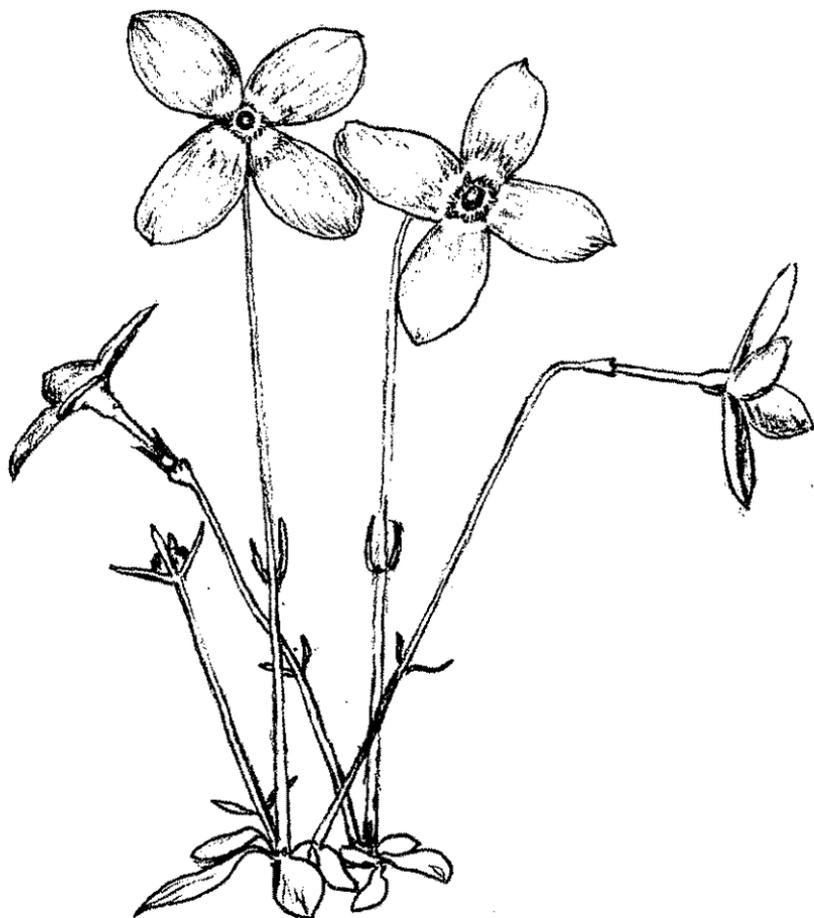


NORTH
CAROLINA

wild flower

PRESERVATION
SOCIETY, INC.



Bluets
Houstonia caerulea

SUMMER 1997
Volume IX, Number I

**NORTH CAROLINA WILD FLOWER
PRESERVATION SOCIETY, INC.
1996-98**

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NEWSLETTER
of
North Carolina Wild Flower Preservation Society

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COVER DRAWING: *Houstonia caerulea* - Bluets
by Craig Moretz

President's Message . . .

Hello fellow members! A number of events and/or issues have arisen since our last Newsletter. On April 19, seven intrepid members braved the unusually cold weather to staff a booth at the Museum Magic festival in Raleigh. Our booth was requested and arranged by fellow member Jan Weems through her work with the Museum of Natural Science. Denny and Marlene Alder, Marlene Kinney, Evelyn Caldwell, Betty Pipes, Jesse Perry, and Benson Kirkman provided educational materials and answered questions about wildflowers for children and adults. They reported the event as being a rewarding one for them.

A motion was made and accepted at our pre-hike board meeting that the Society discuss changing its name. This suggestion received at least tacit approval at the Saturday night business meeting. The suggested name, the N. C. Native Plant Society (dedicated to the preservation and conservation of native plants), becomes shortened and easier to use, yet maintains the emphasis on preservation as a subscript. Using the term "native plant" broadens the scope of the Society to include areas that already are part of our agenda. There is some opposition to changing the name due to historical reasons. Others have suggested shortening the name to the N. C. Wild Flower Society. More information about this proposal will be included in the next newsletter for your consideration. The Society membership may ultimately be asked to vote to change the name or to keep the old name.

The Society has endorsed the Teaming With Wildlife proposal that is currently before the U. S. Legislature. This legislation proposes adding a small fee to the cost of recreational equipment that would be used to support preservation of non-game species. A similar, successful arrangement has been in place for years that uses fees on hunting equipment and hunting license revenues to support conservation of game species. Congress is expected to vote on this issue very soon. Many businesses that sell recreational equipment are in favor of this proposal, but they, and Congress, need to know that people are willing to increase the cost of equipment to meet this goal. If you agree with the proposal, a personal letter to your U.S. Senator and Representative in support of the legislation would help tremendously.

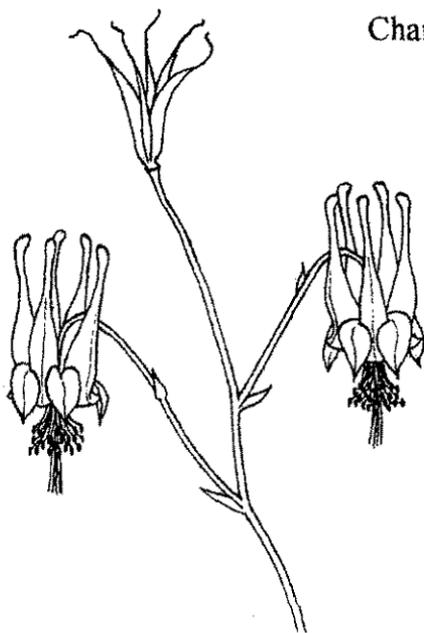
Election time is approaching and I will soon be appointing a nominating committee. The offices of President, Vice President, Recording Secretary, and Corresponding Secretary will be available to interested members. New members for Program, Publicity, Newsletter, and

Conservation committees will also be needed. Three new Trustees and an Historian will be added. Any members who would like to nominate themselves or others should contact me or Eric Hawkins.

