NORTH CAROLINA wild flower PRESERVATION SOCIETY, INC.

SPRING 1978
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ILLUSTRATIONS

Wild Geranium on front cover by Georgia Chapple of Wilson, N.C. All other illustrations are by Dot Wilbur.
WILD FLOWER CONSERVATION - DO WE REALLY CARE?

Interest in growing wild flowers and woody natives is still increasing. Reports from the northeast indicate that significant attention is being directed toward recommending use of natives in large landscaping projects as well as the individual wild flower garden. Popularity such as this means more demand for many natives which already are decreasing and disappearing from our fields and woodlands. Exploitation by commercial interests and individual amateur collectors has increased. Shall we view the situation with active concern or shall we make a continued effort to place wild flower conservation high in the consciousness of ourselves and the uniformed general public? Few people realize that many native plants available for purchase are taken from our natural areas.

For you who feel a genuine concern, the following are a few suggestions for positive action:

- develop a "conservation consciousness" regarding collecting of native plants; if the plant is not scheduled for destruction, don't dig it,
- don't cultivate wild flowers that can't be propagated by yourself or obtained from a friend or nurseryman who has successfully propagated the species desired,
-active participation in the Wild Flower Society seed exchange,
-form your own local native plant group and organize plant rescue trips for other interested gardeners in your area. We are missing frequent opportunities to gather fine native plants in great quantities,
-popularize weeds such as the moth mullein discussed in this issue. Judiciously placed common natives are as beautiful and longer lasting than the more sought after and usually unsuccessful wild collected orchids and lilies.

You can make an impact by educating others through your garden clubs, local newspaper garden and nature column and your personal daily contacts. We have a responsibility to develop a "conservation consciousness" in everyone and that responsibility begins with our own actions as examples.

Ken Moore
President
SPRINGTIME SERENADE!

I walked in the woods today
   And chanced upon a parade.
Nature's springtime heralds
   Were staging a serenade!

Fern fronds unfurled their banners
   Along the woodland path,
While Columbines waved their trumpets
   Saluting as I passed.

Jack stood in his pulpit
   Preaching a sermon without words,
And Heavenly voices of songbirds
   All around me could be heard.

Fairy bells danced gaily,
   Nodding their yellow heads,
As delicate, showy orchis
   Peeped shyly from earth's bed.

Red trillium blossomed rampant
   Around a babbling brook;
Enhanced by beds of violets
   In every shady nook.

Trout lilies and mosses
   Formed a carpet soft and green
For Hepaticae, Bloodroot, Anemone -
   Oh, what a lovely scene!

4
The parade was captivating;
Imagination knew no bounds
As russet jugs of ginger
Were glimpsed upon the ground.

The Dutchmen missed the party,
For as I left the scene
I saw their laundered breeches
On boughs of lacy green.

—Mary Norman

(Written in April 1975 following a walk in the woods)

* * * * *

"In Wildness Is the Preservation of the World"

—Henry David Thoreau

* * * * *

THE WILD GERANIUM  
(Geranium maculatum)  
by  
Patricia F. Ross  

I first saw the wild geranium on a lovely April day. Sunlight filtered through the canopy of trees and highlighted the graceful, lavender blossoms. I remember how excited we were to find it growing on the same sheltered hillside with foamflower, windflower, May apple, Iris cristata, Christmas fern and false solomon's seal. We had indeed discovered a treasure cove in this eastern piedmont section of our State. The hillside was abundantly brightened by the wild geranium, its loose clusters of single flowers, about an inch across, held high by hairy slender stems. Its soft green deeply lobed foliage added to the beauty of this perennial wild flower.

The wild geranium, which is not related to our cultivated variety, gets both its popular and scientific names from the beak-like appearance of its fruit. Geranium is derived from the Greek word for crane or heron and maculatum refers to the somewhat blotched or spotted appearance of the older leaves. The plant is sometimes called spotted cranesbill or crane's bill or spotted geranium.

