



The
Escambia
County
Historical
Society,
Founded
1971

**No Meeting of the Society in April
April Meeting Replaced by
Tuesday, May 2, 2017 Program
At Brewton First Methodist Church
10:30 a. m.**

**The Program for May 2, 2017: Performance by the
Escambia County High School Choir**



In addition to having twelve members selected to perform at a Carnegie Hall Choir Festival this April, the choir has been honored with other invitations. Previous performances include an appearance at the recent Alabama Association of School Boards Convention and the Atmore Chamber of Commerce Banquet for 2016 where choir director Conrad Weber received a Citizen of the Year Award.

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**Bicentennial
Committee Meeting
Tuesday, May 2, 2017,
1:30 p. m. at the
McMillan Museum**

**ECHS Board Meeting of
Officers and Trustees
Tuesday, May 9, 2017
11:00 a. m. McMillan
Museum**

The May Meetings

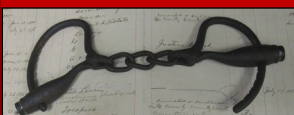
The month of May will be a busy one for the Society. In addition to sponsoring the Tuesday, May 2, 2017 program by the Escambia County High School Choir, the society will return to its regularly scheduled fourth Tuesday of the Month Meetings on May 23, 2017.

The society will meet in the McMillan Museum at 3:00 with a business meeting, a program, and time for refreshments after the program.

The program will be a presentation by guest speaker Coletta Bailey, on "Feed Sack Clothing."



**Conrad Weber, at left,
Director of Escambia
County High School
Choir, Receives Citizen
of Year Award from
Atmore Chamber of
Commerce President
Chris Singleton.**



**Antique
Handcuffs in our
Museum**

Volume 44 Number 4

April 2017

News and Announcements



Flomaton High School

From the Facebook page for the Fair, this explanation of its purpose, “Instead of just doing a typical research paper, our students will be creating a visual exhibit to display their findings.” Local historical societies, museums, and educational organizations have been invited to set up exhibits and there will also be antique cars to show how cars have changed in history.



This program is designed to offer curated museum exhibits and other “How-to” resources to museums, historical societies, and other community organizations in the state.

The first D. I. Y. exhibit available is “The Art of the Great War: Posters from the Alabama Archives.” Two examples are shown above.



Flomaton High School History Fair
Wednesday
April 26,
2017
8:00 a. m.-
2:00 p. m.

Concerning these posters, according to the announcement of this new program, “Through a simple application process, local organizations may obtain high-resolution, print-ready exhibit graphics along with an installation and publicity guide, free of charge.”



Daedalus Statue Honoring World War I Pilots Dedicated at Maxwell Air Force Base on April 6, 2017



On April 6, a bronze sculpture of Daedalus by British sculptor James Butler was dedicated at Maxwell Air Force Base.

The statue commemorates the centennial of WWI and the WWI pilots for whom the order of Daedalians was established at Maxwell AFB in 1934. The Order of Daedalians is a fraternal and professional order of American military pilots.

The statue is a gift to Maxwell made possible by the Croix Rouge Farm Memorial Foundation and an Alabama businessman Nimrod “Rod” Frazer, a Korean War Army veteran, Silver Star recipient, author and historian.

In her article about the dedication, writer Rebecca Buryio described the statue:

“Standing erect in full period pilot gear from World War I, the bronzed likeness of a man seems as if it might take flight at any moment. Based upon

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News and Announcements

(Continued from page 2)

the mythical creature endowed by a Greek god with the right to fly, the impressive modern representation shows a combat pilot with his arms stretched out above his head lifting two, large wings strapped to his wrists and forearms. Wearing a pilot cap and strap, his face is turned downward and embodies the strength and pioneering spirit that can only come from service and sacrifice" (from the article "Donated Bronze Honors WWI Pilots," Montgomery Advertiser, March 22, 2017).

Rod Frazer, who donated the statue, is quoted as saying:

"It shows the beginning of air power. They started WWI on horses and ended it in airplanes and so this is a tribute to the technology and the courage and spirit of winning between the Americans and the French"

(<http://www.pnj.com/story/news/local/dispatch/2017/03/22/donated-bronze-honor-pioneering-wwi-pilots/99491480/>).