Over 40 members of the Society converged on South Mountains State Park to enjoy a great display of wildflowers. Our Saturday night business meeting was concluded with our gala auction, which has become somewhat of a ritual. Many special plants were culled from gardens and were donated by members. Some wonderful plants were donated by nurseries (which received special mention), and the N. C. Botanical Garden. A collection of back issues of the Society Newsletter received the most competitive bidding. Bob Tuggle contributed his considerable talents as auctioneer. Not only was the event fun, but we raised \$750 for the Society. Thanks to all for participating! See you in August!

Charlotte

Charlotte Patterson



NCWFPS 1997 Spring Meeting

At South Mountain State Park

by Mark Pumphrey

The Spring Wild Flower Meeting of the North Carolina Wild Flower Preservation Society was held on April 26-27, 1997 at South Mountain State Park in Burke County. Over thirty members of the Society participated in the two-day event.

Day one was a beautiful Spring day and the weather was perfect for a Wild Flower Walk. The flowers in bloom were at their peak, and in profusion. Scouts Bob Tuggle and Allie Gooding had joined park rangers two weeks prior to the walk to seek and find the best sites for the Society to explore, and Bob returned on the day before the hike to again travel with rangers around the park to scout out potential wild flower "goldmines".

Before the Saturday morning hike began, Ranger Charles Shelton met the group in the main parking lot of the park to give us a mini-briefing on park history, activities, goals, fauna and flora. After a brief summary of the hikes planned for the weekend, we were off on the first leg of the Saturday morning hike, which took us up to campsites 5-8 and then looped back to the picnic area near the main parking lot for lunch.

Among the plethora of plants spotted during the morning hike were white and pink silverbell trees, sweet shrub, pawpaw, giant chickweed, purple violets, horse sugar, Robin's plantain, pussytoes, hawkweed, rose bay rhododendron, striped Jack-in-the-pulpit, crested iris, *Trillium erectum*, showy orchis, golden Alexander, golden ragwort, wild ginger, barren strawberry, gaywings, devil's bit, wild forget-me-not, rue anemone, foam-flower, pennywort, tassel rue, shuttleworthy ginger, yellow star grass, maidenhair fern, wild yam, partridge berry, cinquefoil, dewberry and two star attractions for many in the group: yellow lady's slipper and ginseng.

The afternoon hike, which came after a lunch break and a long, winding drive up one of the dusty mountainside roads near the park to the top of Walker Top Mountain (currently part of the gamelands adjacent to the park proper), began with a site of beauty intermingled with ugliness: a beautiful stand of pink *Trillium catesbaei* growing profusely among a wooded roadside area being used as a dump by either campers or local residents. We cautiously made our way down a very steep hillside through



this wooded area to an old logging road about two-hundred yards below. The soil was so rich that it literally moved down the hillside as we walked. Every effort was made by the group to avoid trampling native plants or disturbing the

soil, which was the richest soil imaginable. The product of this richness was an unbelievable array of many wild flowers, in great number, including the following: Carolina lily, spiderwort, *Trillium catesbaei*, Indian poke (false hellebore), bergamot, blue cohosh, interrupted fern, showy orchis, rock cress, waterleaf, bellwort, nodding mandarin, *Lilium superbum*, Jack-in-the-pulpit, sweet cicely, spicebush, and two more highlights: an amazing array of *Trillium simile* and a canopy of silverbell blossoms below the old forest road.

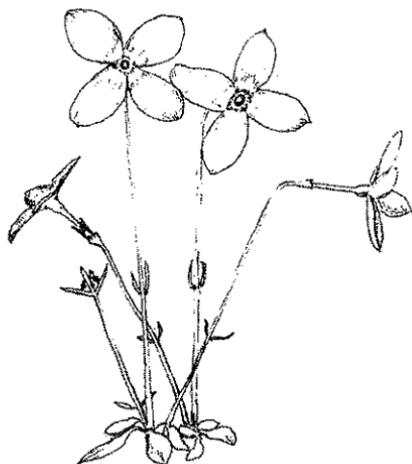
Day two was dampened but not diminished by misting rain, which increased to a minor downpour during our picnic lunch at the same picnic area we had used the day before. The focal point of the morning hike was the waterfall. Along the way, we saw more of the same plants spotted on the Saturday hike, with the noteworthy addition of walking fern. By one o'clock, Society members were loaded up and headed for home. All in all, the weekend was considered one of the best events of the Society to date.

What's In A Yard, Besides 3 Feet?

by Craig Moretz

With progress come improvements? While lawns across the state seem to get greener and more lush as chemical fertilizers, lime and broad leaf "weed" herbicides are applied, North Carolinians as well as our neighbors to the north, south, and west are losing something dear to a dwindling few of us traditionalists. We are losing our "yards" as they become "lawns." To the unwisened, a "yard" is a diverse array of all types of plants, both native and introduced, along with a varied assortment of mosses and lichens. "Lawns" are high maintenance, mono-cultured expanses requiring constant mowing, watering, and weeding - via herbicide application. They are veritable wildlife deserts, unless you consider those brilliant pink flamingos (*Flamingo plasticus*). In contrast, "yards" are virtually maintenance free, requiring only occasional mowing - 'just to knock the weeds down' - and are home to a rich biodiversity of sundry wildlife.

In the mossy open expanses of a "yard", there grows a wonderful tiny jewel with leaves so small that they are hardly noticable at all and individual flowers that are larger than the plant itself. The treasure of which I am refering is *Houstonia caerulea*, more commonly known as Bluets or Quaker Ladies. As the latin name, *caerulea*, suggests, the flowers are beautiful pale blue - thus, Bluets. No southern "yard" is complete without large patches of miniature bouquets of flowering Bluets. *Houstonia caerulea* flowers throughout the early spring and shares its beauty with those few of us who still have "yards."



