

SPLITTING *SARRACENIA ALABAMENSIS* SUBSP. *WHERRYI* (D.E. SCHNELL) CASE & R.B. CASE 2005 INTO TWO NEW SPECIES (SARRACENIACEAE)

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Abstract: The two geographically disjunct groups of *Sarracenia alabamensis* subsp. *wherryi* (D.E. Schnell) Case & R.B. (Case 2005) are described as separate species. The western disjunct entity is elevated to species rank as *Sarracenia wherryi* (D.E. Schnell) Mellichamp & Trexler *comb. et stat. nov.*, native to Washington County, Alabama, and immediately adjacent Wayne and Greene counties, Mississippi. The eastern entity is described as *Sarracenia chrysea* Trexler *spec. nov.*, indigenous to Alabama counties of Baldwin, Escambia, Monroe, and Conecuh, and northwest Escambia County, Florida. Integrated biologic, ecologic, geologic, and distribution criteria synthesize as evidence for separate species in a unified concept. *Sarracenia chrysea* and *S. wherryi* only form colonies within specific edaphically-governed patches on hillside seepage bogs, where the slowly-succeeding herbaceous ecology excludes shrubs and congeners. Unique developmental and adult biology complementary to this habitat results in limited ecological tolerances for *S. chrysea* and *S. wherryi*. They depend upon this habitat to survive and reproduce, and the specific convergence of factors underlying the formation of their habitat confines these species to irregular patches within larger hillside seepage bogs in sequestered and unrelated inland ranges east and northwest of Mobile Bay.

Introduction and background

Sarracenia is a North American genus of wetland-dwelling pitcher plants native to the southeastern United States, with one species, *S. purpurea*, ranging north into Canada. Since their earliest depiction by Clusius in 1601, *Sarracenia* have commanded widespread botanical and horticultural interest, but it was not until the early 20th century that more modern treatments provided a better understanding of the species and their geographic ranges (Macfarlane 1908; Wherry 1929, 1935; Bell 1949; McDaniel 1971; summarized in Mellichamp 1978). These developments allowed finer points of inquiry to be pursued which form the basis of most questions-at-issue in *Sarracenia* today, some of which fuel several ongoing taxonomic debates (Case & Case 1975, 1976; Schnell 1977, 1978; Gibson 1983; Naczi *et al.* 1999; Mellichamp 2008; Mellichamp & Case 2009; Rice 2018; recent summary in Naczi 2017).

Sarracenia alabamensis subsp. *wherryi* (D.E. Schnell 1978) Case & Case 2005 (hereon, “subspecies *wherryi*”) hails from the lower Coastal Plain in southwest Alabama and immediately adjacent parts of Mississippi and Florida. Near the type location in Washington County, Alabama, subspecies *wherryi* is usually a short plant (~21 cm tall) forming sparse clumps of radially-rosetted pitchers characteristically blushed red in the upper half. Avoiding rivers and flat meadows,

subspecies *wherryi* is only found on seepage slopes in hilly topographic regions distant from the coast. As noted in unpublished National Heritage Program (NHP) works and by other observers (Case & Case 1975; Hummer 1986), the taxon consolidates into two far-disjunct and geographically unrelated distribution centers (in some NHP literature, “subpopulations”). The western group is located on the upper Escatawpa River subdrainage in west-central Washington County, Alabama, and adjacent Mississippi. The eastern group is on the upper Perdido River drainage in Baldwin County, Alabama, and northwestern Escambia County, Florida, extending northeast to the west side of the Conecuh-Escambia River in Alabama.

Subspecies *wherryi* is part of the *Sarracenia rubra* complex, an informal group of geographically disjunct entities with practically identical sweet-smelling red flowers (Case & Case 1976; Mellichamp & Case 2009). Their biology and habitat preferences literally set them apart from the larger, more widespread and conventionally-recognized taxa (Macfarlane 1907). Each member of the complex has been included in *S. rubra* Walter at some point in its botanical history. Debate has persisted for nearly a century on their taxonomic placement or recognition, the distinctness and significance of their morphology, and their geographic range limits (Wherry 1929, 1935, 1972; Bell 1949; McDaniel 1971, 1986; Case & Case 1976; Schnell 1977, 1978, 1979; Mellichamp 2008; Mellichamp & Case 2009; Rice 2018). Early works often grouped *S. rubra* complex members into *S. rubra* Walter before differences between the disjuncts had been clearly understood (Macfarlane 1908; Bell 1949). This was also done later by those who noticed differences but were overwhelmingly concerned with other issues (McDaniel 1971; but see 1986).

Between the 1950s and 1970s, F.B. Case and R.W. Case extensively studied the *S. rubra* complex, producing several important taxonomic decisions. Their introduction of *Sarracenia alabamensis* to science (Case & Case 1975) was followed by a broader treatment of the *S. rubra* complex describing *S. alabamensis* subsp. *wherryi* (Case & Case 1976). Case & Case intimated that placement of subspecies *wherryi* under *S. alabamensis* was provisional (Case & Case 1976), but they published no new views. Then in 1978 subspecies *wherryi* was placed in *S. rubra* by Schnell, also provisionally.

The initial typification of the name *S. alabamensis* (Case & Case 1975) did not conform with extant rules: the type collection included specimens gathered on different dates, so it was not a single gathering. The name was thus illegitimate in 1975. This was corrected later (Case & Case 2005) and led to revisions of *S. alabamensis* sensu lato (summary in Mellichamp & Case 2009). Since the species name *S. alabamensis* was illegitimate until 2005, the subspecies name *S. alabamensis* subsp. *wherryi* (Case & Case 1976) was also illegitimate at the time of the initial description. Thus, the combination *S. rubra* subsp. *wherryi* (Schnell 1978) is the first legitimate name for the taxon. In this way, Schnell inadvertently published a new name (*subsp. nov.*), not just a new combination (*comb. nov.*). The holotype (US 2797749), never examined by Schnell, and the Latin diagnosis he cites for his combination, both come from Case and Case (1976), who relate the plant to *S. alabamensis*.

Subspecies *wherryi* has always been obscure, only having been described relatively recently. Plants of the western distribution center have been accessible for many decades, and are common on roadsides in Washington County, Alabama. Still, many roadside plants are hybrids, and parent taxon descriptions based on them risk inadvertently conflating hybrid features (e.g. Case & Case 1976 pp 316). The eastern group, best known from Baldwin County, Alabama, has rarely been photographed, and has always been less accessible to botanists. Most accounts, portraying subspecies *wherryi* in provisional diagnosis from better-understood taxa, depict a small and highly generic *Sarracenia* with little specified morphology. This is unusual for any taxon in a genus where

morphologic criteria are core to taxonomy (e.g. McDaniel 1986; Naczi *et al.* 1999); and suggests too many entities have been grouped into a single taxon. Past findings significant to the *S. rubra* complex and with implications for general *Sarracenia* biology have not augmented or integrated with established knowledge, depriving them of taxonomic impact (Trexler 2026). This together has made specific morphology pertaining to subspecies *wherryi* difficult to imagine or verify.

This work revises the taxonomy of subspecies *wherryi*. It began in February 2022 with T.L. Mellichamp, who had studied the taxon across its range and in cultivation between the 1970s and 2007 for his treatment of the genus (Mellichamp & Case 2009). Mellichamp concluded it was distinct from subspecies *alabamensis* and deserved species rank at least by merit of discrepancies in their pitcher cohort morphologies, size, and geographic range disjuncture. Mellichamp and the current author never agreed with placement of subspecies *wherryi* in *S. rubra* Walter. After Mellichamp's passing (12 Sept. 2022), Carson Trexler continued to study subspecies *wherryi* independently through 2025.

This paper explores properties and implications of the range disjuncture of the two groups that comprise subspecies *wherryi*, hereon treated as separate species. It argues that genetic separation is caused by factors with special implications for the sequestered distribution centers that do not follow for the more widespread *Sarracenia* species of the lower Gulf Coastal Plain. The two entities avoid avenues for distribution used by other *Sarracenia* species of the region, and are found to be geographically separated by virtue of important aspects of their own biology. Their considerable ecological specializations, biological differences, and biological homogeneity within their discrete ranges can only be explained as separate taxa, and are best explained as separate species.