The Baldwin County Historical Society Presents A History of the Grand Hotel



Date: Sunday, April 23, 2017
Location: The Immaculata Center
1601 Main St., Daphne
Time: 2:30 p. m.

From the notice for the program:
"The present Grand Hotel Marriott Resort, Golf

Club & Spa, located in the town of Point Clear, traces its rich history to the 1840s. In its early days many of its guests arrived by Bayboats, bringing visitors from all over the country by way of Mobile.

"During the Civil War, the facility served as a Confederate Hospital. Hundreds of Confederate soldiers died while at the hospital and many of these are buried in the nearby Confederate Rest cemetery. During World War II the facilities were used as a maritime training school.

"In 2014 it received an Award of Excellence from the National Trust for Historic Preservation and was added to their list of Historic Hotels of America."

Website offers Historical Newspapers from the 1700's-2000's

The website, Newspapers.com, according to Brewton Mayor Yank Lovelace, basically has all the newspapers in Brewton up to 1925 and newspapers from all over the U.S. including Pensacola.

A sample story of what can be found on the Newspaper.com site.

**From The Bee, Danville, Virginia, April
17, 1934
"Mule Sets Own Working Hours"**

Accomac, Va. –

Bill, a mule on the Bunter farm, "Willow Rank," near here, had his own schedule of working hours long before anyone ever heard of NRA codes.

Promptly at 12 o'clock Bill stops, through there is no bell or whistle to tell him the time, and not another bit of work will he do until after he has had his mid-day meal and rest. It makes no difference whether his plow is in the middle of a row at noon he stops. No one has ever been able to explain how he senses the time.

Note: NRA is the abbreviation for National Recovery Administration, a New Deal agency which was established in 1933 to create codes of "fair practices" and set prices.

Snapshots of the ECHS March 2017 Meeting



Above, Guest Speaker Raymond Melvin is shown with part of his collection of Naval Stores items.

In front of Mr. Melvin are cups which were attached to the trees to collect the sap from the trees.

To the right of the picture is a model of a turpentine still.



Above, Rosin Yards, Pensacola, Florida, ca. 1918.

Resin is the solid amber residue obtained after the distillation of crude turpentine.

Size of the yard shows the importance of the Naval Stores Industry in the southeast.

To the right, a close up of the model turpentine still, shown above. Here the sap was cooked to produce the naval stores items such as tar, pitch, and turpentine.



Snapshots of the ECHS March 2017 Meeting *(Continued)*



An Overview of the Items from His Extensive Naval Stores Collection Which Raymond Melvin Displayed at the March Meeting.

In the background is the picture of the Rosin Yard in Pensacola from ca. 1918; against the wall are tree barks showing the multiple cuts (cat faces) made in the trees to get sap. In front are hacks, axes, other specialty tools, and to the right, various cups which were nailed to the tree to collect the sap.



Close up of Items Used in the Naval Stores Industry

In front, from the left, are a Bark Hack, which removed the bark in preparation for cutting the "cat face"; a Wood Hack used to chip a "Streak" in the tree or cut to get the gum flowing; and a Concave Apron, a flat oblong piece of galvanized iron, with the ends slightly upturned, used to guide the gum flowing from the face of the tree into a collection cup.

Snapshot of the ECHS March 2017 Meeting *(Continued)*



Wood Puller

The puller is used after the first two seasons of cutting the trees when the increased height of the cat face has made the use of a hack impossible. The puller is then used in place of the hack. This tool resembles the hack except that the blade is closed and the tool is provided with a long handle.



Axe Maul

The Maul was used to strike the axe to make the chip or cut in the tree.

Snapshots of the ECHS March 2017 Meeting *(Continued)*



More Close Ups of Tools

At the left front are two cups used for collecting the sap or rosin. At the left front is the Pringle cup (1910), and behind the Pringle is the McKoy cup (1908), each named after the inventor/manufacturer.

In the middle is a boxed tree Dip Iron, a tool used to get the sap or rosin out of the boxes or cups attached to the tree.