1997 NC WILDFLOWER OF THE YEAR

Crimson-Eyed Rose Mallow

Hibiscus moscheutos

If you are a frequent visitor to any of North Carolina's many watery habitats, you have probably seen the large white flowers of crimson-eyed rose mallow. You do not have to get down on your hands and knees to appreciate this native perennial - it is a giant among our native wildflowers, a tower of flowers that, from even 100 paces, beckons us to take a closer look.

When mature, this shrubby perennial is 4 to 6 feet tall. Plump, conspicuous flower buds - marvels of architecture and design in their own right - cluster at the tip of each stem and open several at a time. The blooms - the largest of any of our native perennials - are composed of 5 creamy white, translucent petals that overlap to form a funnel and flare at the edges. A garnet eye rings the flower's center, from which rises a pure white column with feathery anthers surrounding the stigma.

At the North Carolina Botanical Garden, crimson-eyed rose mallow usually blooms for 3 to 4 weeks beginning in early July. To attract both hummingbirds and butterflies to your garden, plant crimson-eyed rose mallow - a favorite of hummingbirds - next to Joe-pye weed - a choice plant of butterflies.

Crimson-eyed rose mallow, found in damp or wet sunny sites in the wild, thrives in similar conditions in the home landscape. At the North Carolina Botanical Garden, it is happy in the average growing conditions of our perennial borders.

The Wildflower of the Year Project is co-sponsored by the North Carolina Botanical Garden & The Garden Club of North Carolina, Inc. In its 16th year, the Project's aim is to actively promote an attractive North Carolina wildflower throughout the state and region.

For more information or crimson-eyed rose mallow seeds for special projects, send your request with a self-addressed, business-size, stamped envelope to:

1997 NC Wildflower of the Year
North Carolina Botanical Garden
University of North Carolina at Chapel Hill
CB 3375 Totten Center
Chapel Hill NC 27599-3375

Parasitic Flowering Plants

by James W., Hardin
Emeritus Prof. of Botany, NCSU

The interesting little article in the Winter 1996 issue of *Wild flower* by Craig Moretz on "Ghostpipes" introduces a rather confusing concept found in most old and even some new literature. Craig indicated that ghostpipes/indianpipes were "saprophytic" when they are most realistically considered to be "holo-mycoparasitic." Of course one can argue about the definitions of "saprophytic" and "parasitic" and also about the role of mycorrhizae, but true saprophytes, such as bacteria and fungi, obtain nutrients by external digestion of non-living organic material. Parasites, in the broad sense, derive nutrients from a living host. Direct parasites have a modified root system (haustoria) which are attached directly to the host. In contrast, mycoparasites are actually parasitic on a green plant but by way of a fungal (mycorrhizal) bridge between its roots and the roots of a green host. Following these definitions, there are no true saprophytic flowering plants!

Parasitism in flowering plants is quite a diverse mode of existence that has arisen independently in a number of unrelated families (eight in North Carolina mentioned below). It also represents various types of adaptations as shown in this outline. Only a few examples are given here.

I. **Aerial parasites** - attached directly to aerial stems by modified roots (haustoria)

A. **Hemi-parasitic** - green and partly photosynthetic
(Ex.: eastern mistletoe of Viscaceae)

B. **Holo-parasitic** - non-green, not photo-synthetic
(Ex.: dwarf mistletoe of Viscaceae; dodder or love-vine of Cuscutaceae)

II. **Root parasites** - attached to roots below ground surface

A. **Mycoparasites** - attached indirectly to the roots of a green plant by means of a fungal (mycorrhizal) bridge

1. **Hemi-mycoparasitic** - green and partly photosynthetic
(Ex.: spotted wintergreen and pipsissewa of Pyrolaceae)

2. **Holo-mycoparasitic** - non-green, not photosynthetic
(Ex.: indianpipes and pinesaps of Monotropaceae; crested coral-root and coral-root of Orchidaceae)

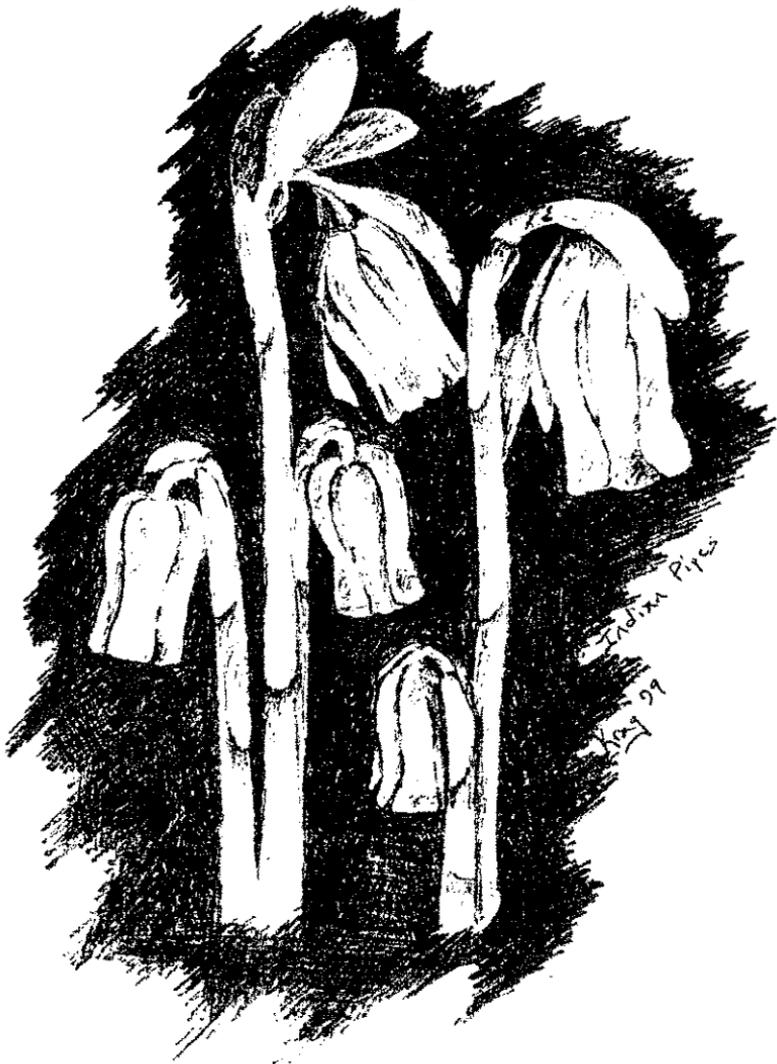
B. **Direct root parasites** - attached directly to host roots by haustoria