Sarracenia alabamensis subsp. *wherryi* is elevated to species rank as *Sarracenia wherryi*. As the western distribution center of the former subspecies, *S. wherryi* is known from Washington County, Alabama, and Wayne and Greene counties, Mississippi. The eastern distribution center is a new taxon, *Sarracenia chrysea*, of Baldwin, Escambia, Monroe, and Conecuh counties Alabama, and the Perdido River drainage of northwestern Escambia County, Florida. *Sarracenia chrysea* is typified with a new specimen. *Sarracenia wherryi*, retaining the type of subspecies *wherryi*, accordingly receives a new taxonomic circumscription. Biological differences noted in Hummer (1986) and Case & Case (1976) are corroborated in this work. They are covered in the diagnoses and in Trexler (2026).

Materials and methods

Materials, methods, collection protocol, and permits used to examine *Sarracenia* for this work are identical to Trexler (2026). Descriptions in taxonomic treatments derive from accessioned herbarium specimens in appendices to Trexler (2026). The below descriptions of juvenile *Sarracenia* derive from unpublished data and experiments between 2022 and 2025.

Fieldwork revolved around visits to sites of *S. wherryi* and *S. chrysea* in their natural range. Excursions occurred in May-June and September 2022; April and September 2023; April and August-September 2024; and April-May and October 2025. Excursions coincided with the production of the first cohort of leaves in spring and climax leaf cohorts in late summer. Observations below derive from fieldwork. Sites from which the below observations derive were on private land (either active or former commercial pine plantation). According to landowners, all lands were managed by only prescribed fire without the use of herbicide.

Observations

The following observations highlight biological and ecological differences between *Sarracenia chrysea* and *S. wherryi* from co-occurring congeners with upright leaves. These both indicate geographic and genetic separation of *S. wherryi* and *S. chrysea*, and important differences from more widespread congeners.

Juvenile biology

As seedlings, all upright *Sarracenia* species first produce carnivorous leaves of uniform size and shape. Leaves of juvenile plants are rosetted and may be produced in great numbers. Upright *Sarracenia* species are largely indistinguishable at this stage, which lasts for at least one annual growth cycle. Juveniles subsequently follow circannual growth patterns in the production of discrete leaf cohorts like adults do. Important differences between species emerge as plants approach maturity, often regarding the inferior lamina and its substructures (Trexler 2026).

For tall upright species *S. alata*, *S. flava*, and *S. leucophylla*, in the subsequent phase of foliar growth, each leaf produced is substantially taller than the one before it. “Development” corresponds to foliar, root, and rhizome size increase per each produced leaf and root (in horticulture this is called a “leaf jump”). As juvenile plants develop, leaves cease to be inward-facing and inferior laminae become erect-upright. As they accrue height and size, extremity features become more defined, including the peristome, secondary and tertiary veins, the lid’s margins and column, and characteristic coloration. Leaf count typically decreases, some plants producing only one or two large leaves per cohort. Periods of growth inactivity and the production of hibernacula between leaf cohorts characterize growth cycles after the initial rosetted stage. Juveniles assume a somewhat graminoid appearance from which they never revert.

Sarracenia chrysea and *S. wherryi* retain many features of the initial rosetted stage into maturity. As in the initial rosetted stage, these species only produce leaves of consistent height per annual growth cycle. Development does not coincide with rapidly incremental “leaf jumps”; instead, advances in size and morphological differentiation only occur at the start of the annual growth cycle upon breaking dormancy in spring.

Juveniles of *S. wherryi* and *S. chrysea* are smaller than those of other species. They are always radially-rosetted, and never become graminoid. At maturity, *S. chrysea* may have nearly erect-upright inferior laminae with highly differentiated extremity features, but the species remains rosetted with inward-facing leaves. *Sarracenia wherryi* produces short, deeply “L”-shaped leaves in radial rosettes even when mature. Like juvenile *Sarracenia*, adults of both species produce many leaves per year (to 15 or more). Flowering size requires about three years of unchecked growth (up to five in other species). Both species’ apical growth points harbor smaller flower primordia than larger species, leading to flowering even in individuals with small rhizomes and apical growth points. *Sarracenia wherryi* and *S. chrysea* pass through juvenility faster than taller upright species.

Neoteny

Mature plants of *Sarracenia chrysea* and *S. wherryi* are characterized by uniform annual leaf size, high leaf count, small rhizomes of variable diameter across their length, and a radially-rosetted habit. They have nearly aphyllodous and apetiolate inferior laminae (and correspondingly practically lack independent phyllodia), making inferior lamina length roughly equal to that of the superior lamina (Trexler 2026). Cohort heterophylly is not obvious in such plants given their

uniform annual leaf height and reduced pitcher phyllodes (Trexler 2026). Though these plants are sexually mature, these are juvenile characteristics for *Sarracenia*, and adults of these species usually strongly resemble juveniles, especially *S. wherryi*. Given these similarities, these adult plants may be called “neotenic”. In contrast, the holotype specimens of *S. wherryi* (US 2797749, Fig. 1) and *S. chrysea* (HPSU 26375, Fig. 5) have tall leaves with well-differentiated features like other upright species outside the *S. rubra* complex, i.e., without juvenile morphology. Such plants however may revert to neoteny (e.g., HPSU 26384, whose short leaves correspond to an exceptionally dry period in 2023).

Neotenic plants especially occur in drier microsites absent of congeners. Plants with fully developed morphology are more common in perennially wet habitat. *Sarracenia chrysea* more often expresses fully developed morphology, while *S. wherryi* is usually short-neotenic. Observations of prey niche partitioning finding subspecies *wherryi* and other *Sarracenia* under ~25 cm to primarily consume ants (Gibson 1983) were corroborated in this research. In dissecting leaves for allometry for Trexler (2026), *S. wherryi* leaves were observed to irregularly contain large prey, consuming mostly ants. By contrast, *S. chrysea* leaves with typical morphology were occasionally found with large prey (especially moths and spiders), while still containing many ants. Taxa in the *S. rubra* complex have been shown to exhibit great diversity in respect to adult size even within sites (Case & Case 1976). All members of the complex native to the lower Coastal Plain express neoteny, and

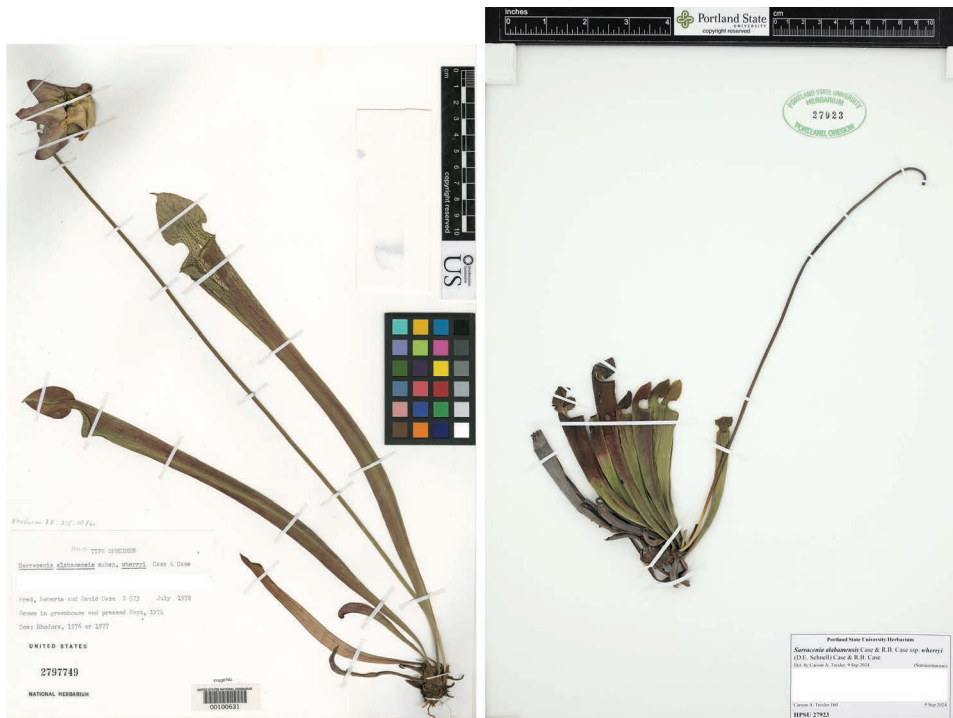


Figure 1. Two herbarized specimens of *Sarracenia wherryi*: the holotype (left) has fully formed, adult features. The short plant at right (HPSU 27923) has neotenic features. Both are mature, but the morphology of the holotype is characteristic of adults in most upright *Sarracenia* species. Specimen labels have been obscured to protect sites.