The most unusual seed capsule, which is slender and pointed like a crane's bill, has an interesting way of dispersing its seeds. As the capsule ripens, its sections split in such
a way that they eject the seeds out from the parent plant. The Macmillan Wild Flower Book describes the recoiling segments of the ripened capsule as working like "released watch springs."

Because the pods ripen almost overnight and disperse their seeds suddenly, the seeds are difficult to collect, but this wild flower seeds itself freely in a wide variety of conditions. If you do find seeds, they may be sown in early spring or late fall, or the plant may be propagated by dividing clumps in spring or fall, leaving several plump eyes on each division. Plant about one inch deep with the eyes leading to the surface and mulch. Marie Sperka in Growing Wildflowers says if the nodes on the rhizome are not well developed the plant may stay dormant for a year.

One of the nice things about the wild geranium is that it certainly isn't fussy about its habitat. Most of our wild flower books list it as growing in rich open woods and damp shaded roadsides in either neutral or acid soils. I have seen it growing in dense shade and one gardener has a lovely colony growing and blooming in full sun, where it grows in ordinary garden soil with mulch to keep the roots moist.

Although there are other species of wild geranium, the Geranium maculatum is the best known and in the words of Neltji
Blanchan in Nature's Garden, is found from "Newfoundland to Georgia and westward a thousand miles." Apparently there is much variation in color and flower size in the wild and reportedly there is a rare white form. Wouldn't it be exciting to come across that?

A close relative of the Geranium maculatum, the European species, Geranium pratense, has a place in history as the flower that first attracted the attention of the German scholar and botanist Sprengel to the close relationship which exists between flowers and insects.

In the current best seller, The Country Diary of an Edwardian Lady, which all wild flower gardeners will love, Edith Holden has painted three species of the wild geranium which she found in England. One was this same Geranium pratense.

I have only seen one other species of wild geranium (of which I was aware) the Geranium versicolor or pencilled cranesbill, blooming in a bluebell wood south of London in May. The foliage looked very much like our maculatum, but the blossoms were white and delicately penciled or veined in a deep magenta—a beautiful species.

When I asked Ken Moore to tell me something exciting about the wild geranium to include in this article, he said, "It's one of the most beautiful wild flowers, and it's
easy to grow." What more could a wild flower lover want?

Each day of Spring paints a new picture in our gardens. Please don't miss the charming gift of the wild geranium.

* * * * * *

WILD GERANIUM

Though nursed by field, and brook,
and wood,
And wild in every feature,
Spring ne'er unsealed a fairer bud,
Nor found a blossom sweeter.
Of all the flowers that Spring hath met,
And it hath met with many,
Thou art to me the fairest yet,
And loveliest of any.

J. Clarke
BLUFF MOUNTAIN

The North Carolina Nature Conservancy has obtained an option to purchase 710 acres of Bluff Mountain in Ashe County. After nearly a year of negotiation between NCNC and Bluff Owners, an option was signed in early January. Bluff Mountain has been identified by the N. C. Natural Heritage Program and top state botanists as the number 1 priority in the entire state.

The property is distinguished by high cliffs with spectacular views and a bog with unusual montane and coastal-type vegetation which sits atop a high mountain plateau at 4480 feet. Thirty-one endangered or threatened plant species are located here, including the federally endangered or threatened Geum radiatum (spreading avens), Lilium grayi (Gray's lily), Saxifrage caroliana (Carolina saxifrage), and Carex misera (miserable sedge). So diverse is the plant life on the mountain that on a recent field trip there, three rare plant species were found within a few feet of each other. Additionally, Bluff provides habitat for grouse, wild turkey, deer and other wildlife.

Prior to January, 1979, NCNC needs to raise $400,000 to purchase Bluff Mountain and to develop an educational research program which will allow an outstanding graduate botany student each year to spend the summer
The fundraising effort was kicked off early this year with generous contributions from the N.C. Botanical Garden Foundation and the New Hope Audubon Society. We hope other groups and individuals will follow these examples by contributing to the preservation of what is unquestionably the most unique natural area in the state. All contributions should be made payable to N.C. Wildflower Preservation Society, Inc., Bluff Mountain Fund, and mailed to Mrs. Sydnor Cozart, 900 West Nash Street, Wilson, N. C. 27893.