At the right is a Boxed Ax Head. These were usually curved to fit next to the tree and were used to make the original cuts and establish the large opening at the base of the tree.



Front Row, Left to Right, Melvin Raymond, Don Sales, Barbara McCoy, and Ranella Merritt. Second Row, Left to Right, Ann Green, Ruth Carden, Florence Rowser, Amanda Bell, June Martin, Robert Martin, and James Gulley. Back Row, Left to Right, Charlie Ware, Thomas White, Charles Stone, Alex McDowell, and Tom McMillan.

Snapshots of the ECHS March 2017 Meeting *(Continued)*



On the front row, Jacque Stone is visiting with Evelyn Franklin, seated on the second row. Also, on the second row on the left, Darryl Searcy is talking with Byron Findley. On the back row, left to right, are Carolyn Geck, Mike Edwards, and Joe Ross.



In the photo at the left, left to right, seated, James Gulley, then Charlie Booher. Standing, Barbara McCoy is talking with James, and seated at the right, Byron Findley is talking to Darryl Searcy, not pictured. In the photo to the right, our speaker Raymond Melvin is being photographed by Tom McMillan.



Left to right, Darryl Searcy, reading, then Sammy McGlotheran, Robin Brewton, and Evelyn Franklin.

Photo to the right, another view of the tools for the Naval Stores Industry in the collection of Raymond Melvin.



Snapshot of the ECHS March 2017 Meeting *(Continued)*



Florence Rowser asks a question of our speaker. Florence mentions that her father worked in the turpentine industry, collecting the rosin or sap and that he wore boots that came over his knees to protect his legs from snakes. Amanda Bell is to the right of Florence with her back to the camera. June Martin is to the right of Amanda. Ann Green and Ruth Carden are looking on. They are to Florence's left. In the back, Charles Stone listens to the discussion.

To the Right, the Refreshment Table.



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The ECHS *Journal* Section

Carnivorous Plants: Escambia (Continued from ECHOES February 2017)

By Darryl Searcy

The Northern Pitcher Plant

The Northern Pitcher Plant (aka Purple Pitcher Plant), *Sarracenia purpurea*, is found extensively including the Eastern seaboard and Gulf Coast of the United States, the Great Lakes region, most of Canada, Washington state, and Alaska. That makes it the most common and broadly distributed pitcher plant, as well as the only member of the genus that inhabits cold temperate climates. The species is the floral emblem of the Canadian province of Newfoundland and Labrador. Recently it was introduced into bogs in parts of Ireland, where it has thrived. It is an introduced and now naturalized species in northern California to the extent that it is found in habitats of the native carnivorous species *Darlingtonia californica*, in the Klamath Mountains and northern Sierra Nevada.

Like other species of *Sarracenia*, *Sarracenia purpurea* obtains most of its nutrients through prey capture. However, prey acquisition is said to be inefficient, with less than 1% of the visiting prey captured within the pitcher. Even so, anecdotal evidence by growers often shows that pitchers quickly fill up with prey during the warm summer months. Prey fall into the pitcher and drown in the rainwater that collects at the base of each leaf.

Prey items such as flies, ants, spiders, and moths, are then digested by an invertebrate community, made up mostly by the mosquito and the two-winged



The Northern Pitcher Plant.

midge fly. This relationship between two insects is indicative of insect commensalism.

Interestingly, the oldest known illustration of *Sarracenia purpurea* is from Clusius's *Rariorum Plantarum Historia* dated 1601, and includes illustrations of primitive roses, as well as a rotifer (wheel bug), and bacteria form the base of a food in-quiline (bug that creates plant galls)

web that shreds and mineralizes available prey, making nutrients available to the pitcher plant. New pitcher leaves do produce digestive enzymes such as hydrolases and proteases, but as the individual leaves get older into their second year, digestion of prey material is aided by the various bacteria that live within the pitchers.

Threadleaf Sundews *Drosera Filiformis* and *Drosera Tracyi*

Giant Threadleaf Sundew, *Drosera tracyi* is the large, greenish thread leafed sundew that is native to the gulf coast. The exact scientific name, *Drosera filiformis* variety *tracyi* or *Drosera tracyi* has been debated since the original description of *Drosera filiformis* was applied.