may closely resemble each other when in that state. Neotenic plants bear few of the clearly differentiated features conventionally used to identify *Sarracenia* species.¹

Colonies and enclave patches

Sarracenia chrysea and *S. wherryi* form single-species colonies away from congeners in hillside seepage bog complexes. In the case of these species, colonies are groups of discrete clumps, only forming in certain ecological patches (hereon, “enclaves”) within the larger bog. Enclaves are characterized by a short and sparse herbaceous layer and slow rate of vegetative succession (Fig. 2). Shrubs and taller upright *Sarracenia* species are conspicuously absent from enclaves, which makes them noticeable when they break up dense stands of vegetation. Such patches harboring *S. wherryi* and *S. chrysea* colonies may be enveloped by the rest of the *Sarracenia* bog, or disjunct from it (“exclaves”). Exclaves are inconspicuous given the absence of conventional *Sarracenia* bog indicators like *S. leucophylla* or *Helenium vernale*.

Unlike tall upright congener species like *S. leucophylla*, whose stands may densely fill habitat outside enclaves, colonies of *S. wherryi* and *S. chrysea* occur sporadically across the landscape. Even within their most robust patches, *S. wherryi* and *S. chrysea* never form dense stands like the tall upright species do. Tall upright species do not avoid enclaves and frequently tightly enclose them. Nevertheless, these species and their hybrids do not occupy enclaves. All enclaves appear to resist vegetative succession relative to the seepage bog complexes they are found in. Even where surrounding bog becomes dense with herbaceous and woody plants, *S. wherryi* and *S. chrysea* colonies tend to remain free of vegetative encroachment. After long periods without rain, enclave patches may show signs of hydrologic change earlier than elsewhere in the bog (Trexler pers. obs. April 2024-Oct. 2025).

Enclaves are the only places *S. wherryi* and *S. chrysea* form their characteristic clusters of individuals, “oodles”, which have not been described. Oodles are loose ~1 to 1.5-meter-wide clusters of multiple genet clones, both individually rosetted and vegetatively clumping. Multiple oodles may comprise a colony. Oodles of *S. wherryi* are usually made up of neotenic plants, while oodles of *S. chrysea* often comprise plants bearing typical morphology. Oodles scatter evenly in enclave patches, typically situated 2 meters apart or more of each other as. Oodles are the most common mode of association expressed by these species within colonies (as opposed to being scattered individual rosettes). Enclaves are the only places where oodles form. Seedlings of these species are common only amongst oodles.

Observations of Underlying Edaphic Conditions to Enclave Ecologies

Enclaves where at least *S. wherryi* occurs coincide with unique combinations of edaphic conditions caused by clay fragipans lying exceptionally close to the surface. In large bog complexes in pine plantation, deep tracks left by logging equipment revealed these subsurface features. Areas harboring *S. leucophylla*, *S. alata*, and *S. psittacina* were transected by very deep tracks (1 meter or more), through wet soil with a dark surface horizon, and without a near-surface fragipan. Transects crossing from such areas into enclave ecology harboring colonies of *S. wherryi* revealed a near-surface presence of a clay fragipan. Tracks rose from deep, often dark-colored media in *S. leucophylla*

¹ Though not invoking neoteny per se, “undifferentiated morphology” or “reversion to short stature” are typically cited for conservative taxonomic decisions concerning *S. rubra* complex entities (McDaniel 1971; Case & Case 1976; Schnell 1977).



Figure 2. Oodle of *Sarracenia chrysea*, yardstick for scale. Photo taken 26 April 2024.

bog to surmount a massive clay understructure close to the surface. Tracks passing over this fragipan left only surface imprints in lightly colored inorganic soil (Fig. 3).

In every instance where equipment transected *S. wherryi* colonies, tracks revealed a near-surface rise in the subsurface fragipan, through ecology characterized by an absence of woody plants, and a decrease in surface coverage of vegetation. The only *Sarracenia* growing over near-surface fragipans was *S. wherryi*, with a sparse floral accompaniment. At least one *S. wherryi* colony is known from an exclave imbedded in a convex slope overlain by the Fruitdale-Toinette-Rutan complex



Figure 3. *Sarracenia wherryi* colony (foreground on either side of equipment tracks) in an enclave inside a stand of *S. leucophylla*. Equipment tracks transecting the enclave here are surface-level, but among *S. leucophylla* depth exceeds ~1m. Photo taken 27 April 2025.

(USDA 2026), of which the hydric components are in the minority (the Rutan series). That these subsurface structures are durable to large machinery and are topped by sparse vegetation suggests resistance to root penetration. Planted pine die young and stunted in enclave patches, possibly due to subsurface impaction.

No equipment transects were observed in sites of *S. chrysea*, but the species distributes in enclave patches much like *S. wherryi* on soils forming atop the same subsurface stratum, the Miocene undifferentiated series. Unlike *S. wherryi*, *S. chrysea* is found on foot or toe slopes and adjacent areas near wet level drainages, and practically never occurs on shoulder slopes.

Synthesis of evidence for range separation

- Juvenile plants of *Sarracenia wherryi* and *S. chrysea*...
 - are not competitive against rapidly growing surrounding vegetation
 - do not rapidly attain height even with ample resources
 - do not transition to capturing larger prey as they approach maturity (resulting in size boost)
 - are absent from habitat where juveniles of taller congeners are competent
 - Synthesis: general *Sarracenia* habitat is ungenial for *S. wherryi* and *S. chrysea* reproduction
- Adult plants of *S. wherryi* and *S. chrysea*...

- lack the height and ecologically-significant morphology (pitcher phyllodes) of taller congeners
- mostly attract and consume ants
- are neotenic, or may revert to neoteny
 - Synthesis: adult *S. wherryi* and *S. chrysea* avoid competing with taller congeners
 - adult *S. wherryi* and *S. chrysea* are confined to an ecological niche associated with juvenility
 - adult *S. wherryi* and *S. chrysea* fill this niche relative to taller congeners in the same habitat
 - *S. wherryi* and *S. chrysea* only reproduce/persist in habitat favorable for juvenile *Sarracenia*
- Enclave patches...
 - spatially partition *S. wherryi* and *S. chrysea* colonies from taller congeners
 - are defined by a lower ecological amplitude relative to dynamic cycles of the surrounding bog
 - occur as islands in the larger bog
 - possess conditions where small size is advantageous and which select against large *Sarracenia*
 - result from convergent edaphic conditions sporadically present in hilly, inland areas
 - Synthesis: gene flow among local *S. wherryi* or *S. chrysea* occurrences is restricted by internal anchors and external obstacles relative to enclave patches
- Suitable edaphic conditions for enclaves...
 - converge only on seepage slopes atop shallow Miocene series subsurface
 - are absent between the ranges of *S. wherryi* and *S. chrysea* adjacent to the Mobile embayment
 - are absent from Mobile and south Baldwin counties, AL (along with *S. wherryi* and *S. chrysea*)
 - Synthesis: no avenue for distribution exists north, south, east, or west of the ranges of *S. wherryi* and *S. chrysea*
 - *S. wherryi* and *S. chrysea* are confined to separate ranges by virtue of their own biology
 - Preclusion of gene flow between *S. wherryi* and *S. chrysea*

Discussion

Synthesis criteria enumerated above indicate for *Sarracenia chrysea* and *S. wherryi* niche compression into small microsites in highly localized patches in separate geographic ranges. Comparisons with taller congeners show that pressures on *Sarracenia* species distribution in-habitat are related to inherent biological characteristics (Gibson 1983; Trexler 2026). These have negative implications for the potential of *Sarracenia chrysea* and *S. wherryi* to potentially spread beyond their limited known ranges and inform for disjuncture.

