NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO

Founding Chapter Of

THE OHIO NATIVE PLANT SOCIETY

6 Louise Drive
Chagrin Falls, Ohio 44022
(216) 338-6622

On the Fringe

THE JOURNAL OF THE OHIO NATIVE PLANT SOCIETY

Volume No. 6 **September/October** **Number 5**

ANNUAL DINNER - FRIDAY, NOVEMBER **13th**

NOTE: PROGRAM CHANGES FOR CLEVELAND CHAPTER *

* **September 10** (Thursday) **7:30 p.m.** - Sanctuary Marsh Nature Center, North Chagrin Reservation - Tom Stanley of Cleveland Metroparks will talk on "Native Shrubs of Ohio, how to identify them and use them in the landscape."

* **September 18** (Friday) **7:30 p.m.** - Penitentiary Glen, Lake Metro Parks - Bruce Mack will give a slide lecture on "Mushrooms of Ohio." An excellent photographer, mushroom identification has been Bruce's avocation for years.

* **September 19** (Saturday) **9:30 a.m.** - Penitentiary Glen, Lake Metro Parks - Field trip with Bruce Mack to find and identify mushrooms.

October 3 (Saturday) **9:30 a.m.** - Happy Days Center, Cuyahoga National Park - Field trip with a professional botanist to see the flowers of Fall, including the fringed gentian. Warren Stoudemire - Walker Paul

October 15 (Thursday) **7:30 p.m.** - Holden Arboretum - ~~Jeff~~ Knoop of the Nature Conservancy will talk to us on "Making a Prairie in Your Own Backyard." Jeff's father has created one of the most stunning prairies in the state at Dayton Aullwood Center and taught Jeff well.

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September 11 (Friday) **Cincinnati Chapter - 6:00 p.m.** - Avon Woods Center - Picnic supper and trail walk at Center. 8:00 p.m. lecture by Jo Apple on "Growing and Propogating Woodland Wildflowers."

September 12 (Saturday) **Wilderness Center Chapter** - Aster and goldenrod field trip to botanist Clinton Hobb's home, Kent. Call: 419/289-6137 evenings.

September 13 (Sunday) **Dayton Chapter - 1:30 p.m.** - Field trip to Culbertson's Woods, Clinton county. Call: 513/897-8139.

September 21 (Monday) **Dayton Chapter - 7:30 p.m.** - Cox Arboretum - Pam White, landscape architect with Montgomery County Parks will speak on "Landscaping with Native Plants."

September 21 (Monday) **Columbus Chapter - 7:30 p.m.** - Spring Hollow Nature Center Members slides of summer adventures.

October 3 (Saturday) **Cincinnati Chapter** - Lake Grant, Mt. Orab, Ohio - Field trip for fall flowers and gentiana andrewsii. Call 513/385-0670 evenings.

October 4 (Sunday) **Dayton Chapter** - Field trip to Clear Creek Valley with Paul Knoop. Depart 8:00 a.m. from Cox Arboretum. Call: 513/897-8139.

October 10 (Saturday) **Wilderness Center Chapter** - Field trip to Dearman property, Southeast Canton. Call: 419/289-6137 evenings.

October 18 (Saturday) **Cincinnati Chapter** - Field trip to Shawnee Lookout in Hamilton County Park for Fall color. Call: 513/385-0670.

October 19 (Monday) **Dayton Chapter - 7:30 p.m.** - Dayton Cox Arboretum - Vic Soukup, Univ. of Cincinnati, will speak on "Trillium Preservation in China."

October 19 (Monday) **Columbus Chapter - 7:30 p.m.** - Spring Hollow Nature Center Dr. Horace Davidson will speak on "Native Plants Feed Butterflies Twice."

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Athens	-		-		
Cleveland	-	Tom Sampliner	-	216/932-3720	Eve.
Cincinnati	-	Jim Innis	-	513/385-0670	Eve.
Columbus	-	Jim Stahl	-	614/882-5084	Eve.
Dayton	-	Ellen Fox	-	513/897-8139	Eve.
Toledo Organizer	-	Denise Gehring	-	419/535-3058	Work
Wilderness Center	-	Glenna Sheaffer	-	419/289-6137	Eve.

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NOTICE ON NEWSLETTER SUBSCRIPTIONS FOR STATE MEMBERS

If you wish a subscription to "On The Fringe" they are available at the rate of $7.50 per year. Send your check made payable: Native Plant Society, 6 Louise Drive, Chagrin Falls, Ohio 44022.

NATIVE SHRUBS OF OHIO by Tom Stanley

Perhaps the least appreciated group of plants found in Ohio is our native shrubs. Most of us can point with pride to the "old white oak" tree in the back yard, or remember the day Dad planted the white pine, and marvel on how much it's grown over the years. Springtime excites us with the blooming of woodland wildflowers. We even know the names of many of them--trillium, mayapple, bluebells--like old friends who drop in once a year.

Ah, but shrubs. To many of us shrubs are nothing more than the plants we place around the house foundations. We aren't even sure why we plant them there, except that everyone does it that way. When someone asks "What's this bush?" we usually reply, "I'm not sure, it was there when we bought the house."

In fact, many of the shrubs around our houses are actually trees that we try to keep small by constant pruning, or they are specially cultivated varieties that are developed to stay small. It's as if we are embarrassed by what is naturally available to us for landscaping our homes, so we invent, or import new varieties. However, this article is not intended to critique the "inventions or the imports," but rather to extol the virtues of our native Northeastern Ohio shrubs; a task that, in total, is beyond both my capabilities and the scope of this article.