+++ +

One touch of nature makes the whole world kin.

Shakespeare

Gray's lily
Endangered and Threatened Plant Species  
Found on Bluff Mountain

- Arabis lyrata
- Carex baileyi
- Carex buxbaumii
- Carex conoidea
- Carex misera
- Carex woodii
- Chrysosplenium americanum
- Clematis verticillaris
- Diervilla lonicera
- Gentiana crinita
- Geum radiatum
- Gymnocarpium dryopteris
- Habenaria orbiculata
- Helianthemum bickenellii
- Liatris aspera
- Lilium grayi
- Lonicera dioica
- Lycopodium selago
- Muhlenbergia glomerata
- Panax quinquefolium
- Parnassia grandifolia
- Phlox sublata

Lyre-leaved rockcress
Bailey's sedge
Buxbaum sedge
Cone-shaped sedge
Wretched sedge
Wood's sedge
Golden saxifrage
Rock clematis
Common bush-honeysuckle
Fringed gentian
Spreading avens
Common caffern
Large round-leaved orchid
Bicknell's frostweed
Rough gayfeather
Gray's lily
Limber honeysuckle
Fir clubmoss
Bristly muhly
Ginseng
Big leaved parnassia
Moss phlox
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<td>Windleaf cinquefoil</td>
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<tr>
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<td>Choke cherry</td>
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<tr>
<td>Rhododendrum roseum</td>
<td>Election pink</td>
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<td>Rhynchospora alba</td>
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<td>Bog goldenrod</td>
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<td>Rusty woodsia</td>
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Submitted by

Paul Johnson
N. C. Nature Conservancy

* * * * * * * *

Come forth into the light of things,
Let nature be your teacher....
One impulse from a vernal wood
May teach you more of man -
Of moral evil and of good -
    Than all the sages can.

-William Wordsworth
"CONSERVING OUR NATURAL HERITAGE"

THE GREEN SWAMP PRESERVE

by

Charles Roe

The preservation of the Green Swamp national natural landmark has been achieved by two new North Carolina conservation programs. The Natural Heritage Program documented the ecological value of the Green Swamp and recommended The Nature Conservancy act to protect the expansive wetland system. The corporate owner of the land, Federal Paper Board Company, donated the most critical 13,850 acres to the Conservancy, and the Green Swamp preserve will eventually be transferred to the State of North Carolina.

The Green Swamp, in Brunswick County, off highway 211, is among the best remaining tracts of pocosin in the Carolinas. The swamp's plant communities include excellent examples of pine savannahs, bay forests, Atlantic white cedar, and vast pocosin. Green Swamp hosts at least fourteen species of insectivorous plants and nine orchids. The swamp contains all 21 species of Sphagnum found in the coastal plain. It supports nine of the state's endangered and threatened plant species, and also harbors six rare animal species—including threatened
alligators, red-cockaded woodpeckers, bears, and possibly the Eastern cougar.

For many years Green Swamp has been used as a "natural classroom" by the state's botanists and biologists. The donation preserves the wetlands mosaic from the peat mining, timber cutting, and drainage that threatened it. Expectations are that the State of North Carolina will eventually manage Green Swamp as a nature sanctuary.

As ecologists and protection planners of the State Natural Heritage Program identify those natural areas most deserving preservation, the North Carolina Nature Conservancy acts to acquire key sites. The Nature Conservancy—a national conservation group with citizen membership—has helped preserve over 85,000 acres in North Carolina alone. The Conservancy in North Carolina has acquired land for protection of areas such as Great Dismal Swamp, Roan Mountain, Chowan Swamp, Islands, and Currituck Banks.