1. **Hemi-parasitic** - green and partly photosynthetic

(Ex.: gerardia, lousewort, and witchweed of Scrophulariaceae;
buffalo-nut, bastard toadflax, and piratebush of Santalaceae)

2. **Holo-parasitic** - non-green, not photosynthetic

(Ex.: beechdrops, broomrape, squawroot, and cancer-root of
Drobanchaceae.)



A YEAR WITH THE BLUES

by Craig Moretz

Have you got the Blues? Some of our best native wildflowers are Blue! From earliest spring till late autumn the wilds abound with blue flowers in every conceivable size and shape. Here are just a few.

As winter fades and bright sunny days chase grey clouds away, fields, roadsides, and yards are blanketed with the baby blue flowers of speedwell (*Veronica persica*). Each flower is only 1/4 inch in diameter. Yet, produced by the thousands, create veritable carpets of blue. Often overlooked or just taken for granted, speedwell can rival, on a miniature scale, any planted winter-flowering annual in the horticulture trade. Perhaps its short-lived flowering season accounts for its low value to horticulturists. However, the best part of growing many of our wildflowers is the short-lived nature of their blooms. This makes their enjoyment all the more special. It forces us wildflower enthusiasts "to stop and take time to smell the roses!"

Another short-lived blue treasure also arrives with the early days of spring. Bluebells (*Mertensia virginica*) heralds in spring with splendid, boudy displays of cheerful blue flowers. Tipped with hanging clusters of blue "bells", hence the common name, the arching stems of *Mertensia virginica* rise to greet the spring. While more common to our north and west, Bluebells are uncommon to rare in North Carolina growing in only three counties. Although native populations are rare, the plants can be locally abundant. One location in central North Carolina is home to thousands of Bluebells creating a virtual ocean of blue upon the woodland floor. A wonderful natural garden indeed.

As April comes to an end, the rolling sandhills of NC really get the blues. The pine woods, in some areas, become carpeted with the sky blue flowers of *Lupinus diffusus*. This species of lupine has leaves that are covered with silvery white hairs, giving the leaves a pale grey-green color. The plants are low-growing and with age, one plant can form a mat 3-4 feet across. Flower racemes rise to ~ 18 inches high and are covered with myriads of intense sky-blue flowers. When in flower *en masse*, areas as large as an acre can become a scene not soon to be forgotten, as a sea of blue spreads beneath the deep, rich greens of the pines towering overhead. Without doubt this drama which unfolds each year in our sandhills, ranks high on the list of natural wonders. When Chicken Little said, "the sky is falling," she must have been standing in just such a natural garden, amongst breeze-tossed waves of blue.



From its first year as a flowering adult to grand, old age as a woodland matriarch, Amsonias of all denominations rank tops among our blue wildlings. As young adults one or two stems rise to bear forth brilliant clusters of many star-shaped, blue flowers. Each passing year yields more and more flowering stems until a true specimen plant several feet across is draped in glorious blue. In addition to having blue flowers, *Amsonia* species with their many leaf shapes and textures turn brilliant yellow in autumn and make excellent foliage plants.

What's in a name? Well in the case of Great Blue Lobelia the name says it all. *Lobelia siphilitica*, perhaps better known as Great Blue Lobelia, like the name says, has fantastic deep blue flowers which are borne in late summer. Reaching its greatest potential along streams and in meadows in our mountain counties, flower spikes of *Lobelia siphilitica* tower above the surrounding vegetation. Individual flowers sparkle like deepest blue sapphires, beckoning lazy bumblebees to come have a sip of nectar and ensure the creation of future generations of these brilliant blue masterpieces.

These represent only a few of our Blue natives. There are many others awaiting discovery out in the wilds about you!

PAWPAW TREES HAVE A RICH HISTORY

by Dave Owen

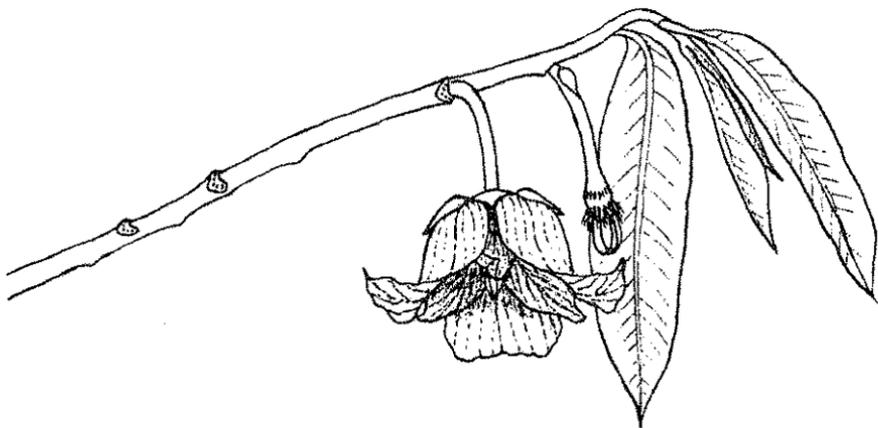
Around the first of April a very unusual flower blooms in the midst of our riverine forest flood plains that few have noticed. It belongs to the almost legendary pawpaw tree. I say legendary, because as a child I only knew of its existence through the children's song "Pickin' up pawpaws, put 'em in your pockets, way down yonder in tha pawpaw patch." What this fruit looked like, or why it was even gathered, I had no idea. I even wondered if the song had some disturbingly suggestive meaning that older friends knew about, but that I in my innocence, hadn't figured out yet!