The seeds of both are identical. Hybrids are fertile, and occur in the wild (although, as with most sundews, these two often self pollinate). The only real

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Threadleaf Sundew *Drosera Tracyi*, shown at the left, is twice as big as *Drosera Filiformis*, shown at the right.



At the right, *Drosera Filiformis* flower.



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differences are that *Drosera tracyi* is about twice as large as *filiformis* in all areas (leaves, flowers, etc., but not seeds, and *Drosera tracyi* is greenish, while *Dosera filiformis* has reddish coloration, especially in its 'Florida Red' variant. Molecular studies have not been applied to the two, so what more accurate scientific scrutiny would reveal is unknown at this stage

Scientifically, the plant is described as being an upright, glandular perennial. Its preferred habitat is savannas and bogs or damp ditches. Distribution is coastal in the Escambia region. The leaves are mostly basal; thread-like and glandular (sticky). The flowers are on leafless stems and spiraled; bisexual in nature and symmetrical in form; one-sided on the stalk; 5 sepals and 5 petals; pink to pale purple, occurring in the spring.

This member of the Sundew family (*Drosera tracyi*) is distinctive, with its stringy leaves covered with glistening droplets of sticky exudate. Insects trapped in the hairs are digested by plant enzymes. Researchers have fed these plants fruit flies labeled with the radioactive isotope nitrogen-15 and have found that substantial quantities of protein from the insects end up in the storage roots, thus demonstrating the importance of this source of nutrients. The southern species is larger than the northern species and is considered by some authorities to be an altogether separate entity.

Honestly, the science should wait until rigorous

molecular or DNA study is done on these two plants that will provide better guidance than the outdated system of observation of physical characteristics. While the system has worked reasonably well in the past, it is obvious for some groups of plants and some groups of animals, that a more rigorous scientific approach needs to be taken.

Be that as it may, the fact remains that the Giant Threadleaf Sundew appears to be here to stay and it is thriving on the hoards of insects that visit its sticky leaves and stems.

Yellow Butterwort, *Pinguicula lutea*

Yellow Butterwort, *Pinguicula lutea*, is a species of warm-temperate carnivorous plant in the Lentibulariaceae family. It grows in savannas and sandy bog areas of the Southeastern United States.

The flower is usually in a bright yellow or a straw-yellow color and very rare in white color. Like all the insectivorous plants of the genus *Pinguicula*, the Yellow Butterwort traps small insects by using specialized glands on the surface of its rosette of basal leaves.

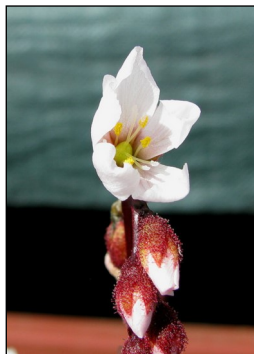
This plant lives along the Gulf Coastal plain of the southeast; commonly found in Alabama, Georgia, Mississippi, North Carolina, South Carolina, Florida and Southeast Louisiana.

Yellow Butterwort, *Pinguicula lutea*, is a species of warm-temperate carnivorous plant in the Lentibulariaceae family. It grows in savannas and

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**Dosera Filiformis
"Florida Red"**



**Florida Red
with
White Flowers**



**Thread-leaf
Sundew**



Thread-leaf Sundew

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sandy bog areas of the Southeastern United States.

Its preferred habitat is a drier environment as compared to other butterwort that live in the South. It prefers to grow on poor nutritive soil and in acidic bogs where the pH ranges from 5.0 to 6.0 and the soil is a mix of half peat moss and half sand. Partial shade areas like open pine wood, marshes, moist savannas, and sandy soils are also favored by *Pinguicula lutea*.

The leaves of Yellow Butterwort are yellowish-green arranged in a basal rosettes. The simple shape of a leaf blade is ovule to oblong; slightly curved inward with a pointed tip.