The Alabama and Tombigbee rivers separate *S. wherryi* and *S. chrysea* (not the Mobile River), and the two species largely avoid these drainages. NHP records cross-referenced with drainage maps (Mettee *et al.* 1993) show that these species cluster close to their respective core river basins (the Escatawpa and Perdido River), and that their two ranges are not related by drainage basin. Their association with the Mobile embayment is peripheral to their ranges. As evident in their opposite-facing east-west boundaries on the Chickasawhay and Conecuh-Escambia Rivers, respectively, the ranges of *S. chrysea* and *S. wherryi* avoid large rivers: their ranges are separated by 30 miles of swampy bottomland. These species also avoid the coast. *Sarracenia wherryi* is situated 60 miles away from the Gulf of Mexico, and *S. chrysea* is 30 miles from it at its southernmost locality. *Sarracenia chrysea* is almost 35 miles disjunct west of the nearest occurrence of *S. rubra* subsp. *gulfensis*. *Sarracenia wherryi* and *S. chrysea* are notable for strictly adhering to interfluvial seepage slopes. Other lower Coastal Plain *Sarracenia* species do not show such unique patterns of distribution.

Distribution limits for *S. wherryi* and *S. chrysea* derive from their affinity to enclave ecology. Enclaves contribute to the spatial and ecological partitioning of *Sarracenia* taxa within bogs, and their presence arises from rare convergences of subsurface features and edaphic conditions. Enclaves are the only places *S. wherryi* and *S. chrysea* dominate the upright *Sarracenia* niche, the only places where the species form oodles and where they form colonies, and the only places these small species are not crowded out by tall upright *Sarracenia*. Oodles spatially consolidate genetic individuals of these short species in ecology where they are always visually prominent to airborne pollinators. The prevalence of seedlings near or within oodles (and not near isolated individual plants) suggests that these groupings in-habitat facilitate reproduction. Enclaves are conducive to these species' fecundity, reducing the rate of temporal ecological cycles enough to accommodate slow-growing seedlings. Colonies probably represent basins of genetic diversity for these species as well as partitioned ecological niches. Lastly, *S. wherryi* and *S. chrysea* demonstrate peculiar affinities to shallow soils, including short size, neoteny, tolerances to extreme hydrological disturbance (for *S. wherryi*), and small, slowly-creeping rhizomes. Important biological differences between these species (e.g., contrasting circannual growth patterns) contradicts grouping into a single taxon. Species biology cohering to highly specific ecology supports genetic separation between *S. chrysea* and *S. wherryi* by reducing likelihood for distribution beyond known ranges.

Sarracenia wherryi and *S. chrysea* colonies depend upon the presence of specific and highly localized edaphic conditions for their preferred ecology to form. In-habitat preferences propagate implications up-scale, amounting to range sequestration. The ecologically suppressed conditions that *S. wherryi* and *S. chrysea* are competent in are absent beyond their ranges, which prevents these species from distribution or competence outside their known ranges (and outside enclaves in-site). A dearth of necessary subsurface conditions for enclave formation probably explains these species' absence from the seaward meadows as noticed before in Case and Case (1976). Other *Sarracenia* species show consistent modes of in-habitat distribution where they occur inside the ranges of *S. wherryi* or *S. chrysea* to their more coastal occurrences, further suggesting that convergent biological factors correspond for *Sarracenia* species distribution and range.

Enclaves themselves result from a confluence of specific subsurface factors. Unpublished survey reports and NHP data find that the known ranges of *S. wherryi* and *S. chrysea* are confined to small regions of undulating topography characterized by a shallower presence of the Miocene undifferentiated series than elsewhere on the nearby lower Coastal Plain. The ombrotrophic and aquiferous Miocene series is conducive to the formation of much *Sarracenia* seepage bog ecology. It becomes shallow in the ranges of *S. wherryi* and *S. chrysea*, especially on hillsides, and in the northern part of the range of *S. wherryi* (Newton *et al.* 1975), where *S. wherryi* is sometimes the sole *Sarracenia* taxon present. The Miocene series gets deeper to the south, and becomes subsumed by alluvial deposits on east and west margins of the Mobile Embayment (Osborne *et al.* 1989). The two species, which coincide with diverse topography, a shallow Miocene subsurface, and patchy ecology, disappear with these conditions as the Miocene series deepens (as noted in unpublished NHP surveys). If edaphic conditions govern the presence of their required habitat, *S. wherryi* and *S. chrysea* are probably indelibly confined to their rather sequestered known ranges.

Sarracenia alata, *S. flava*, and *S. leucophylla* by contrast liberally distribute through drainage corridors and the seaward-most lower Coastal Plain. They show no obvious limits to their distribution and have highly general habitat tolerances, and may be expected to cross most rivers while maintaining key species criteria (e.g., juvenile development traits and adult circannual growth patterns). Tall upright taxa are present in the geographical area between the edge of the range of

S. wherryi and the Tombigbee River, and in the space between the range of *S. chrysea* and the Alabama River and Mobile Bay. If *S. wherryi* and *S. chrysea* were able to cross the Alabama-Tombigbee river systems, they should have been found there too. Given their inherent constraints to in-habitat occurrence however, *S. wherryi* and *S. chrysea* have no avenue by which to distribute towards each other through the Mobile Embayment, or in any other direction, nor do they demonstrate any inclination to. Inherent limits to distribution have implications for *S. chrysea* and *S. wherryi* evolution coherent with their biology that clearly do not exist for the tall upright taxa.

Given the pressures confining them to their ranges today, and the unique biology of both species, it is difficult to argue that *S. chrysea* and *S. wherryi* have not evolved independently in their highly sequestered ranges. That their distributions appear to be the result of introverted strategies to the same environment as more widespread congeners suggest that their taxonomic models should not follow the same criteria as those taxa. It is more speculative to expect these plants to be closely related to each other than it is to observe range divisions and biological differences and conclude for evolutionarily separate species.

On the lower Gulf Coastal Plain, taller upright *Sarracenia* species partition from partly-neotenic *S. rubra* complex taxa with sequestered ranges. Evidence comes from allometry (Trexler 2026), ecology, distribution, juvenile and adult biology, and niche partitioning (Gibson 1983). That these dimensions are involved in establishment and long-term survival in *Sarracenia* habitat is supported by the biology and distribution factors inherent to the disjuncture of *S. chrysea* and *S. wherryi* and studies of the other species (Trexler 2026).

The geographically disjunct *S. rubra* complex entities themselves differentiate in diverse biological ways, including in circannual growth cycles, degrees of tolerance of small disturbances, and in visible features that help characterize recognizable homogeneity. Their in-habitat spatial partitioning from other *Sarracenia* is not easy to compare, given the different ecologies each entity is indigenous to, and each shows preference to particular sub-habitat where plants reproduce and form colonies. The *S. rubra* complex taxa in general are endemic to small ranges characterized by inter-fluve slopes, steepheads, and sandhills. They each show strict edaphic preferences relative to other taxa. They may be the result of reversion, where species in the past have become isolated in places where the resource-conservative characters of neoteny are advantageous. Perceptions of disjuncture seem less strange when these factors are considered.

Lastly, Trexler (2026) finds strong differences between *S. alabamensis* and both new species. *Sarracenia alabamensis* exhibits trimorphic heterophylly, a trait it shares with at least *S. oreophila*. Its first cohort leaves are decumbent and phyllodous (unique in the genus), its second cohort is upright and partially phyllodous, and it has massive aphyllodous climax cohort leaves resembling *S. leucophylla* or *S. oreophila*. Like the latter two species, *S. alabamensis* may get tall (to 81 cm, for climax cohorts, similar lengths for first cohort leaves), far larger than *S. wherryi* or *S. chrysea*. It inconsistently produces squamulae between leaf cohorts. The unique skirt-forming first cohort leaves, size of mature plants, prominent pitcher and independent phyllodia, and lack of a neotenic size class precludes oodle-forming for *S. alabamensis*. These characteristics biologically and ecologically separate it from *S. chrysea* and *S. wherryi*.



Figure 4. Carson Trexler with *Sarracenia wherryi* in Washington County, Alabama, 27 May 2022.