But the pawpaw has become a new friend of mine in the past eight years as I have explored our local piedmont rivers and contemplated their meaning to me. Its favorite habitat is the shady forest understory in rich, moist soils of river margins. It most frequently occurs in the piedmont and less commonly in the mountains and coastal plain of North Carolina. It reaches its most luxuriant form along the Mississippi river and its tributaries where a "patch" of pawpaw may extend for dozens of acres.

American Indians gathered both wild and cultivated pawpaw, selecting them for the yellowest, creamy fruit. But because the pawpaw did not develop a reputation for medicinal properties, its fascination among Europeans coming to the new world was limited. The Spanish explorer Desoto first mentions it in his chronicals in 1541 as he moved up the Mississippi valley. The sweet fruit was of significant consequence to conquistadors who were always on the edge of starvation.

Desoto may be responsible for the name pawpaw, the fruit looking very similar to the papaya that he and his troops had just experienced in tropical America. But the Ararwakan Indian word "papaya" denotes a fruit that is in no way related to what became known as the North American pawpaw and which was later given the Latin name of *Asimina triloba*.

The pawpaw is the northernmost member of a group of mostly tropical plants known as Annonaceae, with more than 2,000 species known throughout the world. Other related fruits from this family are quite popular in tropical America: the custard apple, the sugar apple and the soursop. As one moves south into Florida, the related and slightly aromatic pond apple replaces the pawpaw in the flood plain habitat.



The pawpaw tree grows to a maximum height of 35 feet and may be as much as a foot in diameter. It is stoloniferous, forming colonies branching underground that produce plants identical to the parent. The trunk is usually slender and opens up into a dense, rounded top.

Pale green flowers appear around the first of April and soon turn a unique maroon, sometimes before its leaves appear or concurrent with them. The two inch bisexual flower has two sets of three petals, inspiring its Latin name *triloba*.

The aromatic pawpaw is the largest native fruit in North America and everything about it is odd and unforgettable. It comes in pear-shaped, oblong form, 3 to 5 inches long as a single fruit or in clusters. The skin is light green, later turning yellow. The flesh can be white to yellow in color, the yellower the tastier. Hidden in the sweet pulp are several shiny, dark brown, flattened seeds. They contain an alkaloid that is said to have a stupefying effect on the brains of animals. Could this be why the opossum never makes it across the road?

The wild fruit is very perishable and therefore hard to transport to market, so it is usually sold only locally. It should be gathered while still green and allowed to ripen beyond the yellow stage to an almost unappetizing black. If it is eaten at the time of picking, it should be only after the first frost, as is the case with our native persimmon. Occasionally a picker may develop dermatitis from handling the fruit. But the pulp is rich, nutritious and very filling. It is high in unsaturated fats, vitamins A & C, proteins, carbohydrates, potassium, phosphorus, sulfur and very high in amino acids.

Besides the pawpaws reputation as a delicious edible fruit, I did find reference to its use in colonial times in making an alcoholic beverage. The fibrous bark of this river tree was known to make an excellent fish stringer. Native Americans wove a cloth from the bark.

After Desoto, history ignored the pawpaw for nearly two centuries until the English artist and naturalist, Mark Catesby, described it in his work entitled "The natural history of Carolina, Florida, and the Bahama Islands." I found a copy of this magnificent piece of art and writing in the Durham Public Library that local river enthusiast George Pyne had donated in memory of his wife Mary after her recent passing.

Catesby's colleague, a Mr. Collinson, wrote in 1738 to the explorer John Bartram, who was in the south at the time on an expedition, and requested a sample of the pawpaw fruit for Catesby. He said that Catesby would "thank thee very kindly for the fruit; and come they either dry, or in spirits, they will lose their colour; so pray describe it as well as thee can, that he may be qualified to paint it." Collinson followed this with a report to Bartram in 1739, that the "jar with the pawpaws came safe, and my friend Catesby thanks very much." Mark Catesby described the fleshy fragrant fruit as "light yellow, smoothe, resembling a ram's scrotum."

If the description by this English gentleman hasn't unsettled your stomach yet, try just one more report. I have learned that the pawpaw is finally being grown commercially in California and that a hardier variety may be developed that could make the pawpaw the number one fruit found in the American supermarket. Here is how it works.

Only recently have botanists realized that the pawpaw tree was pollinated primarily by various species of carrion flies. If these insects are not around, the plant will not produce fruit. To solve this problem, commercial growers have gone to slaughterhouses and brought the entrails of animals and strung them over the tops of their pawpaw trees. The stench draws the carrion flies who then pollinate the flowers. Fruit is subsequently borne in copious quantities.

The North American pawpaw has great commercial potential if the problem of the pollination of its flowers and the perishable nature of the fruit can be worked out. In the meantime, if you are lucky enough to come across the fruit in the Triangle area in the early fall, here is a recipe that I chose from the "Naturalist's Guide to Cooking with Wild Plants," by Connie and Arnold Crochmal.