However, I will endeavor to discuss some of the more common groups, such as the shrubby dogwoods, viburnums, and sumacs. I would hope I can succeed not only in aiding in the identification of these native plants, but more importantly in increasing the appreciation and use of some of them in the home landscape. For those who are fortunate to own property beyond the 50" x 100" lot sizes of suburbia, the opportunity to utilize these plants is exciting, but even on the small lot, some can be effectively employed. We first must think beyond the ball and cube school of shrub pruning to realize the true potential of most of these shrubs. Simply put, most do not look or respond well to the continual assault of the hedge shear. Think of them as we do the American pioneer, needing a little space and freedom, for both our forefathers and foreshrubs have evolved into more civilized species, perhaps for the better, perhaps not.

Dogwoods

I start with this group because most people know and appreciate the flowering dogwood, a small tree common to our woodlands and yards alike. Most of the dogwood family members however are shrubs. The Woody Plants of Ohio by E. Lucy Braun, lists eight shrubby species, most of which can be found in the northeast quadrant of the State. I will discuss the three species most common and recognizable, alternate-leaf dogwood, **Cornus alternifolia**, gray dogwood **C. racemosa,** and red osier, **C. stolonifera.**

As a group, dogwoods can be recognized by the usually opposite branching habit (one exception) and their smooth-edged, roundish to eliptic-shaped leaves. The vein pattern in the leaves is also characteristic. Rather than heading directly to the leaf margin, as is true in most leaves, the veins tend to sweep upward toward the

leaf end. An old trick I was shown to recognize a dogwood leaf is to gently break and tear it across its width. As the two pieces are separated, thread-like strands can be seen holding the two pieces together.

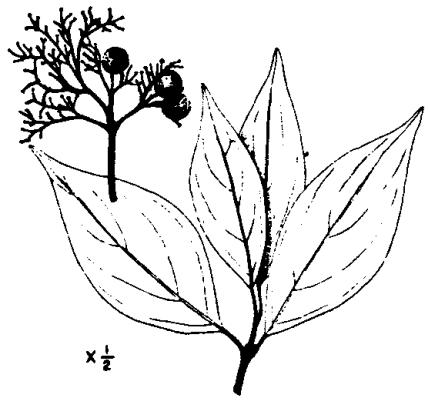
Dogwoods have long been appreciated by horticulturists and landscapers. Dozens of species and varieties are now available to the homeowner, including the three I'm about to discuss. However, most commonly found are special varieties with unusual growth habits, or special leaf and fruit coloration, etc. I'm still partial to the originals.

Alternate leaf dogwood is so named because it is the exception to the trait of having opposite branching and leaves. Its branching habit is to grow in irregular tiers forming a somewhat flat, horizontal plant. It is sometimes called pagoda dogwood which reflects this branching characteristic. Despite its native orientation, it would not be out of place in a Japanese garden.

The leaves are similar to flowering dogwood in shape, eliptical, but its flowers and fruit are not. Cream-colored small flowers in small clusters appear in May with blue-black fruit on red stems maturing in fall.

Dogwoods as a group are a very important wildlife plant. Especially the fruit and, to a lesser degree, the foliage are eaten by a large number of songbirds and small mammals.

This attribute is reason enough to include dogwoods in a landscape planting. The two other dogwoods I mention, gray and red osier, are more densely shrub-like in their characteristics and therefore provide excellent cover and nesting habitat as well. Gray and red osier dogwood are often found in "old fields" that have been abandoned as farms or meadows. Both have characteristics which make their identification, even at a distance, fairly easy. Gray dogwood often appears as a tapering "mound". Its growth habit of spreading out from the center with new plants each year produces clumps with smaller younger plants on the periphery and taller, older plants in the core. Not only is it a recognizable shape to us, but so it must also be to small songbirds, as it is almost impossible to examine a good size clump of gray dogwood and not find at least one nest. The prolific flowering and fruiting is also an asset, both from an aesthetic and wildlife point of view. The white berries on red stalks are attractive and valuable as an avian food source.



Cornus racemosa

While the twig color of this plant is, as its name implies, gray so too is the red osier dogwood descriptive of its stem color. In fact, it is the

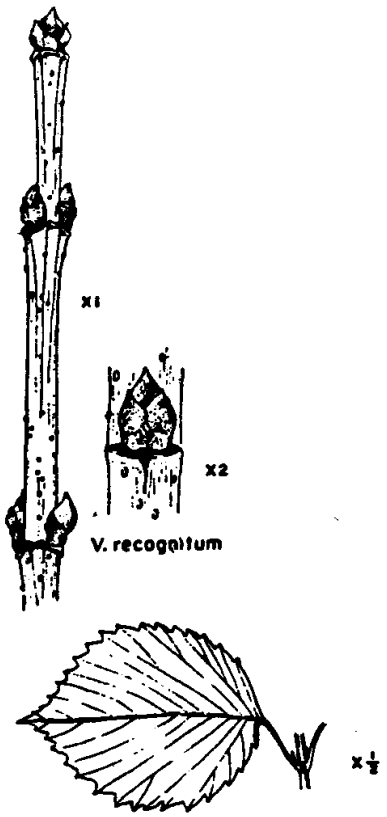
brightly colored red twigs which make this a highly prized landscape plant, especially in the winter. Also, with white fruit and leaves appearing similar to gray dogwood, it is nonetheless an easy to identify shrub because of this distinctive coloring.

Viburnums

Viburnums represent a rather large complex of native shrubs and small trees, 10 or more species plus varieties, in the State of Ohio alone. I shall concentrate on only two which are typically shrub-like and common in our area. I mention two others in passing--black-haw, **Viburnum prunifolium**, and nannyberry, **V. lentago** because although their size would cause some people to call them small trees (15'-30'), they are nonetheless native and readily available at local nurseries.