Species concept

This paper follows a unified species concept, which integrates individual lines of evidence to explain separately evolving metapopulations (de Queiroz 2007). Criteria for separately evolving metapopulations are individual lines of evidence that organically integrate as unified support for species. Evidence indicates for a lack of gene flow between *S. wherryi* and *S. chrysea* and positively supports separate species. They differ biologically in important ways that are easy and reliable to observe, especially in their circannual growth patterns, leaf cohort substructures, and tendencies toward neoteny. Numerous consistent differences in these species' leaves aid in their recognition. Differences like these already distinguish other species that have been conflated before, such as *S. flava* and *S. oreophila* (Trexler 2026). Evidence for species distinction in this sense is consistent with other canonically diagnosed *Sarracenia* species that are now widely accepted (e.g., Naczi *et al.* 1999). Critical synthesis of range and habitat with species biology describes *S. wherryi* and *S. chrysea* as reproductively separate taxa, here ranked as separate species.

Taxonomic treatment of *Sarracenia wherryi*

I fulfill the original premise of this research and raise *Sarracenia alabamensis* subsp. *wherryi* (D.E. Schnell 1978) Case & Case 2005 to species rank with T.L. Mellichamp:

Sarracenia wherryi (D.E. Schnell) Mellichamp & Trexler *comb. et stat. nov.* (Fig. 1, 4, Back Cover)
BASYONYM: *S. rubra* subsp. *wherryi* D.E. Schnell, Castanea 43(4): 261 (1978), citing the Latin diagnosis in Case & Case (1976).

HOLOTYPE: Fred, Roberta, and David Case. US [2797749].

Etymology: Honoring botanist Edgar T. Wherry (1885-1982).

Synonyms:

Sarracenia rubra sensu Macfarlane (1908) (in-part), non Walter, Fl. Carol. 152. 1778.

S. jonesii Wherry, Journ. Wash. Acad. Sci. 19: 385 1929 (in-part, not including the type).

S. alabamensis (Case & Case 2005) subsp. *wherryi* (D.E. Schnell 1978) Case & Case 2005 (in-part, including the type).

Existing Common Names: "Wherry's Pitcher Plant". Locally, "Sweet Pitcher" or "Buttercup" (but never "Flycatcher").

Proposed New Common Name: Escatawpa Sweet Pitcher (pronounced: "*Escatawba*"), after the river that is the core geographic feature of the species' range.

Description: **Plants** forming sparse clumps or individual rosettes, mature plants commonly neotenic and rather uncommonly exhibiting type morphology; **rhizomes** (2-)5(-7) mm diam., variable in diameter along length; **squamulae** (5-)11(-17) mm L, forming hibernacula only at the end of the growing season; **petioles** emerging laterally; **abaxial unchambered column** terete to modestly canaliculate; **independent phyllodia** very rare, obfalcate, bearing broad alae, decumbent or weakly ascending; **pitcher phyllodia** prominently alate; **pitchers** (6-)17(-39) cm L, produced in two cohorts differing allometrically and in substructural assemblage, leaves of nearly the same length per cohort in mature plants, producing up to 18 pitcher leaves per year, variable numbers per cohort, inferior lamina projecting from the apical growth point horizontally or at a lateral angle, always laterally-ascendent in climax cohorts to nearly decumbent even in large plants, superior lamina

invariably erect-upright, pitcher tubes not medially lordotically recurved, leaves bearing a bright red cast upon opening, quickly adopting a deeper strawberry-red blush for active trapping duration, aging to dull green or red; **first cohort pitcher leaves** decumbent-ascending, the first leaf often erect-upright, petioles short and occupying ~3% whole leaf length, pitcher phyllode occupying ~6% of whole leaf length, with broad alae, inferior lamina occupying ~61% of whole leaf length; **climax cohort pitcher leaves** deeply “L”-shaped (inferior lamina horizontal to plant axis, with upright superior laminae), proportionally wider than first cohort leaves, apetiolate, aphyllodous, pitcher chambers penetrating the leaf base or engaged with it, inferior laminae broadly alate and occupying ~52% of whole leaf length; **external pitcher tissue** colored red, tan, dull green, very rarely yellow, tissue uniformly textured externally, soft to the touch (but not as pliable as *S. alabamensis*), puberulent, occasionally finely pubescent; **inferior lamina** somewhat succulent compared to other species, primary veins not becoming hidebound in dried specimens; **superior lamina** not articulated in diameter from inferior lamina, tissue opaque and not membranous or semitranslucent; **nectaries** present on exterior dorsi-ventral adaxial meridian from leaf base to peristome, but absent from lid, abaxial surface of orifice, and from inferior lamina tube abaxial exterior; **veins** absent from external surface, veins on internal surface dark red to black, broad, prominent, pinstriped to reticulate, variable, present across internal Zones 2 & 3, especially at lateral sides of tube, colored indistinctly from surrounding tissue on interior and exterior surface of adaxial half of lid, colored veins absent from lid margin; **peristome** colored bright yellow-green, agape, distal adaxial extremity independently spouted from and more outrolled than the rest of the peristome, adaxial spout vertically-oriented relative to superior lamina axis; **lids** as wide as long, not wider than orifice, suberect, externally colored copper or bronze, flat, not vaulted, margins invariably entire, lateral lobes not cordate or obscuring abaxial pitcher tube when viewed from the side; **internal Zone 1** hirtellous, sometimes darkly-pigmented; **internal Zone 1-2 transition line** level with pitcher orifice and peristome; **internal Zone 2** waxy, yellow to cream colored, nectareous surfaces absent from abaxial interior but present on lateral adaxial sides, extending to internal Zone 4 and usually indicated by dark pigment or reticulate veins; **internal Zone 3** waxy or covered in minute downward-pointing hairs ~.10 mm L, not corresponding to a narrow segment of uniform tube diameter above the inferior lamina; **internal Zone 4** bearing retrorse hairs; **internal Zone 5** smooth surfaced, without retrorse hairs, sometimes extending to a point proximal to the leaf base suture in both adults and seedlings; **flowers** only sweet-scented as ripe raspberries, 2-6 cm diam.; **scapes** (160-)288(-455) mm L, 1-3 mm basal diam., taller than or equaling height of tallest leaves; **sepals** 10-28 mm L × 11-33 mm W, colored green-maroon, aging to yellow, distal ends bluntly obtuse, sometimes apically pinched, occasionally strongly laterally replicate but usually remaining flat with age, sometimes arched over and ensconcing the capsule; **petals** 18-39 mm L × 7-25 mm W, bright red to nearly black on sun-exposed surfaces, pale on inward-facing surfaces, panduriform, with deep medial constriction, distal lobes always broadly orbiculate and never raised or out-spread; **umbrella style** 13-25 mm radius from stigma to pedicel; **capsules** 8-10 mm diam., 5-10 mm L, globose, never conic; **seeds** 1.3-2.1 mm L, numbering to 650, tan, brown, or purple, obovoid.

Circannual Growth Sequence & Lifespan: blooming in mid-April, producing up to two, usually one scape per apical growth point, pitchers on non-flowering growth points emerging with nearby flowers, petals dehiscence by late April, sepal lateral halves often replicate but not reflexing vertically to expose the capsule after anthesis, capsules dehiscing to shed seed by mid-October; remaining floral parts dead by winter; first pitcher leaf cohort produced from bud-burst to mid-summer,

inferior laminae persistent to winter; phyllodia produced after the first cohort of pitcher leaves; summer hibernaculum absent, occasionally producing 1-2 squamulae between pitcher cohorts; climax cohort of pitcher leaves produced late August to early October; winter hibernaculum produced mid-October, squamulae persistent to late spring; all foliage from previous year senescent by the succeeding spring.

Range: *Sarracenia wherryi* is indigenous to the upper Escatawpa River subdrainage, especially near Vinegar Bend, Tibbie, and Chatom, Alabama. It occurs east of the Escatawpa River drainage in habitat scattered between small tributaries of the Tombigbee River, but does not approach that river nearer than 7 miles. Its range terminates three or so miles into Mississippi on the eastern margin of the Chickasawhay River subdrainage to the west. Its occurrences are most exclusive of other species in the north of its range near Chatom, where plants may get relatively large, tapering southwest to a boundary roughly at the latitude of Vinegar Bend in Alabama and Kurtz State Forest in Mississippi, where plants tend to be smaller. It once formed large, isolated single-species *Sarracenia* stands west of Chatom, and in the dry hills southeast of Tibbie.