The overall diameter of an entire rosette can measure upwards to 2.5 inches. The fleshy surfaces of the leaves are covered with numerous sticky droplets called the mucilage. The mucilage is secreted by the peduncular gland on the top of each stalk. Small insects often get trapped by the glandular stalks for mistaking the mucilage as water drops.

Once the prey is stuck on the droplets, a digestive enzyme is released to extract nitrogen from the insect. The margin of the leaves also slowly roll inward and relax again after the digestion is complete.

Like many carnivorous plants, this trapping mechanism allows the plant to seek supplement nitrogen sources from the insect as a way to replace its nutrient-deficient habitat.

The flowers open in early spring from February to May; producing one solitary yellow flower that will have five irregular petals and five sepals. A flower petal has one to several notches. One of the petals extended all the way down to the back forming a long slender spur. This structure holds the nectar.

Usually, only pollinators that have a long tongue can reach the nectar. The size of the flower is about 2 inches in diameter, which is held slightly upright



Bloodwort Yellow

on a long stalk that arises from the basal rosette of leaves.

Throughout the spring the plant will produce several flower stalks that reach as high as 12 inches. Both the flower stalk and the sepals are covered with fine hairs that help to attract and entangle prey. After the flower is pollinated it develops into a rough capsule that will contain numerous small

seeds.

Flatleaf Butterwort *Pinguicula*

There are two main groups of *Pinguicula* in this region. The Arctic-Temperate, and the Temperate-Subtropical. The Arctic species is made up of species that survive the harsh winter dormancy by producing hibernacula (tight little resting buds that look like small heads of garlic), and the Subtropical species that retain leaves year-round, although they tend to become a bit small during the winter.

Otherwise, their rosette of leaf sizes are mostly governed by the availability of water. Out of flower, these species are essentially impossible to distinguish from each other. While these plants can usually be instantly identified by flower color, the occasional flower variant (white forms) can confound easy identifications.

Fortunately, if one is really pressed for identifications, you might take a look at the nature of the hairs on the flower palate to identify them.

Hybrids, well, let's not even go into that, as there are too many to count.

Scientifically, the Flatleaf Butterwort is described as being an upright, glandular perennial. Its preferred habitat is swamps, wet soils or standing water, open roadsides where water is persistent in ditches. This is a species that is very fond of a wet habitat. The deep maroon color of the leaves easily distinguishes it

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Flat-leaf Butterwort

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from other species growing in our area of SW Alabama. Some specimens may have lighter colors, however, often due to insufficient sunlight.

The leaves are in basal rosettes, no leaf stalk; egg-shaped or tapering to the tip with sides less than equal; margins are smooth and curled inward.

The flowers are terminal (solitary at the tip of a flowering stem); bisexual in nature; about 2 inches across and divided into deeply cut notches where each part is the image of the other; calyx is 5-lobed; corolla is funnel-shaped and spurred at the base. Color is blue to whitish blue; 2 stamens.

The yellow palate extends from the corolla tube and is clearly visible when the flower is fully open. The flower will last for several days, but strong sunshine is needed to persuade it to open its lobes fully. The flowers occur in the spring and are small but can reach almost 2 inches across when open.

Fruit is a capsule.

The species usually grows for only a year or so before dying, or when cross-pollination has occurred. The sole life purpose of the plant is to reproduce itself through fertile seeds.

The butterwort's genus name, *Pinguicula*, derives from the Latin *pinguis*, meaning "fat," and refers to the greasy (or buttery) feel of the leaves. "Wort" comes from the Old English word *wyr*t and simply means "plant."

Minute glands cover the upper surface of the butterwort's slimy leaf, producing the tacky mucilage and others secreting tissue-dissolving enzymes.

Like sundews and the myriad of other carnivorous plants, the butterwort lures prey insect to its death, as the insect mistakes the mucilage for water or nectar. Gnats and other flies landing on a leaf become stuck. Slowly the leaf edges curl inward, forming a trough while releasing more glue over the hapless

victim, along with digestive secretions that dissolve it. Consumption of the resulting nutrient-rich goo takes two to three days.

When the leaves unfurl, summer winds whisk away the hollow remains, and the plant resumes its deceptively innocent appearance.