Viburnums in general have a number of characteristics in common with dogwoods. They too have opposite branching and leaves. While it may now seem that virtually every plant has opposite leaves, actually far more plants have alternate leaves, so this trait is very useful in identifying dogwoods and viburnums from many other shrubs and trees. The flowering and fruiting pattern of viburnums is also similar to a number of shrubby dogwoods in that they appear in terminal clusters.

Maple-leaved viburnum, **Viburnum acerifolium**, is one of my personal favorite local shrubs. As its name implies, its key characteristic is that its leaf resembles the typical maple leaf shape. Serrate, or toothed on the margin, it most closely resembles a red maple leaf. Unlike most of the shrubs I have, or will mention, maple-leaf viburnum is most typically found in woodlands, not open areas. This is actually its most valuable trait, that is, its ability to grow in the shade. A number of landscape situations require shade-tolerant plant and maple-leaf viburnum fills this need. Its flowers are small, yellowish to white, and in flat clusters which produce black berries. Like the dogwood family, viburnums are also favored wildlife food, although not utilized to quite the same extent. However, the local bird population will thank the homewoner who plants viburnums.



Viburnum recognitum

Arrow-wood viburnum, **Viburnum recognitum** (or **V. dentatum**) is the other member of this group I'd like to mention. This plant is often found in similar "old field" habitats as gray and red osier dogwood. Its growth habit, a clump of arrow-like shafts, and leaf, coarsely toothed and rounded in shape, are the keys to its identification. Its fruit is blue-black and the foliage turns a yellow and red color in fall.

Sumacs

That brings us to the sumacs--a fascinating and diverse group. Two of its members are worthy of mention, if only to contrast them to the three

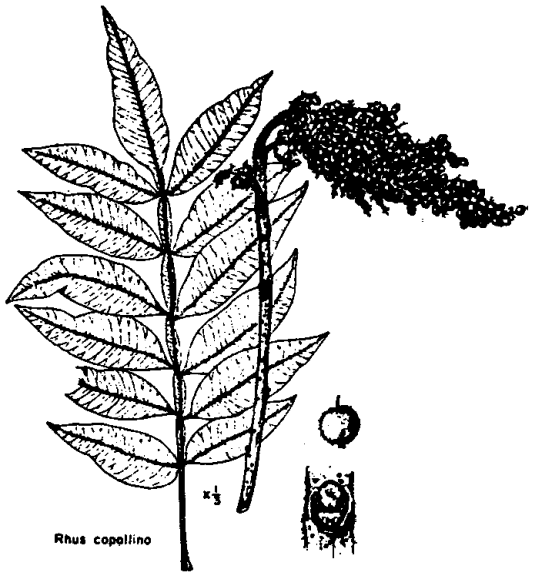
I will describe in more detail.

Poison sumac, a not uncommon shrub of wet areas in Northeast Ohio, and poison ivy (yes, "leaves of three, let it be") also a member of this genus, are two plants from this group that are definitely not recommended for home use.

On the opposite side of the coin are three sumacs, shining or winged **Rhus copallina,** staghorn **R. typhina,** and smooth **R. glabra.** These species are often seen along road and woods edges and also in "old fields". Starting with the characteristics that all three have in common will help distinguish them from other species. The terminal, often pyramidal-shaped cluster of fruit, is the most notable characteristic. The multiple-leaflet, compound leaves are also easily recognizable.

The shining or winged sumac is the shortest-growing of the three. It can either be recognized by the "winged" tissue along the leaf stem between leaflets, or the usual table-top flat appearance of the extensive patches in which it is often found.

The other two species, staghorn and smooth, are the largest members of the sumacs and actually can be classified as small trees. Staghorn sumac twigs are densely hairy, presumably named after the "velvety" covering on newly formed deer antlers, as well as the growth habit which is antler-like, while smooth sumac looks much the same, but has smooth twigs. The leaves of all three sumacs turn bright red in fall, a fine attribute for landscape use. Unfortunately however, the gangly appearance of staghorn and smooth sumac, coupled with its rather short life span and brittle nature, do not lend them to the formal foundation planting. These same traits can be expertly utilized in the natural landscape of a larger yard. In this context, its short-lived nature is not a problem because new growth will continually spring forth from the root system of the original plants. I like them as part of a wildlife planting for one very positive attribute that they possess. While not as preferred a food as dogwood and viburnum berries, sumacs provide an important winter sustenance for many species. The bright red fuzzy fruits hang on well into winter and are available at critical times for our local wildlife. It's Mother Nature's way of making sure the bird feeder is filled on the cold, snowy winter days.



If you're still with me, you have followed me through a description of eight native shrubs of Northeastern Ohio. I've suggested that most can be utilized in the home landscape, at least if one is slightly creative. Most, if not all, are grown and sold through local nurseries. Buying an arrow-wood viburnum for a home landscape instead of a European cranberry viburnum or a Korean spice viburnum is a positive step for someone who is at least interested in, if not dedicated

to, the use of native plant material. However, "truth, justice, and the American way" can be taken a step further. As stated in Karl Smith's letter in this issue, "native plants" can, and I agree, should mean not only identifying a species that is a native to this area, but also identifying individuals which are a part of the locally evolved population of that species.

An exciting challenge for those who are interested is to locate plants which are known to be grown from local ecotypes, or perhaps even collect and/or grow the local types from seed.

This concept, along with the above-mentioned shrubs, as well as others, will be part of the program on September 10, 1987, at 7:30 p.m. at the Sanctuary Marsh Nature Center of the North Chagrin Reservation.

Tom Stanley is the Natural Resource Manager of the Cleveland Metro Parks System. His B.Sc. is in Forestry and his M.Sc. is in Forest Ecology.