Remarks: Juveniles of *Sarracenia wherryi* are always radially rosetted and leaves remain characteristically “L”-shaped at maturity. Developing leaves of juvenile plants and neotenic adults seek ground contact upon emerging from the growth point, with inferior laminae strongly lateral-descendent. Plants growing on ledges may project leaves laterally into space, developing inferior laminae arcing back toward the growth point. *Sarracenia wherryi* hybridizes rampantly in disturbed habitat.

Taxonomic treatment of *Sarracenia chrysea*

The eastern group of the former subspecies *wherryi* is determined to be a separate species:

Sarracenia chrysea Trexler, *spec. nov.* (Fig. 5, Front Cover)

HOLOTYPE: Carson A. Trexler #143 sheet 1 of 2, HPSU [26375]. Collected with Rob Wood. 20th April 2024. Alabama, Baldwin County, Splinter Hill Bog.

Etymology: From Latin *chryseus*, meaning golden, originally from Ancient Greek χρῖσεος, meaning golden cup-like vessels, or being figuratively or literally made of gold. The epithet alludes to the vivid golden-yellow hue of its leaves.

Synonyms:

Sarracenia rubra sensu Macfarlane (1908) (in-part), non Walter, Fl. Carol. 152. 1778.

S. jonesii Wherry, Journ. Wash. Acad. Sci. 19: 385 1929 (in-part, not including the type).

S. rubra subsp. *wherryi* D.E. Schnell, Castanea 43(4): 261 (1978) (in-part, not including the type).

S. alabamensis (Case & Case 2005) subsp. *wherryi* (D.E. Schnell 1978) Case & Case 2005 (in-part, not including the type).

Existing Common Name: “Coppertops”, used by conservationists near the type location.

Proposed New Common Name: “Perdido Sweet Pitcher”, after the Perdido River.

Description: **Plants** forming dense or sparse clumps, or individual rosettes; **rhizomes** (2-)5(-8) mm diam., variable in diameter along length, **squamulae** (8-)11(-14) mm L (longer squamulae have been observed), 4-8 or more apparent in complete hibernacula; **petioles** vertically oriented; **abaxial**



Figure 5. *Sarracenia chrysea* holotype.

unchambered column terete, or very shallowly canaliculate; **independent phyllodia** rare, short, ascending, obfalcate, alae very reduced; **pitcher phyllodia** nearly lacking alae; **pitchers** (7-18(-37) cm L, produced in two cohorts at the beginning and end of the growing season, cohorts dimorphic in respect to different allometric proportions of inferior lamina substructures, leaves within cohorts the same length, climax cohort more voluminous than first cohort, up to 15 pitcher leaves produced per year but variable numbers of pitchers produced per cohort, leaves arrayed radially facing and emerging vertically from apical growthpoints, leaves erect-upright, pitchers of both cohorts often medially lordotically recurved; **first pitcher cohort** phyllodous, borne on erect petioles occupying ~5% full leaf length, pitcher phyllode occupying ~11% leaf length, alae very narrow, occupying ~61% of whole leaf length, tube of inferior lamina narrow, gracile; **climax pitcher cohort** nearly aphyllodous, with broad extremity features, borne on erect petioles occupying ~2% leaf length, pitcher phyllode (if present) not alate and occupying ~3% of leaf length the inferior lamina occupying ~56% of whole leaf length, with a narrow tube but gradually dilating, pitcher chambers engaged to petiole and not penetrating leaf base, inferior lamina erect upright with straight abaxial contour, or occasionally gently decumbent-ascending below the internal Zone 3-4 transition line; **external pitcher tissue** colored bright yellow-green with few dark hues or external markings, superior lamina tissue soft, pliable, somewhat pubescent on tube but waxy on lid exterior, but not soft or pliable on inferior lamina surface; **inferior lamina** narrow, elongated, very gradually tapered; **superior lamina** membranous and barely semitranslucent on fresh and active trapping leaves, occasionally bearing obscure depressed blisters on abaxial tube exterior on climax leaves, these not pale-colored or more semitranslucent than surrounding tissue, in both cohorts prominently inflated distal to internal Zone 2-3 transition to a point immediately proximal to peristome (a “goiter”); **external nectaries** present on adaxial meridian from leaf base to peristome, absent from lid or abaxial interior surface of orifice; **veins** reticulate, never pinstriped, those on internal tissue dark red to black, narrow, prominent mostly on lateral sides of tube and abaxial surface of orifice interior, present on lid interior surface and extending to margins, those on external tissue surface dark-pigmented, narrow, weakly reticulate; **peristome** bright yellow, oriented at a gently dipping angle relative to pitcher axis but not agape, distal adaxial extremity not spouted independently from lateral spans of peristome, not becoming vertically oriented abaxially relative to pitcher axis; **lids** typically longer than wide and wider than orifice, borne atop columns, held horizontal to pitcher axis, externally bright yellow or copper-colored, not flat or medially vaulted, whole lid structure wavy, margins undulate, lateral abaxial lobes cordate and obscuring abaxial lid column when viewed from the side; **internal Zone 1** hirtellous, colored bright yellow; **internal Zone 2** waxy, yellow to cream colored, nectareous surfaces often coinciding with densely reticulate veins, nectareous waxy surface extending proximally along internal adaxial meridian toward internal Zone 3-4 transition line; **internal Zone 3** waxy or bearing minute hairs ~0.1 mm L, corresponding to a narrow pitcher tube segment of uniform diameter above transition point of internal Zones 3 & 4; **internal Zone 4** covered in retrorse hairs; **internal Zone 5** lacking retrorse hairs; **flowers** fragrant, only sweet-scented as ripe raspberries, 4-6.5 cm diam.; **scapes** numbering 1-2 per apical growthpoint, 168-370 mm L, 1-2 mm basal diam., exceeding or equaling height of tallest leaves; **sepals** 10-18 mm W × 14-23 mm L, ovate to elongated lanceolate, usually overlapping proximally, tapering gradually to the apex, distal tips blunted, sometimes pinched just proximal to apex, colored dark red but aging to yellow by June; **petals** 22-33 mm L × 11-16 mm W, of varying shades of red to nearly black, pale on surfaces not exposed to sun, panduriform, distal lobe orbiculate to nearly strap-shaped, medially laterally constricted at overlap with style disc, lateral margins

tightly revolute at medial constriction; **umbrella style** 14-16 mm radius from stigma to pedicel; **capsules** 5-11 mm diam., 7-12 mm L, globose (never conic); **seeds** 1.39-1.83 mm L, numbering 400 or more, tan, brown, or purple-brown, obovoid.

Circannual Growth Sequence & Lifespan: blooming in mid-April, producing one scape per apical growthpoint (rarely two), pitchers on non-flowering growthpoints emerging with nearby flowers, anthesis simultaneous with the opening of the first traps on nearby non-flowering growthpoints, petals dehiscent by late April, sepals not often laterally replicate, rarely reflexing vertically to expose the capsule, capsules starting dehiscence in mid-September; floral parts dead by winter; first pitcher leaf cohort persistent to October; phyllodia produced before the summer hibernaculum; summer hibernaculum produced after first cohort of pitcher leaves, squamulae persistent to winter; climax cohort of pitcher leaves produced September to early October; winter hibernaculum produced mid-October, squamulae persistent to late spring; foliage of previous year dead by succeeding spring.

Range: *Sarracenia chrysea* is best known from the upper Perdido River drainage in Baldwin County, Alabama. It ranges to the eastern two thirds of Escambia County, Alabama, where it is found near minor tributary streams of the Conecuh-Escambia River. From here its range extends just barely into Monroe and Conecuh counties. It is not known to follow the Conecuh-Escambia River into Florida. *Sarracenia chrysea* ranges south along the Perdido River in Baldwin County, Alabama and Escambia County, Florida, along whose banks its range tapers to terminate roughly at the latitude of Barrineau Park. Records and searches have not located *S. chrysea* between the eastern edge of the Perdido River drainage in Florida and the western range extent of *S. rubra* subsp. *gulfensis* in the Blackwater River drainage. East of the Perdido River in Escambia County, Florida, land becomes flat and unfavorable for *S. chrysea*.²

Remarks: Practically all leaf tissue of *S. chrysea* is bright yellow-green, the superior lamina being strikingly membranous and semitranslucent. A consistent neotenic size class has not been observed. While short, rosetted plants with neotenic features are not unusual *per se*, they are outnumbered by erect-upright individuals with typical morphology. *Sarracenia chrysea* may revert to short stature with “L”-shaped leaves if regularly mown or when stressed, plants returning to full size with upright leaves over time or when conditions ameliorate. Like other erect-upright species it occurs with, pitchers of *S. chrysea* die when soil moisture depletes, plants then forming hibernacula and becoming dormant.