Part of the intrigue of searching our swamplands is for the sheer joy of finding butterworts, bladderworts and sundews: botanical oddballs. They're a challenge to locate, but sighting one of these little-known carnivores doling out their version of plant kingdom justice always brings a smile to any bug-bitten face.

Blue Butterwort *Pinguicula Caerulea*

Blue Butterwort, *Pinguicula caerulea*, is also known as Violet Butterwort, Blue-flower Butterwort, or Common Butterwort. This particular carnivore occurs throughout our area, south into the Florida Keys and the Bahamas, where they grow in pockets of limestone mixed with a bit of sand and decomposed plant matter.

Suffice it to say that this species can grow quite well in a greenhouse environment using vermiculite and a small amount of peat. In this part of the southeast, it is generally found growing in very wet areas and has been recorded as growing under water along the edges of streams and fresh water pools.

For added technical information, many butterworts cycle their leaves between rosettes composed of carnivorous and non-carnivorous as the seasons change, so no distinction is made that would further divide them into a myriad of groups based on their ability to produce different foliage during their growing season.

If the growth in summer is different in size and shape to that in early spring or



Blue Bloodwort
Photo courtesy Ann Biggs-Williams,
Brewton, Alabama

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winter, the plant would be considered heterophyllous, whereas uniform growth would identify it as being a homophyllous species. In this case, the Blue Butterwort would be homophyllous (all alike, never changing).

The leaf blade is smooth, rigid, and succulent, usually bright green or pinkish in color. The leaves measure about 1.5 inches long. The shape depends on the species, but usually they will be obovate, spatulate, or linear, and like all members of the family, the plant is carnivorous.

In order to catch and digest insects, the leaf uses two specialized glands which are scattered across the upper leaf surface; a peduncular gland that consists of a few secretory cells on top of a single stalk, while the second type lie flat on the surface. These cells produce a secretion which forms tiny droplets across the leaf surface.

This wet appearance helps lure prey in search of water. The droplets secrete limited amounts of digestive enzymes, and serve mainly to entrap the insects. On contact with an insect, the glands release mucilage from cells located at the base of their stalks. As the insect struggles to free itself, the motion triggers more secretions that further encases the prey.

Some species can bend their leaf edges slightly, bringing additional glands into contact with the trapped insect. Once the prey is entrapped the digestion begins, the initial flow of nitrogen triggers enzyme release, which breaks down the digestible components of the insect body.

The fluids are then absorbed back into the leaf surface through microscopic pores, leaving only the insects' exoskeleton on the leaf surface.

The flowers are only able to trap small insects and those with wings that land on the petal surface. The secretors can only

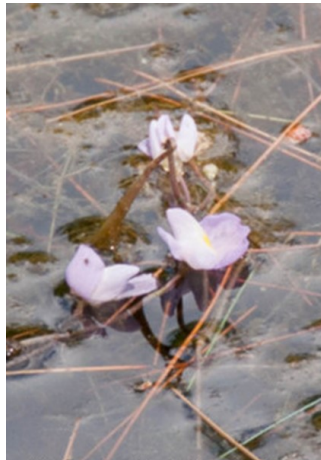
function a single time, so that a particular area of the flower can only be used once.

As with almost all carnivorous plants, the flowers are held above the rest of the plant by a stalk, in order to increase the probability of trapping potential pollinators. The single, long-lasting flowers will have two lower lip petals characteristic of the butterwort family, and a spur extending from the back of the flower.

The calyx has 5 sepals, and the petals are arranged in a 2-part lower lip and a 3-part upper lip. Most butterwort flowers are blue, violet or white, often suffused with a yellow, greenish or reddish tint. The

shape and colors of the flowers are distinguishing characteristics which are used to divide the genus into subgenera and to distinguish individual species from one another.

The round to egg-shaped seed capsules open when dry into two halves, exposing numerous small brown seeds. If moisture is present the seam closes, protecting the seed and opening again upon dryness to allow for wind dispersal. Many species have a net-like pattern on their seed surface to allow them to land on water surfaces without sinking.