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Editor's Note: We would like to stress the danger of using the following non-native shrubs in landscaping, even though they are sometimes recommended as food supply for birds. They are **very invasive** and ruin other native species. They are: Autums Olive, Russian Olive, Japanese Bush Honeysuckle, Euonymus Fortunei (climbing), Common Buckthorn, and European Buckthorn. It would be better to plant nothing than to plant one of these.

ANNUAL DINNER - FRIDAY, NOVEMBER 13 1987 - 5:30 P.M.

Once again it is time to alert you to the Annual Dinner coming up in November. Those of you who have attended in the past know that it is always a festive occasion and an opportunity to see members and friends.

A flyer will be sent out in September along with the 1988 ballot for officers. But we just want to remind you so that you will put it on your calendar **now**.

Dr. Warren H. Wagner at the University of Michigan will be the speaker. The title of his talk is "Ferns of the Western Great Lakes Region." Dr. Wagner is Professor of Botany and Curator of Pteridophytes of the University of Michigan. He is the author of numerous books and articles on all facets of Botany. Known as a scintillating speaker, he performs magic on-stage with ferns. I can guarantee you that you won't sleep through **this** lecture!

A HISTORY OF THE NATURE CONSERVANCY AND ITS PRESERVATION EFFORTS IN OHIO by Larry Smith

The Ohio Native Plant Society and The Nature Conservancy share many goals and members. Some of the most active members of the Ohio Chapter of TNC come from within the ranks of Ohio's Native Plant Society. With this article I would like to briefly introduce the mission and accomplishments of TNC, relate some of the early history which led to the development of The Nature Conservancy and present the role which TNC has played in natural area protection in Ohio.

For those who are less familiar with our organization, The Nature Conservancy is a privately funded, nonprofit conservation organization whose purpose is to protect and preserve ecologically significant natural areas and the diversity of species which they support. Our priority is the protection of critically endangered ecosystems and plant communities and rare species of plants and animals. The Nature Conservancy works most effectively at the state level through local chapters and staffed field offices as we have in Ohio, but the organization has recently expanded its scope of activity by initiating natural area inventories and protection programs in more than 10 countries in the Caribbean, Central America and South America. .

Since its origins in the early 1950's, The Nature Conservancy has become widely recognized as one of the most effective conservation organizations, and our rare species protection efforts are second only to of those the U.S. Department of Interior. Nationally, TNC has protected more than 900 preserves encompassing almost 3 million acres of land and water which represents the world's largest privately run nature preserve system.

The concern for the disappearance of America's pristine natural areas is not a recent issue in our country. From a group of concerned and active ecologists a movement began in the early 1900's which gradually evolved to become The Nature Conservancy. In 1915 eminent American ecologists, Victor Shelford of the University of Chicago and Robert Wolcott of the University of Nebraska, proposed the formation of a scientific association to deal with the problem of the destruction of our nation's natural areas. At an historic meeting of the American Association for the Advancement of Science held in Columbus, Ohio in 1915, fifty members voted for the establishment of the Ecological Society of America. Victor Shelford became the first president of this society whose stated purpose was "to promote the scientific study of organisms in relation to the environment and to facilitate an exchange of ideas among ecologists." The study sites were to be the natural areas across the country.

In order to have natural areas for study, one had to insure that some of the existing sites would remain untouched. One early function of the Ecological Society of America was an inventory of natural areas in various parts of the country. The result of this effort was, The Naturalists' Guide to the Americas, published in 1926.

Many members of this society wanted to accomplish more than just research on these last remaining natural areas. As they were studying the sites, they continued

to see destruction as there was little or no organized protection for such areas. One of the most vocal of these members speaking out for natural area protection was Ohio's E. Lucy Braun, a pre-eminent ecologist from the University of Cincinnati, and prominent member of the Ecological Society of America. Dr. Braun led an effort to create a "primeval monument system" as part of our National Park System. This effort was unsuccessful and other avenues were explored to provide natural area protection. However, the majority of the members of the Ecological Society, being academicians, felt that the Society's work should remain focused on scientific research and publication and did not support the efforts of their preservationist colleagues.

Feeling scorned and frustrated, these preservationists withdrew from the Ecological Society and formed an independent group, the Ecologists Union, in 1946. This group of 158 founding members continued their lobbying for natural area preservation. At the first meeting of the Ecologists Union its members set three goals: 1) to maintain original conditions in specified natural areas; 2) to preserve plant and animal communities; and 3) to encourage scientific research in preserved areas. It is amazing to realize that forty-one years later, the goals of The Nature Conservancy are virtually identical to those agreed upon at the first meeting of the Ecologists Union held in St. Louis.

The Ecologists Union was a very active group. Early efforts aimed at lobbying Congress on many issues including purchasing wilderness for Superior National Forest, pressing for the creation of a prairie reserve in the Midwest, and opposing the transfer of large tracts of federal grazing lands to state or private control. These conservation issues are still relevant today.

The Ecologists Union continued to grow but they soon realized that to achieve maximum effectiveness more popular support and a more diverse membership was needed. To help accomplish this a name change was in order as the term"ecologist" was not yet a household word, and the term "union" inspired undesirable connotations. Therefore on September 11, 1950 the Ecologists Union formally adopted its new name: The Nature Conservancy, a name inspired by a British conservation society.

Land acquisition projects soon followed and salaried staff came later, but after a 35-year evolution from the Ecological Society of America to the Ecologists Union to The Nature Conservancy an active land preservation organization developed, supporting itself through a means which is still working well today - direct appeals to its members for cash contributions.