Working with an unusual alliance of environmentalists, businesses, universities, foundations, and government, The Nature Conservancy and Natural Heritage Program offer North Carolinians the opportunity to protect the state's natural diversity. Their success is dependent upon public support. If you care to offer your contributions, information about natural areas, and participation,
please contact: North Carolina Natural Heritage Program, c/o Division of State Parks and Recreation, DNRC, P. O. Box 27687, Raleigh, N. C. 27611.

Pitcher Plant

Butterwort

Sundew
REPORT ON THE SEED EXCHANGE
by
Harry Phillips

This past fall saw the Wildflower Society inaugurate its seed exchange program. In cooperation with the Botanical Garden in Chapel Hill, seed of some dozen common, easily cultivated native species were made available to members. Nearly two hundred requests were received and approximately one thousand seed packets were distributed.

The most troublesome area of the program concerned the collection of ripe seed. The majority of seed contributed to the program, especially from plants of the Composite family, were immature. Needless to say and with due respect and appreciation to collectors, it is difficult to locate ripe seed before it is dispersed and removed by the wind. Generally the seed or nutlets produced by the composites will appear swollen when ripe and when broken will reveal a white embryo. Seed contributed in large quantity is also helpful when making it available to the membership. There is, of course, an ever-present need for more information about our native wildflowers grown from seed and their use in the garden.

Special thanks are extended to Mr. Tom Shinn, Mr. Lionel Melvin and Mrs. Fanny Kletzien for their generous contributions to the Seed Exchange Program.
In an effort to make seed available from more of our native wildflowers in quantity, the following questionnaire is provided for members to contribute their expertise and experience growing native plants.

Provide information in the five categories for each of the individual species for which you are able to contribute seed for our Seed Exchange. Please remove questionnaire from Newsletter and forward to Harry Phillips, Totten Garden Center 457-A, UNC., Chapel Hill, N. C. 27514.
SEED QUESTIONNAIRE

1. Name of wildflower, annual, biennial or perennial, where it occurs naturally, flowering time, height.

2. Seed treatment: best time to collect, storage, sowing

3. Cultivation requirements: soil, location, moisture

4. Comments: where plant is best used in the garden, interesting features, specific likes and dislikes, etc.

5. Seed source: how much seed of this species can you contribute?
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PLANTS AND MICROHABITATS
IN THE
CROATAN NATIONAL FOREST
by
Jeannie Wilson

Early explorers in the United States, such as John and William Bartram and John Nuttall enthusiastically wrote of savannas in the southeast. Among the marvelous plants were venus fly traps, sundews, orchids and pitcher plants. William Bartram was so impressed that he wrote

"What a beautiful display of vegetation is here before me, seemingly unlimited in extent and variety, sparkling as the gem that flames on the turban of the Eastern Prince" (Harper 1958).

It is believed that these savannas were maintained by wildfires or burning by Indians. William Bartram

"...entered some almost unlimited savannas which were absolutely enchanting; they had been lately burnt by the Indian hunters, and had just now recovered their vernal verture and gaiety" (Harper 1958).

There are fewer wildfires now under the forest service management program.
In the shallow sandy ditches between these ridges, one can part the grass and see *Bartonia verna* (in summer) and *Utricularia subulata* (bladder-wort). These are good examples of "belly plants" because you have to get down on your hands and knees to take a good look!

On the edges of the wiregrass ridges, sometimes cascading down to the furrows, one may find a clump of *Pyxidanthera barbulata* (pyxie-moss). It is easier to find in March and April when it is in full bloom.

The most diverse and perhaps most interesting microhabitats are the areas on slight slopes between the higher sand ridges and lower pocosins or black gum swamps. These areas are devoid of a shrub or grass covering, so there are many herbaceous species. The intermediate moisture conditions must also be more optimum for these species. Some of the species found here are *Lycopodium* spp. (clubmosses), *Dionaea muscipula* (venus fly traps), *Sarracenia rubra* (sweet pitcher plant), *Burmannia biflora* and
The most significant activity in the Croatan National Forest in terms of modifying the environment, is the lumbering operation. The lumbering process involves clear-cutting, burning the remaining debris, and replanting pines. Before the pine seedlings are planted, the sites are bedded to provide better drainage. The resulting ridges and furrows, compounded by natural variations in topography, creates a mosaic of microhabitats.