Pawpaw Ice Cream

2 cups sliced pawpaw
2/3 cup sweetened condensed milk
1 Tbsp lemon juice
1 cup heavy cream

Blend the pawpaw in a blender until smooth. Add the condensed milk and lemon juice, and blend until smooth. Whip the cream until stiff, and fold into the blended mixture. Pour into a freezer tray, and freeze until firm, about three hours. 4 servings.

If you live next to a shady creek or floodplain, you may want to consider starting your own pawpaw patch. You can obtain help from the experts by writing to the Pawpaw Foundation, P O Box 23467, Washington, DC 20026. But if you find that the carrion flies are not around in suitable numbers, you may want to talk the matter over with your neighbors before taking more serious action.

*Dave Owen is a Durham native and resident field naturalist at West Point on the Eno Park. His column, **River Dave's Journal**, appears the first Wednesday of the month on **Hometown**, in **The Herald-Sun** (Durham, NC).*

The Zebra and the Pawpaw

by Ken Bridle

Native plants are interesting for lots of reasons, not the least of which is how they are interrelated with the other plants and animals that make up the subtitle ecology of our world. It is the many levels of interconnectedness that make native plants a joy to study and a pleasure to have in our gardens and in the habitats around us.

The native pawpaws, *Asimina triloba* and *A. parviflora*, are fascinating plants to naturalists and gardeners as well as being important to wildlife. They are representatives of a largely tropical family of plants. They are stout, irregularly branched, deciduous shrubs with large, thick, leathery dark green leaves. These tropical family plants make their home in the temperate woods of the southeastern states along rich alluvial bottom lands and other sheltered wet areas. Growing as small trees and shrubs they most often occur in small colonies. Notable in the winter by their leaf buds which resemble a fine point camel-hair paint brush. Early in the spring they produce distinctive bell-shaped flowers before the expansion of the leaves. The dark green, lush foliage of the plant is very suggestive of its tropical affiliation. While growing as a Subcanopy tree in the woods pawpaws have a sparse and open branching pattern. When growing in full sun the plant is a dense, thick, cone-shaped canopy of dark leaves. Late in the summer the odd looking fleshy fruit ripens in a matter of a few days. In the autumn the leaves turn bright yellow prior to falling.

Many forms of wildlife can be found associated with pawpaws. The spring flowers are frequented by spiders, bees and flies. The summer foliage offers refuge and concealment to many animals. And the fruit, while of dubious attraction to humans, is quickly used by many animals. The most notable form of wildlife that relies on pawpaws is the Zebra Swallowtail butterfly, *Eurytides marcellus*. This is one of our most distinctive butterflies. The wings are sharply striped with black and white bands, and accented with red and blue dots on the hind wing, just adjacent to the very long tails. This butterfly, like most others, has several breeding cycles each season, resulting in at least three broods. Unlike most other butterflies the broods of the Zebra Swallowtail are recognizable as the size of the butterfly gets larger, the tails get longer and the coloration becomes darker during the season.

The Zebra Swallowtail is only known to lay eggs on members of the genus *Asimina*, which in the southeast includes about seven species commonly known as pawpaw. The pale green larva (caterpillar) is marked

with rows of tiny black dots and narrow bands of yellow and blue along the main part of the body. Near the head, wider bands of black, yellow and blue are found. The larvae eat only the leaves of the pawpaw and can be found resting under the leaves or near the base of the plant.

This butterfly does not adapt well to urban development and appears to need mature forests for breeding. However, if some of the larval food plants are provided in yards near natural stands of pawpaw, the female butterfly will readily use the garden plants to deposit eggs. These butterflies are known not to travel far and seem to remain in the area of the earlier stages of their life cycle. The adult butterflies fly low to the ground and are often caught in spider webs. The adults of both sexes use the underside of the pawpaw leaves as night roosts and as shelter from inclement weather.

A good population of Zebra Swallowtails is an indicator of a healthy forest nearby, I hope you all have them where you live.

CALENDAR OF EVENTS

- | | |
|------------|---|
| August 2-3 | NCWFPS 1997 Fall Meeting at Mount Pisgah,
Buncombe County, NC |
| May 23-24 | NCWFPS 1998 Spring Meeting at Merchants
Millpond, Gates County, NC |
| August 1-2 | NCWFPS 1998 Fall Meeting on North
Carolina's southeastern Coastal Plain.
Orchids!!! |

WE HAVE LOST A VERY FINE FRIEND

by Ken Moore

The end of 1996 was filled with sadness by the news of the untimely death on December 21 of Dr. J.C. Raulston, Director of the North Carolina State University Arboretum. Known to most of us simply as "J.C.," this generous-hearted and energetic man accomplished more in his 56 years than most would manage in several lifetimes.

Allen Lacy's description of J.C. as "...the linchpin of American horticulture in the late twentieth century" accurately characterizes one who brought into cultivation more new plants than anyone else this century. Remembering him, folks most frequently use the word *legendary*. How appropriate. He seemed tireless as he constantly pursued the many activities that have contributed to his legendary status. To offer a very abbreviated list, J.C. will be remembered for:

Distributing thousands of cuttings and rooted plants to nursery people, public gardens and home gardeners.

Educating professionals and the public alike by traveling thousands of miles in any given month to present lectures to nursery associations and botanical, horticultural and landscape professional gatherings and garden symposia throughout the nation.

Teaching and inspiring hundreds of undergraduate and graduate students each year, utilizing the NCSU Arboretum--through his diligence now recognized as a world-class horticultural gem of plants and design ideas--as an outdoor classroom.

Graciously opening his spacious home (converted from an old warehouse) to lodge many out-of-town horticultural visitors, provide meeting place for Arboretum public gatherings, and encourage his students with his famous banana split parties. Gatherings often included another of J.C.'s round-the-world slide programs of plants and gardens, inspiring all with more ideas on how to "plan and plant for a better world" (his motto).