The Ohio Chapter of The Nature Conservancy became organized in the late 1950's, primarily in the Cincinnati region at first because of the activities of Dr. E. Lucy Braun who was such an active member of both the Ecological Society of America and the Ecologists Union. The Ohio Chapter's first preservation project was a portion of southern Ohio's Lynx Prairie which Dr. Braun made famous through her research, publications, and field trips. From that first project in 1959, TNC has protected more than 90 natural areas encompassing nearly 18,000 acres to date. Last year alone, the organization was able to protect more than 3500 acres of land

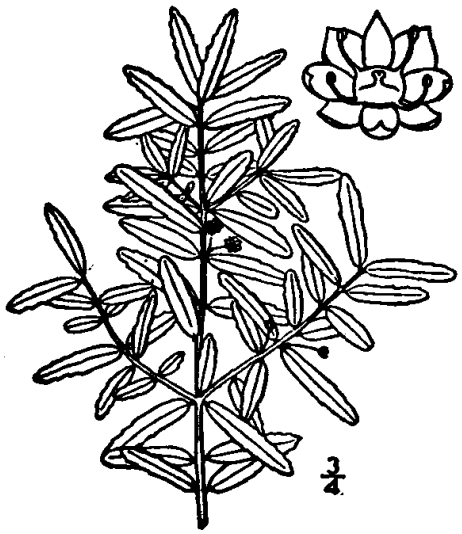
with a market value of nearly $4.5 million. In addition to these land acquisition projects, we have negotiated voluntary landowner protection agreements on 120 tracts totalling nearly 7000 acres of land.

The Nature Conservancy develops its priorities for protection on the rarity of the "elements" - the native plants, animals, or plant communities. Determining the relative rarity of each of Ohio's species of plants and animals and plant communities is a very important job accomplished by the scientific staff of the Natural Heritage Program within ODNR's Division of Natural Areas and Preserves. The responsibilities and operations of the Natural Heritage Program were explained by Bob McCance in an earlier edition of this newsletter. The major source for TNC protection projects in Ohio are the recommendations generated by the rare species data base of the Natural Heritage Program.

Our portfolio of nature preserves in the state represent portions of each of Ohio's five physiographic sections. Refer to the enclosed map for the locations of TNC projects. Our preserves range in size from several which cover only a few dozen acres, to our Edge of Appalachia Preserve System whose 6000+ acres encompass Lynx Prairie and many examples of hanging prairies on hillsides, dolomite promonotories, plus thousands of acres of mixed mesophytic forest and Appalachia oak forest on the drier and more exposed sites over acid shales and sandstone. Most significant within our system of preserves in Ohio are protected examples of bogs, fens, mesic, xeric and sand prairies, oak savanna, a freshwater estuary and swamp forest.

Like most midwestern states, Ohio cannot boast of having any endemic species, those species which can be found only within our borders. Our closest claim to an endemic is the Scioto madtom, a small bottom-dwelling relative of the catfish, which has been collected only in Big Darby Creek, a central Ohio tributary to the Scioto River. However, this rare fish has only been collected on a few occasions in Big Darby Creek and has not been observed in the last 30 years.

Although we don't have endemic plants, there are twenty-two native Ohio plants which are extremely rare throughout their range and as such are classified as globally endangered or threatened. Among these rarities are species which have always been uncommon as well as those plants whose populations have been severely diminished in the last 100 years. Many of these rarest Ohio plants have become the targets of TNC protection projects.



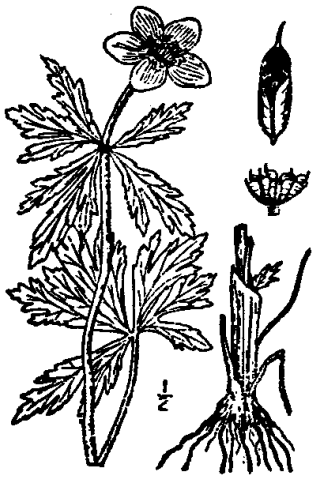
The small evergreen shrub called cliff-green (**Paxistima canbyi**) which occurs on one of TNC's southern Ohio preserves is an example of a species that has always been rare in Ohio and still occurs in the two Ohio counties where it has always been known. The sparse distribution throughout the remainder of its range in five other

1. **Pachystima Cánbyi** A. Gray.
Canby's Mountain Lover.

Appalachian states qualifies **Paxistima canbyi** for a globally threatened status. Another globally rare plant for Ohio is heart-leaf plantain (**Plantago cordata**), an aquatic species of clean slow moving streams. **Plantago cordata** occurs on privately owned property that is protected through a voluntary natural area protection agreement with The Nature Conservancy. This plant is an example of a species which was once much more common not only in Ohio, but also throughout the eastern United States and Canada. In Ohio, for example, the heart-leaf plantain was once known to occur in twelve of our 88 counties; however, through stream degradation and habitat destruction only two populations - one thriving and one quite small - still exist here.

Nearly 200 species of plants and animals listed as endangered, threatened or potentially threatened in Ohio have received protection as a result of TNC projects. For example, on our Kitty Todd Preserve (a remnant of the Oak Openings region located just west of Toledo) more than 60 species of listed plants and five rare butterflies are provided 101 acres of protected habitat. Most significant of these species is the Karner blue butterfly which is not known to occur in any other site in the state. Other TNC protection projects, especially the glacial wetlands of northeastern Ohio, support similar extensive rare species lists.

The responsibility for ensuring the continued viability of the rare species populations and the plant communities on TNC preserves falls upon the shoulders of TNC's stewardship program. As stated earlier, TNC has made a several million dollar investment in the perpetual preservation of rare species and communities on 18,000 acres of Ohio nature preserves. Just as a financial planner is responsible for protecting or enhancing his client's financial resources, the job of a TNC land steward is to plan and manage for the continued or enhanced viability of the genetic resources represented in the gene pools of the rare species on the preserves. These responsibilities include protecting the borders of our preserves from ORV or vehicular trespass through fencing, gating, and signing; maintaining regular audits on the size and extent of rare species populations; monitoring structural parameters of rare community types; controlling invading alien species; and conducting or sponsoring ecological research on our preserves.



r. Trollius laxus Salisb. American Globeflower.

