with the Karlene DeFatta award recognizing her contribution to the promotion of native plants, particularly her establishment of the Haynesville Butterfly Festival occurring annually since 1999.

On a motion from Marc Pastorek with a second from Peter Loos, the meeting was adjourned.

Respectfully submitte Chris Doffitt

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	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Beginning Cash Balance, January 1	\$17,609.98 \$17,242.48	\$17,242.48	S14,652.82	S15,090.44	\$13,116.36	\$13,116.36 S11,585.68	\$10,095.09	S10,124.15	\$10,077.11	\$10,658.81	\$9,135.98
Dues	\$2,215.00	\$1,880.00	\$1,227.00	\$2,172.00	\$1,770.00	\$1,670.00	\$1,867.00	\$1,114.00	\$987.00	\$1,290.00	\$1,505.00
Interest income	.67	0.66	.65	1.09	2.28	3.29	3.31	3.19	3.19	3.18	10.17
Donations received Individuals	98.34	50.00	100.00	50.00						2.00	25.00
Amazon Smile	28.81	10.47	13.70	1 1 0		1 0 10	1 0	1		1 0 0	1 0
Plant auction	1,787.00	1,542.00	1,482.00	1,457.25	671.00	685.00	988.00	1	712.00	349.00	569.00
Expenditures											
Annual meeting (costs) income	(1,594.61)	(863.83)	(45.21)	(906.75)	(201.69)	(199.00)	8.00	(502.50)	(86.35)	(41.48)	(39.00)
Grant/donations	(1,300.00)	(2,100.00)	(50.00)	(2,500.00)		(500.00)	(1,100.00)	(500.00)	(1,000.00)	(1,000.00)	
T-shirts											
Sales	50.00	70.00	90.00	110.00	195.00	80.00	340.00			260.00	89.0
Costs	1	Ľ	1.	1		1	(225.00)			(1,041.12)	£
Newsletter costs	(386.64)	(126.94)	(208.53}	(384.12)	(365.90)	(193.00)	(201.08)	(85.80)	(181.10)	(398.28)	(511.83)
Brochures	(282.30)	1	J.	(333.89)		ī	(106.30)	1	(322.70)	•	
Award plaque	(163.84)										
Web page costs		(62.00)	Т	(00.09)	(58.00)	<b>1</b>	(00.09)	(32.00)	(60.00)		
Louisiana state tax	(15.00)	(15.00)	(15.00)	(15.00)	(15.00)	(10.00)	(10.00)	(00)	(2:00)	(5.00)	(5.00)
Supplies, misc.	1	4		1	1	1			6. <b>1</b>		(30.51)
Bank chargcs/Paypal costs	(29.66)	(17.86)	(4.95)	(28.20)	(23.61)	(5.61)	(13.34)	(18.95)	4	1	
Net cash inflow (outflow) for the year	407.77	367.50	2,589.66	(437.62)	1,974.08	1,530.68	1,490.59	(29.06)	47.04	(581.70)	1,522.83
Ending Balance. December 31	\$18.017.75 \$17.609.98	\$17,609.98	S17.242.48	S14.652.82	\$15,090.44	815.090.44 S13.116.36	\$11.585.68		S10.095.09 \$10.124.15	S10.077.11 S10.658.81	S10.658.81
Un unaution - farming Summer	1	1	1	T		(a			Level - share at		