Bloodwort Purple



Horned Bladder-

Horned Bladderwort *Utricularia juncea*

Horned Bladderwort, *Utricularia juncea*, and Purple Bladderwort, *Utricularia purpurea*. All carnivorous plant species produce flowers, but the blossoms of bladderworts are the most conspicuous. Beginning in late June, stalks bearing bright yellow or purple snapdragon-like flowers protrude 2 to 8 inches above the surface of shallow lakes, ponds, and backwater sloughs in major river drainages, marshes, and fens (frequently flooded areas). Beneath the surface, bladderworts grow feathery branches and miniature

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bladder-shaped trapping mechanisms.

Instead of using a sticky secretion to capture prey, the bladderwort employs sophisticated vacuum-driven traps. The bladders range in size from near zero to about 1/8 inch long. The sides remain compressed until a passing water flea, insect larvae, fish fry, or newly hatched tadpole brushes against a “trigger hair” at the mouth of the trap. The bladder then pops open, sucking in water and prey and snapping closed in a millisecond. There’s no escape.

To consume larger prey, such as baby tadpoles, the plant shuts the bladder door tightly around the animal’s body before releasing digestive enzymes and digesting the part captured inside. The trap then resets.

When another passerby trips a trigger hair, the door opens and the next portion of the tadpole is sucked in to be consumed. This continues until the prey is gone. The harmless-looking bladder then releases excess water, and the plant awaits its next meal.

The following description is taken from Wildflowers of The Escambia - The Book:

“These plants are carnivorous, aquatic (free floating) or semi-aquatic (attached to wetland soil, but with no roots) herbs that form mats or colonies. The preferred habitat is ponds, lakes, pools and ditches, shores, sloughs and swamps. Distribution is throughout. The stems are subterranean, or above ground, branched or not, simulating leaves. Some have tiny urn-like bladders that trap and digest insects and crustaceans. The branches are linear, filiform, dentate, or in a rosette pattern.



The flowers are solitary and small. The corolla is two-lipped with five lobes and may appear as white, yellow, pink or purple; produced just above the water or on wet soil; usually conspicuous because of abundance. Flowers occur in the summer and autumn.

Fruit is a capsule.

Round-Leaf Sundew *Drosera Rotundifolia*

Round-leaf Sundew (*Drosera rotundifolia*) - The leaves of the common sundew are arranged in a basal rosette. The narrow, hairy, nearly 2 inches long petioles (stalks) support the near 1 inch long laminae. The upper surface of the lamina is densely covered with red glandular hairs that secrete a sticky mucilage.

A typical plant has an overall diameter of about 4 inches, and each inflorescence bundle is about 9/10 of an inch. The flowers grow on one side of a single slender, hairless stalk that emanates from the center of the leaf rosette. The flowers are pink or white and bears 5 petals. The seeds are light brown, slender and tapered.

In the winter, this sundew produces a hibernaculum to survive the cold conditions. This consists of a bud of tightly curled leaves found at ground level.

The plant feeds on insects, which are attracted to its bright red color and its glistening drops

of mucilage, loaded with a sugary substance, covering its leaves. It has evolved that this carnivorous behavior is in response to its habitat,



Round-leaf Sundew (*Drosera Rotundifolia*)



Round Leaf Sundew Flower

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Carnivorous Plants: Escambia (Continued from ECHOES February 2017)

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which is usually poor in nutrients or is so acidic that nutrient availability is severely decreased. The plant uses enzymes to dissolve the insects – which become stuck to the glandular tentacles – and extract ammonia (from proteins) and other nutrients from their bodies. The ammonia replaces the nitrogen that other plants absorb from the soil.

The round-leaf sundew has an exceptionally wide range. In North America, the common sundew is found in all parts of Canada except the Canadian Prairies and the tundra regions, southern Alaska, the Pacific Northwest, and along the Appalachian Mountains south to Georgia and Louisiana.

It is found in much of Europe, including the British Isles, most of France, the Benelux nations, Germany, Denmark, Switzerland, Czech Republic, Poland, Belarus, the Baltic countries, Sweden and Finland, as well as northern portions of Portugal, Spain, Romania and in Iceland and southern regions of Norway and Greenland, infrequent in Austria and Hungary.

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