One of the most controversial activities of the stewardship program involves habitat manipulation. This stewardship action, sometimes referred to as "interventionist" management, involves controlling succession or re-establishing an earlier successional state as required by the species we are managing for.

Historically the philosophy of natural area advocates was to purchase an area and then merely let nature take its course. The philosophy, shared by many, was

that these areas should be as natural as possible and therefore untouched by human hands. In Ohio, however, we are working with a highly fragmented landscape on areas that are often small in size and may have suffered various ecological insults such as grazing, draining, inundation, varied agricultural activities, introduction of non-native or extremely aggressive native species or elimination of presettlement fire frequencies. On these highly impacted preserves our role as proper stewards becomes especially complex. On the preserves which have suffered past abuses we must determine what natural community formerly existed and then attempt to restore its natural components. We ask ourselves - What were the controlling natural factors such as fire or water level which allowed these significant plant communities and species to exist? Information on presettlement conditions for the area is frequently unavailable or unreliable. Under these circumstances we must rely on our best ecological opinions developed through personal field experience, discussions, research, and the results of the work of other individuals on similar species and communities.

Many of our rare species require early successional environments and therefore we have found that many, but certainly not all of our preserves, require some level of interventionist management. In 1959 TNC purchased the first portion of Lynx Prairie, but not until 1983 was any extensive management action taken to open up this prairie which was rapidly shrinking due to the invasion of red cedar and several deciduous trees and shrubs.

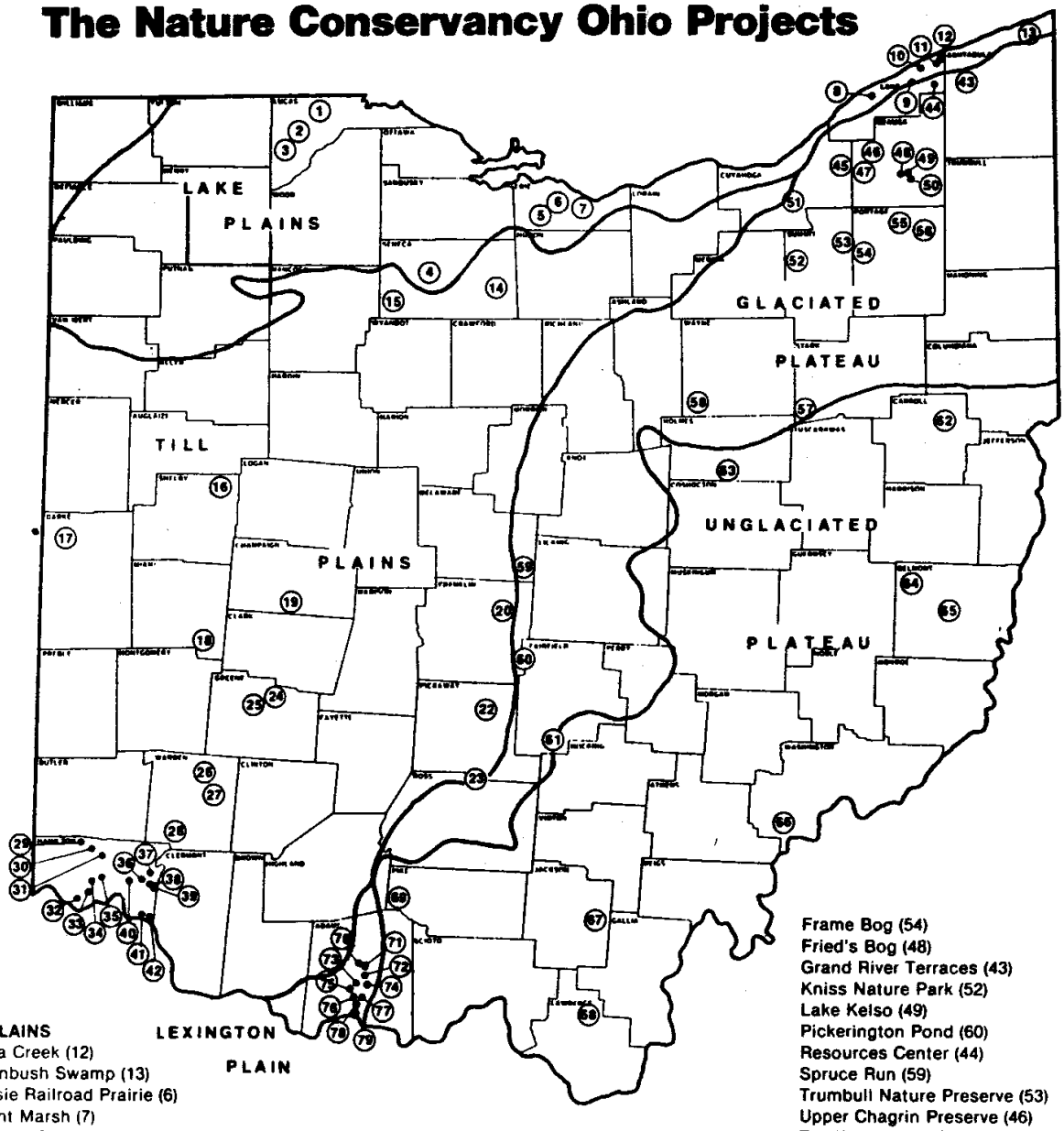
At our Kitty Todd Preserve in the Oak Openings we discovered that all of the 60+ rare plants require open areas maintained through regular disturbance such as burning, cutting, or high water level. At the time this site was acquired we were rapidly losing these openings to the spread of quaking aspen. An aggressive management program of brush hogging, cutting, girdling and prescribed burning is being used to re-established these openings as habitat for rare species.