Extended diagnosis

Leaves of *Sarracenia wherryi* over 20 cm long often retaining neotenic features (always with fully-developed morphology in *S. chrysea*); superior lamina internal reticulate veins not externally visible, external veins absent (often bearing colored external and internal veins below peristome and above internal Zone 2-3 transition line in *S. chrysea*); having stocky leaves with inferior laminae rapidly tapered (gracile and very gradually tapered in *S. chrysea*); pitcher tube mostly lacking lordotic recurvature (often medially lordotically recurved in *S. chrysea*); pitcher

² Photographs of plants alleged to be *S. rubra* subsp. *gulfensis* in this county resemble *S. alata* (McPherson & Schnell 2011, pp. 556, fig. 389 & 390), native to adjacent Baldwin County, Alabama.

tube inferior laminae deeply L-shaped (erect-upright in *S. chrysea*); leaf bases broad, succulent, remaining smooth on dried specimens (gracile, not succulent, veins becoming hidebound on dry specimens of *S. chrysea*); apetiolate or petioles very short, diameter at distal terminus of petiole in agreement with rest of leaf taper (all leaves petiolate, petioles often very long, upright especially in first cohort leaves, petioles distally articulated from pitcher phyllode or pitcher chamber by abrupt diameter increase in *S. chrysea*); pitcher phyllodes bearing wide alae (typically lacking alae in *S. chrysea*); initiation of pitcher goiter not abrupt and in diameter agreement with rest of tube taper as with petioles (goiter conspicuously delimited by abrupt tube dilation at margins, resembling a blister in *S. chrysea*); internal Zone 3 not distinguishable in diameter from rest of tube (corresponding to a collar-like tube segment of slightly contracted diameter from distal or proximal tube segment in *S. chrysea*, as in *S. alabamensis*); climax pitcher cohort apetiolate with alate inferior lamina and most proximal extent of pitcher chamber often engaged to or proximally initiating within the leaf base (petiolate, not alate, pitcher chambers not engaged to or present within leaf base in *S. chrysea*); peristome gaping with pouting adaxial extremity (angled but not gaping with gentle adaxial dip in *S. chrysea*); pitcher orifice and tube nearly cylindrical or dorsi-ventrally compressed (laterally compressed in *S. chrysea*); lid sessile to/engaged to orifice, column not deeply laterally incised, sub-erect, margins entire, not wavy or undulate, proximal lateral lobes not cordate and not obscuring abaxial lid column from lateral perspective, internal lid tissue sometimes dark-red pigmented, veins not colored differently from surrounding tissue, externally solidly-colored bronze (lids borne atop laterally incised column, held horizontal to pitcher axis over orifice, margins undulate, wavy, proximal lateral lobes cordate and obscuring abaxial lid column, dark pigment absent from lid interior, veins dark pigmented on lid interior, exterior lid color often yellow or bronze, margins often yellow in *S. chrysea*); occasionally producing decumbent independent phyllodia with broad alae (ascending, with reduced alae, rare in *S. chrysea*); not producing a hibernaculum in mid-summer (producing a hibernaculum in mid-summer in *S. chrysea*); holding its leaves and continuing to produce leaves at the onset of and under dry soil conditions (losing leaves and going dormant under dry conditions in *S. chrysea*).

Concise diagnosis

- Not producing summer hibernacula between leaf cohorts, leaf tissue lacking bright hues, superior laminae not semitranslucent, inferior laminae decumbent-ascendent, lids flat and margins entire, petioles not abruptly articulated from distal substructures, climax cohorts apetiolate and pitcher chambers extending into the leaf base. Plant of the lower Coastal Plain pine hills near the upper Escatawpa River subdrainage and east- and west- adjacent drainages..... *Sarracenia wherryi*
- Producing summer hibernacula between leaf cohorts, leaf tissue bright golden-yellow, superior laminae often semitranslucent, inferior laminae erect-upright, whole lids and margins undulate, petioles abruptly articulated from distal substructures, climax cohorts petiolate and pitcher chambers not extending into the leaf base. Plant of the lower Coastal Plain pine hills near the upper Perdido River and neighboring northwestern Conecuh-Escambia River drainages..... *Sarracenia chrysea*

County-level documentation

Sarracenia chrysea

ALABAMA: Baldwin: holotype, 20 Apr. 2024 Carson A. Trexler 143 sheet 1 of 2, with Rob Wood, HPSU [26375], det.! • Conecuh: *vide* Alvin Diamond (pers. comms. 19 Apr. 2024), near minor Conecuh-Escambia River tributary. • Escambia: 18 Aug. 2019 Alvin Diamond 29051, with M. Bailey, TROY [49271], photo! • Monroe: 19 Aug. 2010, Alfred Schotz 2168, TROY [45424]³, photo! • FLORIDA: Escambia: 18 Apr. 1993 M.A. Toole & A.R. Ruhman s.n., UWF [13322], photo!

Sarracenia wherryi

ALABAMA: Washington: holotype, Jul. 1972 Fred, Roberta, & David Case S 573, US [2797749], det.! • MISSISSIPPI: Greene: 28 Apr. 1981 Ken L. Gordon 2445, with J. Burris, MMNS [7590], photo! • Wayne: 8-9 Aug. 1896 Pollard 1231, US [272134], det.!

Sarracenia rubra subsp. *gulfensis*

Determination of Alabama Occurrence

ALABAMA: Covington: 2 Oct. 1992 Steve L. Orzell & Edwin L. Bridges 20979, USF [239959], archived as *Sarracenia rubra* subsp. *wherryi* (Case & Case) Schnell. Here determined as *Sarracenia rubra* subsp. *gulfensis* Schnell [photo!]. Plants in-site determined as *S. rubra* subsp. *gulfensis* by T.L. Mellichamp in Mellichamp (2008) [pp 114], and in notes 1 Sept. 2007 with Stephen Ploszak; these corroborated by C.A. Trexler in-site 13 Apr. 2024 with Al Schotz, and 1 Sept. 2024 with Ron Miller.

Acknowledgements: I am thankful to the landowners who gave me access to their property. I have been warmly received by each of you, and am happy we share an appreciation for the excellent plants that grow on your land. I hope I may continue to visit to learn about these plants and the places they grow.

National Heritage Program (NHP) data and unpublished survey reports were used to locate sites of *Sarracenia wherryi* and *S. chrysea* and to assess range and distribution. These resources also gave insight about other habitat aspects in their native ranges. Unpublished resources containing locality data are not cited here to protect sites, as *S. alabamensis* subsp. *wherryi* is a federally petitioned taxon (USFWS 2011; records follow McDaniel (1971) and index it under *S. rubra* Walter).

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³ *Sarracenia alata* occurs nearby (Monroe County, AL): 9 Jul. 1965 Robert Kral 24438, BRITT [144524], photo!

Deanna Michinski, Jim Miller, Ron Miller, Vivian Negron-Ortiz, George Newman, Tim Nidever, Ren Oliver, Jeremy Rentsch, Barry Rice, Alastair Robinson, Tom Rutter, Rob Sacillotto, Larry Savidés, Phil Sheridan, Dan Stern, Heather Sullivan, Patrick Thompson, Randy Troup, Scott Wiggers, and Rob Wood – thank you all.

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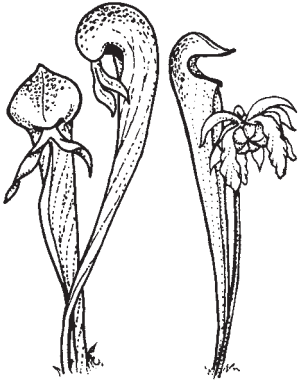
I especially wish to thank Audrey D. Mellichamp for letting me study Larry Mellichamp's reference library for *Sarracenia*, for her good advice, and gracious hospitality.