J.C.'s gifts go way beyond the world of plants and gardens. He is perhaps most legendary for his unselfish sharing of a total enthusiasm for life -- books, movies, art exhibits, and wildly wonderful "junk" food. He was always ready to listen to anyone, long-time friend or new acquaintance,

sharing both joys and sadnesses. He gave without expecting anything in return.

NCBG staff remember J.C. as an enthusiastic presenter of programs on many topics to our members. Two favorites were "J.C.'s Nifty Fifty Landscape Plants," and that wonderful slide-lecture romp around the world illustrating every conceivable garden adornment, from tacky (to the uninformed) gazing globes in German gardens to a South Dakota fence row of artificial birds and pasture of artificial farm animals.

We also remember J.C. for his immediate responses to all kinds of "how-to" and "where-is" horticultural questions; for sending newspaper clippings from another part of the world that would interest our staff; and for his sudden appearances from around the corner to point out something wonderful in our own Garden that he had just photographed.

J.C., known for his many introductions of exotic plants from all over the world, was just as enthusiastic about our own native plants. He sang the praises of such common natives as the winged elm. During a field trip to North Carolina's coastal plain last year, I remember vividly how animated J.C. became at seeing a sandhill covered by the emerald green grass stage of long leaf pine, and how eagerly he photographed, along one short section of unpaved road, many different, potentially superior forms of our common wax myrtle.

Part of the wonderful irony of J.C., world traveller and introducer of exotics, was that he typically returned us to the treasures of our own homeground. In *The Year in Trees*, co-authored with colleague Kim Tripp in 1994, J.C. praised our native white oak: "It is a revealing commentary on our modern perspective that we rarely plant or preserve large trees with an eye toward the landscapes of our children. White oak . . . is a living reminder of the reverence for landscapes, both of the past and the future, that we will need if we are to keep our living spaces as gardens for today and tomorrow."

Yes, we have lost a very fine friend, but he has left us a legacy and a challenge to put into practice just a few of the many thoughtful and kind actions so typical of our friend, J.C.

We extend our good wishes to the fine staff and volunteers carrying on the NCSU Arboretum. We suggest that it is fitting to support their efforts with gifts honoring J.C. Please make checks payable to: NCSU Agriculture Foundation, Campus Box 7645, NC State University, Raleigh, NC 27695-7645. On check's memo line please write "for the Arboretum Education Center in memory of J.C. Raulston."

We miss you, J.C., as we all try to "plan and plant for a better world."

**NORTH CAROLINA WILD FLOWER PRESERVATION SOCIETY
Board Meeting April 6, 1997**

Submitted by Ken Bridle

In Attendance at Emily Allen's Garden: Alvera Henley, Jean and Pearson Stewart, Charlotte Patterson, Bob Tuggle, Eric Hawkins, Nancy Julian, Wayne Irvin, Emily Allen, Craig Moretz and Ken Bridle

1. The minutes from the last meeting were approved.
2. A brief discussion of the Treasurer's Report, no action taken.
3. An update of the plans for the upcoming South Mountain State Park outing. I will call the Foothills Land Conservancy about having someone who knows the Rollins tract with our group. I will try to get them to contact Eric.
4. The next Board Meeting was scheduled for June 28, 1997 at NCBG.
5. Alice has gone to the BG and inventoried our archives, a list of the contents is being prepared, the milestones achieved. Like the time that Emily and Jean pioneered the new field fashion of long pants for women. The exact time of this event was placed between the time when this was uncommon and prior to it becoming common.
7. Our system of mailing continues to improve as we learn more about the pros and cons of bulk mail, some details remain to be worked out. We mail out about 340 newsletters at a cost of \$0.78 each. Due to the length of time that bulk mail can take to reach some of the out of state addresses, we are now mailing these first class.
8. Discussion of our mailing and archives brought up some areas of our relationship with the NC Botanical Garden which need to be clarified and published so that new NCWFPS officers and members and NCBG staff will understand the interrelatedness of our organizations.
9. We continue to work on an update of our brochure, with more inclusive and welcoming text and photos. Any suggestions or comments should be forwarded to Charlotte.
10. In relation to the image of the group, a consideration of a new name was discussed. It is felt that the current name is confusing, cumbersome and might not reflect the interests of our group, or prospective new members. It was recommended that serious thought be given to this and suggestions should be given at the next meeting.
11. Future outings include the Pisgah Inn - Fall 97, Merchants Millpond - Spring 98, other outings have yet to be determined. If we can finalize some of these dates and places we can publicize in a wide range of publications.
12. Our next board meeting will be Friday, before the South Mountains Outing.

NORTH CAROLINA WILD FLOWER PRESERVATION SOCIETY
Informal Board Meeting April 25, 1997.

Submitted by Ken Bridle

In Attendance: Jenny Kraus, Wayne Irvin, Ken Moore, Alice Zawadski, Evelyn Caldwell, Charlotte Patterson, Bob Tuggle, Eric Hawkins, Harry Phillips, Emily Allen and Ken Bridle.

1. Discussion of photographs needed for the new brochure, Wayne is prepared to photograph the outing tomorrow. Any other good photos of people enjoying wildflowers are welcome. Please send them to Charlotte. Also the logistics of the layout, design and printing of the new document were discussed. It was suggested by Harry that we hire a professional to do the job, however, since Jane Schrail has already volunteered and started the initial redesign, we will continue with her. The potential benefits of hiring professionals for this type of job were noted and this will be considered in the future.

2. Discussion of the Fall Meeting in the mountains, the NCWFPS has reserved a block of rooms at the Pisgah Inn, members will have to pay \$77 deposit to Nancy to claim a room. There is also a nearby Hampton Inn we can use as overflow. Charlotte has taken charge of the menu for the meal. We do not have a speaker for the program yet, Dick Bir (NCCES native woody plant specialist at Fletcher NC) and Ruby Harbison (?) Bluff Mountain naturalist were suggested as possible candidates.