When it comes to managing rare species on our preserves we must admit that very little applied research on the mangement of these plants exists in the published literature and so we must proceed with caution. We can't always predict with certainty what the effects of our various management techniques will be on the species and communities of concern. Therefore, before we initiate any habitat manipulation, pretreatment data on species populations or community composition is collected to serve as the baseline to which the response of the species or community after treatment will be compared. Often a species may respond with increased vigor and flowering the year after a prescribed burn, but just as frequently the effects may be more subtle and not be noticed until 2-4 years after the treatment. To protect ourselves from unexpected negative effects of our mangement techniques only a portion of an area is treated at one time.

Much of the work in our stewardship program involves a large investment of manpower to accomplish preserve and species monitoring and habitat management goals. The membership of the Native Plant Society with its interest in species protection and expertise in field botany presents a valuable pool of individuals to help The Nature Conservancy attain its preservation objectives.

Larry Smith is Director of Science and Stewardship for the Ohio Native Conservancy.

The Nature Conservancy Ohio Projects



LAKE PLAINS
- Arcola Creek (12)
- Buttonbush Swamp (13)
- Chessie Railroad Prairie (6)
- DuPont Marsh (7)
- Erie Sand Barrens (5)
- Irwin Prairie (2)
- Kimball Woods (11)
- Mentor Marsh (8)
- Red Mill Valley (10)
- Schwamberger Preserve (3)
- Walden II (9)
- Wickwire-Shade Nature Preserve (4)
- Wildwood Estate (1)

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- Beechwoods/Warren Wells Preserve (29)
- Betsch Fen (23)
- Bradford's Tanglewood (34)
- Cedar Bog State Memorial (19)
- Charleston Falls (18)
- Clifton Gorge Nature Preserve (24)
- Coppess Nature Sanctuary (17)
- Embshoff Nature Preserve (32)
- Funk Woods (14)
- Gahanna Woods (20)
- Glen Helen (25)
- Glenway Woods (33)
- Kroger Hills (39)
- Landen Tract (28)
- Lang Tract (40)
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- Little Miami River (Dravo) (36)
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- Wyoming Nature Preserve (31)

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- Crawford Woods (55)
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- Strait Creek Prairie Bluffs (69)
- Tefft Memorial Sanctuary (66)
- Van Sickle Woods (63)

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- Abner Hollow (78)
- Buzzardroost Rock (73)
- Cave Hollow (77)
- Cedar Falls (71)
- Hanging Prairie (76)
- Lynx Prairie (74)
- Ohio Brush Creek Swirl Preserve (70)
- Red Rock (75)
- Rieveschl Preserve (79)
- The Wilderness (72)

THE NATURE CONSERVANCY
Ohio Field Office, 1504 West First Avenue, Columbus, Ohio 43212 (614) 486-4194

5/84

EDITOR'S NOTE:

The following letter from Karl Smith is printed with the intent of arousing member's interest in a debate that has simmered since the founding of the Society. Strict adherence to Karl's viewpoint would make extremely difficult, if not impossible, the ability to acquire seeds and plants of native species for the amateur gardener. There are very few Ohio nurseries that propogate plants from local ecotypes, and fewer that have seeds for sale.

On the other hand, scientifically, Karl is absolutely correct in his contentions. The introduction of gene material from other areas of the state, much less other states, does indeed threaten the purity of local ecotypes.

We urge our professional scientists to volunteer for the April debate. We need both sides represented. Let us hear from you.

* * * * *

August 4, 1987

Ann Malmquist, President
Ohio Native Plant Society
6 Louise Drive
Chagrin Falls, Ohio 44022

Dear Ann:

You have asked why I have not renewed my membership. Here is my answer.

Since the organization is called the Native Plant Society and not the Native Species Society, I think the organization needs to take a firm stand on what a native plant is. To my mind a native plant is a species that, as best we know, was here before white settlement and is a local ecotype. A species is really a group of sub-populations, caled ecotypes. Ecotypes may have a very similar outward appearance or morphology. But they are very different physiologically, which means they may have very different seasonal growth patterns, and most importantly will have adaptations for growing in different environmental situations. Northeastern Ohio Ecotypes have evolved to be the best suited to grow here.

For example, Great White Trillium, **Trillium grandiflorum** (Michx.) Salisb., is a native species to Ohio and Vermont, but Great White Trillium that comes from the gene pool in Vermont is not a native plant to Ohio. (Gene pool is simply all of the genes contained in a population. The term population can be used to refer to all the plants of a species in a geographic area, i.e., North America, Ohio or your backyard.)

So when articles in your newsletter recommend buying plants from nurseries, you are recommending planting, what are to my mind, non-native plants. The offspring that will be produced by the breeding of the non-native plants with our native plants will be weaker and less well adapted to growing here.

It seems to me the name of your organization should be called the Native Species Society, or define what you mean by a native plant. Until one of these happens, I will continue to be a non-member.

I have a very deep sincere concern for the loss of and genetic pollution of our native plants, as I define them. I take action on this concern on my job and in my personal life. I remain very willing to be of any assistance I can to help you and your organization to clarify its goals.

Sincerely concerned,

Karl K. Smith

Karl D. Smith is the Senior Naturalist at the Brecksville Nature Center, 9305 Brecksville Road, Brecksville, Ohio 44141 of the Cleveland Metroparks System, and is the manager of its Tallgrass Prairie Ecosystem Restoration Project. The above letter is Karl's personal opinions and values and it does not necessarily reflect those of his employer.