Certain species consistently occupy the same special microhabitat. *Asclepias humistrata* (milkweed) and *Stipulicida setacea* grow on very dry, bare, sandy habitats, generally on areas of higher elevation, such as relict sand ridges. *Iris verna* (dwarf iris) and *Cleistes divaricata* (rosebud orchid) can be found on fairly dry ridges made by the bedding process. Also on these ridges one may find *Gentiana autumnalis* (autumn gentian) and *Lilium catesbaei* (pine lily). These species are often hidden by *Aristida stricta* (wiregrass), which grows in dense tufts.

Autumn Gentian
B. capitata, *Pogonia ophioglossoides* (rose pogonia), *Drosera capillaris* (sundew), and *Pinguicula caerulea* (butterwort).

In areas of low topography where ditches were formed by the bedding process, one may find mats of *Utricularia purpurea* (bladderwort) due to the standing water all year. On the margins of these ditches, one may see *Eriocaulon decangulare* (pipewort).

*Lysimachia asperulaefolia* (loose-strife), which is on the national rare and endangered list, can sometimes be seen in areas of low topography where pocosin shrubs are regenerating after clearcutting.

Managed savannas would be preferable to the destructive nature of logging in preserving and maintaining many herbaceous species. However, in lieu of this, the lumbering operation provides an important habitat, and in some cases, refuges, for savannah species.

Parable by the roadside. . .

Once there were three society members roaming the back roads in search of wild flowers, and lo, they came to a sandy moist right-of-way dotted with pitcher plants.

"It won't matter if we each take just one, will it?" asked the member who had just finished her bog.

"Oh, I don't think so," said the second who was about to complete a bog, and the third member thought it would be nice to have a pitcher plant when she got around to making a bog. They stood, having battles with themselves.

Just as the first member was about to push her shovel into the nice soft earth, a faint ghostly form, which somehow strangely resembled Ken Moore, loomed right out of the myrtle and sheep laurel—and the three went away empty handed.

Note: Ken Moore will probably give you a pitcher plant if you visit the Botanical Garden, and save your extra styrofoam cups and plastic pots to take along. The Garden needs them!
MOTH MULLEIN:
A HARDY NATIVE PLANT
by
Rob Gardner

Tired of watching your orchids pine away, your lilies wilt and your trilliums take a turn for the worse? Release yourself of all guilt feelings concerning collecting or buying collected plants: Grow Weeds! It's the best way to get a big splash of color with minimum maintenance and maximum satisfaction. Try cultivating a plant that is easily grown from seed, has attractive foliage and flowers and isn't on anyone's rare and endangered list. Such a common but showy plant is Moth Mullein, Verbascum blattaria. A biennial that has a very attractive basal rosette, the plant forms a flowering stock
6-12 dm. in height the second year and flowers in May and June with yellow or white flowers.

We have had excellent germination by sowing seeds in flats using a standard seed mix and placing in the greenhouse. Germination occurred in nine days with no special treatment. Seedlings were transplanted to styrofoam cups as soon as they were large enough to handle. Average potting mix was used. The seedlings responded favorably to occasional applications of Peters soluble plant fertilizer. Plants were moved outside to harden off and planted in beds for an eye-catching display of rosettes the first year and an airy show of tall flowers the next year. I think one could avoid all the time and effort of sowing in flats and later transplanting simply by sowing directly into the garden.