3. A discussion of the need for an organizational name change also occurred. Several potential names were suggested, mostly based on native plant themes ie. The North Carolina Native Plant Society. A motion was made by Wayne and seconded by Bob to present the idea to the members at the dinner after the South Mountain State Park outing and study the implications of this change, (change or amend the charter...?) the motion passed.

4. We also talked about how to get the word out to the public about the society and its activities.

A Note From The Editor

We are very fortunate to have such a wonderful diversity of people who comprise our society. It is that same diversity that makes our society and this, our, Newsletter premier among other societies across the nation. Upon taking on the responsibility as your Newsletter editor, a personal goal was to carry on the tradition of excellence established by my predecessors, Mrs. Linda Lamm and Mrs. Jane Welshmer. In an effort to do that, I ask for your help. Each one of us has something to contribute to the benefit of all. Your contributions to this Newsletter are welcome and most appreciated and are invaluable assets that make the NC Wild Flower Preservation Society the great society that it is. Whether it's art, poetry, recipes, helpful tips, or articles, our Newsletter needs you! Too many times when I have asked people to write something for the Newsletter they will say, "Oh, I can't write.", or "Nobody will want to read about how I grow so and so." Well please be informed that some of the best articles that you have read in our Newsletter were written by mere mortals just like you!

Many thanks to all, for your suggestions, advice, patience, and understanding. And a Very special thank you goes to Eric Hawkins, whose artistic talents have brought simple text to life in the last several Newsletters!



NORTH CAROLINA WILD FLOWER PRESERVATION SOCIETY, INC.
Aims & Objectives

The North Carolina Wild Flower Preservation Society was formed in 1951 by a group of individuals appreciative of native plants throughout the state and region. The purpose of the Society is to promote enjoyment and conservation of native plants and their habitats through education, protection, and propagation.

Spring and Fall meetings are held at "natural gardens" across the state. Members exchange seeds and propagated plants at these meetings. Other excursions are organized on a local basis throughout the year.

The Society Newsletter is issued twice a year with articles and illustrations by professional and amateur contributors.

The Society publishes the "N.C. Native Plant Propagation Handbook."

The Shinn Scholarship/Grant Fund sponsors research on native plants by undergraduate and graduate students. The fund is supported by member contributions and by gifts and memorials. Applications are made to the Scholarship/Grant Fund Committee for awards in May of each year.

The Society is a nonprofit organization under North Carolina and Internal Revenue Service regulations. Donations are tax deductible.

Correspondence concerning the Society and its programs should be addressed to: North Carolina Wild Flower Preservation Society, Inc., c/o North Carolina Botanical Garden, Totten Center 3375, UNC-CH, Chapel Hill, NC 27599-3375.

MEMBERSHIP APPLICATION

ANNUAL DUES:
Individual or Family: \$15.00
Sustaining: \$25.00
Lifetime Membership: \$180.00

Scholarship Fund Donation: _____

Name _____

Address _____

City _____

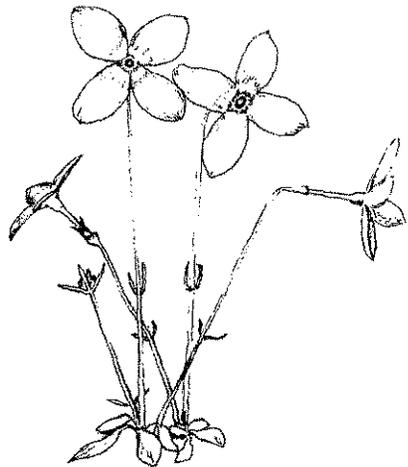
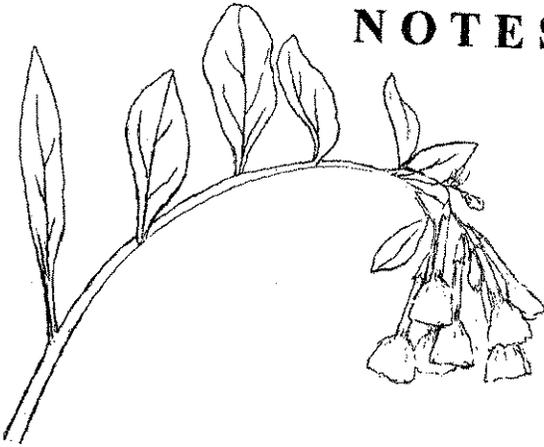
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*Please send this and all address
corrections to:
North Carolina Wild Flower
Preservation Society, Inc.
Ms. Nancy C. Julian
1933 Gaston Street
Winston-Salem, NC 27103-3733*

*Please include your added four
digit zip number for your address
in your dues payment.*

New Renewal

NOTES



NCWFPS PAST PRESIDENTS

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Mr. J.A. Warren	1952-54
Mrs. Paul Spencer	1954-56
Mr. Lionel Melvin	1956-58
Mrs. Carl Pegg	1958-60
Mr. Walter Braxton	1960-62
Mr. Gordon Butler	1962-66
Dr. H. Roland Totten	1966-68
Dr. Herbert Hechenbleikner	1968-70
Dr. Marjorie Newell	1970-72
Mr. Thomas Shinn	1972-74
Mrs. Pearson Stewart	1974-76
Mr. Ken Moore	1976-78
Mrs. O.G. Allen	1978-82
Mr. Tom Howard	1982-84
Dr. Ray Noggle	1984-88
Dr. Benson Kirkman	1988-94
Mr. Bob Tuggle	1994-96

The above are permanent advisors and members of the board of directors.

NCWFPS NEWSLETTER

Newsletter Editor.....	Craig Moretz
Editorial Staff	Eric Hawkins Harry Phillips
Editors Emeritus.....	Jane Welshmer
Past Newsletter Editors.....	Linda Lamm