I will always be indebted to Larry Mellichamp for embarking with me on this quest for *Sarracenia wherryi* four years ago. I hope he would be pleased with this result.

References

- Bell, C.R. 1949. A cytotaxonomic study of the Sarraceniaceae of North America. *Journal of the Elisha Mitchell Scientific Society* 65(1): 137–66, plates 8–14.
- Case, F.W. 2005. Correction to the type citation of *Sarracenia alabamensis* and validation of the name *Sarracenia alabamensis* subsp. *wherryi* (Sarraceniaceae). *SIDA* 21(4): 2169–2170.
- Case, F.W., and Case, R.B. 1975. *Sarracenia alabamensis*, a newly recognized species from central Alabama. *Rhodora* 76(808): 650–665.
- Case, F.W., and Case, R.B. 1976. The *Sarracenia rubra* complex. *Rhodora* 78(814): 270–325.
- de Queiroz, K. 2007. Species concepts and species delimitation. *Systematic Biology* 56(6): 879–886. <https://doi.org/10.1080/10635150701701083>
- Gibson, T.C. 1983. Competition, disturbance, and the carnivorous plant community in the Southeastern United States. Department of Biology, University of Utah.
- Hummer, J. 1986. A common garden experiment reveals two apparent forms of *Sarracenia rubra* subsp. *wherryi*. *Carnivorous Plant Newsletter* 15(1): 3–4. <https://doi.org/10.55360/cpn151.jh830>
- Macfarlane, J.M. 1908. Sarraceniaceae. In: *Das Pflanzenreich IV*.
- Macfarlane, J.M. 1907. On the occurrence of natural hybrids in the genus *Sarracenia*. In: Report of the Third International Conference 1906 on Genetics. Royal Horticultural Society. <https://doi.org/10.5962/bhl.title.118849>
- McDaniel, S.T. 1971. The Genus *Sarracenia* (Sarraceniaceae). *Bull. Tall Timbers Res. Sta.* 9: 1–36.
- McDaniel, S.T. 1986. A final report to the U. S. Fish and Wildlife Service: Taxonomic Study of Three *Sarracenia* Subspecies. Unpublished report. (McDaniel, invoking species concepts, recommends species rank for *S. alabamensis*, *S. jonesii*, and subspecies *wherryi*.)
- McPherson, S., and Schnell, D. 2011. Sarraceniaceae of North America. Redfern Natural History Productions.
- Mellichamp, T.L., and Case, F.W. 2009. *Sarracenia*. In: *Flora of North America Editorial Committee (Flora of North America North of Mexico, Vol. 8)*. Oxford University Press, Oxford, New York.
- Mellichamp, T.L. 2008. New names for natural hybrids in *Sarracenia*. *Carnivorous Plant Newsletter*, 37(4): 112–117. <https://doi.org/10.55360/cpn374.lm492>
- Mellichamp, T.L., and Gardner, R. 1998. New cultivars of *Sarracenia* from North Carolina: *Sarracenia* 'Dixie Lace' and 'Ladies-in-Waiting'. *Carnivorous Plant Newsletter* 27(2): 38–40. <https://doi.org/10.55360/cpn272.lm143>

- Mellichamp, T.L. 1978. Botanist's Corner: Botanical history of CP I: *Sarracenia*. Carnivorous Plant Newsletter 7(2): 56–59. <https://doi.org/10.55360/cpn072.tm942>
- Mettee, M.F., Henderson, W.P., Jr., and Crawford, G.W. 1993. Rivers and Streams of Alabama, Including Mobile Basin Tributaries in Adjacent States (1998 Reprint): Alabama Geological Survey Special Map 241, scale 1:1,000,000. Geological Survey of Alabama, Tuscaloosa, Alabama. [Printed version examined]
- Naczi, R.F.C. 2017. Systematics and evolution of Sarraceniaceae. Oxford 2017 online edition <https://doi.org/10.1093/oso/9780198779841.003.0009> [accessed 18 Jan. 2026]; In: Ellison, A., and Adamec, L. (eds.) Carnivorous Plants: Physiology, ecology, and evolution. Oxford Academic Press, London (print).
- Naczi, R.F., Soper, E.M., Case, F.W., and Case, R.B. 1999. *Sarracenia rosea* (Sarraceniaceae), a new species of pitcher plant from the southeastern United States. SIDA 18(4): 1183–1206.
- Newton, J.G., McCain, J.F., and Turner, J.D. 1975. Water availability of Washington County, Alabama (Open-File Report Nos. 75–746). Geological Survey of Alabama. <https://doi.org/10.3133/ofr75476> [See their figures 1 & 2]
- Osborne, W.E., Szabo, M.W., Copeland, C.W., Jr., and Neathery, T.L. 1989. Geologic Map of Alabama: Alabama Geological Survey Special Map 221, scale 1:500,000.
- Rice, B.A. 2018. The long overdue recognition of *Sarracenia rubra* subsp. *viatorum*. Carnivorous Plant Newsletter 47(4): 152–159. <https://doi.org/10.55360/cpn474.br104>
- Russell, A.M. 1919. The macroscopic and microscopic structure of some hybrid Sarraceniaceae compared with that of their parents. Doctoral thesis. University of Pennsylvania. <https://hdl.handle.net/2027/coo.31924074108436> [Accessed 10 Jan. 2026]
- Schnell, D.E. 1977. Intraspecific variation in *Sarracenia rubra* Walt.: Some observations. Castanea 42(2): 149–170.
- Schnell, D.E. 1978. *Sarracenia rubra* Walter: Intraspecific nomenclatural correction. Castanea 43(4): 260–261.
- Schnell, D.E. 1979. *Sarracenia rubra* Walter ssp. *gulfensis*: A new subspecies. Castanea 44(4): 217–223.
- Thiers, B.M. 2026. Index Herbariorum. The New York Botanical Garden, New York. <http://sweetgum.nybg.org/science/ih> [Continuously updated; accessed 7 November 2025]
- Trexler, C.A. 2026. Longitudinal allometry of inferior lamina substructures in *Sarracenia* (Sarraceniaceae). Carnivorous Plant Newsletter. 55(2): 49–63. <https://doi.org/10.55360/cpn552.ct552>
- United States Department of Agriculture (USDA). Online Web Soil Survey. Undisclosed AOI over Washington County, Alabama, near Tibbie. [including in-program soil profile of “FtD—Fruitdale-Toinette-Rutan complex, 5 to 15 percent slopes”] (n.d.). <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> [Accessed 10 Jan. 2026]
- United States Fish & Wildlife Service (USFWS). 2011. Endangered and threatened wildlife and plants; partial 90-day finding on a petition to list 404 species in the southeastern United States as threatened or endangered with critical habitat. Federal Register 76(187): 59836–59862. <https://www.federalregister.gov/d/2011-24633>
- Wherry, E.T. 1929. Acidity relations of the Sarraceniaceae. Journal of the Washington Academy of Science 19(17): 379–390.
- Wherry, E.T. 1935. Distribution of the North American pitcher plants. In: Walcott, M.V., Wherry, E.T., and Jones, F.M. 1935. Illustrations of North American Pitcherplants. Smithsonian Institution. <https://doi.org/10.5962/bhl.title.69696>
- Wherry, E.T. 1972. Notes on *Sarracenia* subspecies. Castanea 37(2): 146–147.



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Front Cover: *Sarracenia chrysea* in a seepage bog near Rabun in Baldwin County, Alabama. Photo by Carson Trexler, 12 May 2025. Article on page 64.

Back Cover: *Sarracenia wherryi* growing on a crawfish chimney near Chatom, Alabama. The site was destroyed the following year. Photo by Carson Trexler, 11 September 2022. Article on page 64.

Carnivorous Plant Newsletter is dedicated to spreading knowledge and news related to carnivorous plants. Reader contributions are essential for this mission to be successful. Do not hesitate to contact the editors with information about your plants, conservation projects, field trips, or noteworthy events. Views expressed in this publication are those of the authors, not the editorial staff.

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