At the North Carolina Botanical Garden, several beds of seedlings were planted in a variety of conditions on the nature trail: some in well-drained soil, some in clay, some in shade and others in full sun. Whenever you are in the Chapel Hill area this summer, come by the Botanical Garden and check on their progress. I hope to make a short note in a later Newsletter concerning Moth Mullein's success in these different conditions. Good luck with Moth Mullein and be sure to write the editors of your experience with this hardy native plant!
PRELIMINARY OBSERVATIONS ON THE

GERMINATION OF TURKEY BEARD

by

R. E. Farmer, Jr.

Division of Forestry, Fisheries,
and Wildlife Development
Tennessee Valley Authority
Norris, Tennessee 37830

INTRODUCTION

Turkey Beard (Xerophyllum asphodeloides L. Nutt) is a perennial herb of the Liliaceae characterized by a dense cluster of felt-foam basal leaves, giving it a grasslike appearance. In the southern Appalachians, where the species occurs in dry mountain woods, flowering occurs in June on a tall (1 m) stalk arising from a cluster of leaves; seed dispersal is in August. Observations of small amounts of seed collected in Greene County, Tennessee, in 1974, and 1975 suggested that it is characterized by embryo dormancy which can be broken by moist storage at 3°C (stratification) for several months. This study was conducted to define this chilling requirement further and to develop methods for propagating the species by seed.

1. The article is a Government publication and is not subject to copyright.
METHODS AND RESULTS

Seed heads were collected from plants in Greene County, Tennessee, in late July 1976, when the flower stalks were beginning to die and a few seed were being dispersed. Previous observation indicated that dispersal was completed by late August. Harvested flower stalks with attached capsules containing six to nine seed were dried on a laboratory bench at about 21° C for seven days, after which time seed were extracted by hand. Filled seed were easily determined by their external appearance.

Fifty-four lots of 50 filled seed each were placed on moist filter paper in 15-cm petri dishes on August 6, 1976. Eighteen of these dishes were immediately stored at 3° C. The remaining 36 dishes were stored at room temperature (21° C) for 30 days (during which time no germination took place). They were then moved to storage at 3° C.

On October 15, 1976, 18 dishes assigned to warm-cold stratification and 9 dishes assigned to continuous cold stratification were removed from cold storage, and 3 replicates (petri dishes) were incubated under each of the conditions outlined in Table 1. Cumulative germination (radical 2 mm) was recorded every three days until there were no additional germinates for a 10-day period. Seventy percent of the seed was obviously decayed and nonviable by the end of the October germination period. Germination percentages in Table 1 are therefore based
on an average of 15 sound seed per replicate. An analysis of variance of arc-sin transformations of percentages indicated that germination (1) decreased significantly (0.5 level of probability) with increasing temperature, and (2) was significantly higher under light than in darkness. Stratification procedure did not significantly influence germination. Germination speed increased with temperature, but this effect was offset by increasingly lower germination percentages at the higher temperature. Dark germination was slower as well as less than light germination.

The remaining 27 petri dishes of seed were removed from cold storage on January 4, 1977, after five months of stratification. Sixty-two percent was nonviable due to deterioration in storage. Of the sound seed, an average of 76 percent receiving warm-cold stratification and 61 percent receiving continuous cold storage had germinated at 30°C by January 4. Four replicates of 20 ungerminated sound seed from each stratification treatment were incubated at 16-21°C. Seven percent of those seed given warm-cold stratification subsequently germinated as did 13 percent of those given continuous cold stratification.

Seed germinated in January were planted in pots of peat: perlite (1:1) supplemented with Hoagland's solution and grown in a greenhouse until July 1977. At this time 6 to 12 new leaves originating from the root collar area developed.
and grew to a length of 4 to 8 cm. Approximately 50 percent of the planted seed have survived to this stage, and essentially no mortality occurred after several leaves developed.

**DISCUSSION**

Although dormancy relations were incompletely delineated in the study, results confirmed that up to six months' stratification is required to promote germination by the majority of sound seed. The average germination of about 60 percent after 70 days' stratification is roughly similar to that observed for bear grass (*Xerophyllum tenax* Pursh Nutt) by Smart and Minore. However, in contrast to their observations of this western species, a high percentage of apparently sound turkey beard seed deteriorated during cold storage. (Some seed in excess of study needs were stratified in small polyethylene bags commonly used for other species; they were completely deteriorated within two months.) Data on temperature effects indicate that either chilling first results in germination capability at low temperatures or the species is intolerant of moderate germination temperatures. Since

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temperatures in this study were well within
the range tolerated by most species, the first
hypothesis is considered the more realistic.
Additionally, this species is capable of germina-
tion at very low temperatures and in dark-
ness once chilling requirements have been met,
as witnessed by relatively high germination at
$3^\circ$ in an almost continuously dark refrigerator.
The sum of these observations suggests that,
pending further information, the species can be
propagated conveniently by stratifying seed
under well-aerated, accessible stratification
conditions (e.g., on moist filter paper) until
germination begins, followed by transfer to
a growth medium.

Turkeybeard

30
Table 1. Germination percent of turkey beard under several temperature light regimes after 70 days' stratification. Means based on three replicates averaging 15 seed each.

<table>
<thead>
<tr>
<th>Stratification Condition</th>
<th>10°C - 16°C</th>
<th>12°C - 21°C</th>
<th>21°C - 27°C</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Light</td>
<td>Light</td>
<td>Light</td>
</tr>
<tr>
<td></td>
<td>Dark</td>
<td>Dark</td>
<td>Dark</td>
</tr>
<tr>
<td>Warm-Cold</td>
<td>59</td>
<td>46</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>Continuous cold</td>
<td>64</td>
<td>-</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>47</td>
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</table>

1 Fourteen hours daily at high temperature; 10 hours at low temperature.
NCWFPS FALL MEETING

October, 1977

The fall general business meeting of the WFPS of NC convened at 7:00 p.m. on October 29, in the State Marine Resource Center located within the Theodore Roosevelt State Natural Area near Salter Path, N.C.

Treasurer's Report:
Total balance on hand $968.15
Scholarship Fund 411.55

Old Business: Members to coordinate seed exchange program are Jean Stewart and Harry Phillips. A seed list should be established in order that people may be aware of such service and which seeds are available.

Charlotte Jones, coordinator of plant rescue group, cited that the biggest problem is the fact that not enough people across the state help in finding sites for digging. Wilmington, Raleigh, and Asheville areas need people.

Nell Lewis requested plants for her project of starting a wild flower garden in the Bicentennial Garden in Greensboro.

The president announced field trips for Sunday:
9:00 a.m. - Hoffman Trail, next to Marine Center, Leader: John Fussell
9:30 a.m. - Same as above, Leader: Jeannie Wilson
12:00 M. - Meet at Camp Sam Hatcher, in the Croatan National Forest. Bring sack lunch, drink and folding chair. Jeannie Wilson, staff botanist at Hampton's Mariners Museum, Beaufort, will lead the walk through the camp area which contains many insectivorous species.

John Fussell, historian, Fort Macon State Park, was introduced. He presented a slide lecture entitled "The Natural History of the Theodore Roosevelt Natural Area." This was a very interesting program, after which the meeting was adjourned.

Clara Murray, Secretary

* * * * *

For additional information on wild flower cultivation, refer to the North Carolina Native Plant Propagation Handbook, compiled by the members of the North Carolina Wild Flower Preservation Society, available through the Botanical Garden. Price: $3.50 postpaid. Make checks payable to the N. C. Wild Flower Preservation Society and mail to the Garden. Inquire about discounts for large orders.
<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City &amp; State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boyd, Miss Anne Quinn</td>
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<td>McMillan, Mr. Timothy J.</td>
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<td>Mills, Dr. Randolph D.</td>
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<td>Birmingham, AL 35226</td>
</tr>
</tbody>
</table>
MEMBERSHIP APPLICATION

Regular: $5.00  New  [ ]
Sustaining: $25.00  Renewal  [ ]
Life: $100.00

NAME

ADDRESS

CITY  STATE  ZIP CODE
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Totten Garden Center, 457-A, UNC
North Carolina Botanical Garden
Chapel Hill, North Carolina 27514