* * * * *

Dear Karl:

It is with great regret that I must accept your resignation from the Ohio Native Plant Society. While I respect your resolute position on the matter of local ecotypes, I disagree with your method of protest.

The forum of the Society is the perfect place for disputation of philosophies and beliefs. We are made up of professionals, amateurs and laymen. We encompass the whole state and include universities, scientific institutions, parks, museums and governmental agencies. We are in communication with other plant societies around the country as well as the New York Botanical Garden, the Center for Plant Conservation, the National Wildflower Research Center and others.

In such a diverse association there are bound to be many opinions. The Ohio Native Plant Society has always been open to the expression of all points of view and through lectures, field trips and articles in the Journal of the Society has attempted to educate the members and the public, as well as provide a forum for discussion.

The ONLY place one can effectively work for change is WITHIN the Society. By resigning you are simply abdicating the position which gives you the opportunity to inform the members and share your professional expertise.

I invite you and any other reader to join in a debate on the subject of local ecotype preservation on the evening of Thursday, April 21, our regular meeting for April. We will attempt to have all points of view represented and a strong but impartial moderator. This will give you a vehicle to affect opinion and belief.

Your membership in the Ohio Native Plant Society has given you the scope to

express your opinion and your sustaining dues have helped to publish this journal that prints your letter. By your resignation we both lose and are the poorer for it.

Sincerely yours,

Ann K. Malmquist
President & Executive Director
Ohio Native Plant Society

Founding President (Ret.) and
Executive Secretary
Native Plant Society of Northeastern Ohio

* * * * *

Dear Wildflower Gardeners:

Recently, the Garden Center of Greater Cleveland took over the ravine that extends from the Japanese Garden to the Natural History Museum. In the past several years members of the Native Plant Society have worked in this area. Now we are prepared to put the full resources of the Garden Center into the project, including manpower, plantings and watering system.

I would like to extend an invitation to the members of the Native Plant Society to participate with us in this exciting new garden of native Ohio plants. In fact, one area is being designated exclusively as the Ohio Native Plant Society Garden.

I believe that a natural native garden is one of the hardest gardens to get started, and it will take at least three years before it will really take shape. What we need most of all right now is YOU. Anyone who wishes to work Monday from 9 am to 12 noon or Wednesday from 1 p.m. to 4 p.m., please call me the day before. The first half hour will be devoted to discussion of what we hope to accomplish that day, and the last half hour will be a wrap-up session. It is hoped that this will be an opportunity for you to increase your knowledge of plant identification, and horticulture techniques. Members of the Society can work in their own designated garden at **any** time.

If you are interested in joining us in this attractive new project, please call me at 721-1600. I will be glad to discuss it with you. I look forward to seeing some of you at the Native Plant Garden.

Sincerely yours,

Gary A. Farkas
Superintendent of Grounds
Garden Center of Greater Cleveland

THE PROBLEM OF EXTINCTION by Ron Jones

"What an appalling indictment it is, what a disgrace to mankind, that the road to his so-called civilization should be built on the memories of extinct species and species on the way to extinction" (The Right Honorable Earl of Jersey, speaking before the 1972 Conference on Breeding Endangered Species).

Extinction - it is a word that is often used but little understood in its impact and significance. Extinction of plants and animals is occurring all over the world, with the greatest rates being in tropical regions. Half of all tropical forests have already been destroyed, and the remainder are disappearing at the rate of about 50 acres per minute. Of the 235,000 species of flowering plants in the world, about two-thirds occur in tropical areas. It is estimated that 40,000 species of tropical plants will become extinct in the next few decades. Of the estimated 20,000 kinds of plants in the U.S., about ten percent are of concern (850 endangered, 1200 threatened, according to a Smithsonian study in 1978).

An excellent and important book has been written on this subject by Paul and Anne Erlich, titled "Extinction," and published in 1981 by Random House, N.Y. According to the Erlichs, we should be very concerned about the rate of extinction, which has increased markedly with human activities over the past 300 years, and by the end of the 20th Century could be as high as 400 times the normal rate. The earth has experienced several mass extinctions in its past, but these all occurred over much longer periods, usually millions of years. In the natural course of events, species become extinct, and others evolve to replace them. Today, the extinction rate is much greater than the replacement rate, and we are experiencing a net loss of species. This loss of species is very sad, for each species is unique, the terminus of an ancient lineage dating back millions of years, and each species has developed intricate relationships with other organisms in its ecosystem. The loss of biological diversity could have dramatic effects on the fragile ecosystems that make up this living world, and could even threaten the survival of the human species.

It is sometimes difficult to defend the argument that a dam, or a power plant, or some other modern development, should be held up because of the presence of a rare plant or animal. Possibly the loss of that species would do no harm to the ecosystem, but, in most cases, we don't know, nor can we predict the long-term effects of continuing to force species into extinction. We know so little, even about the numbers of plant and animal species that exist - possibly as many as 30 million, and only 1.7 million have been been described! Many species are disappearing in the tropics without ever being known to science - these species might have provided new sources of foods or medicines. This is one of the most obvious arguments for protecting species - they provide us with economic benefits. Others argue that species should be protected for ethical and esthetic reasons - they have a right to exist as living entities, and they provide the world with astounding diversity and beauty.

There are also some extremely important ecological reasons for working to protect species. In a real sense, they provide life-support systems that make our environment livable. Natural ecosystems provide humans with many free public services - atomosphere quality (by affecting levels of oxygen, carbon dioxide, water and ozone), climate control (by forest influences on air circulation, and by the effect of vegetation cover on heat reflection), freshwater supplies (by filtering out pollutants and controlling erosion), soil quality (by maintaining fertility and microbes), and nutrient cycling through decomposition. We are all dependent on these services, and the philosophy that allows us to continue to destroy other species may someday cause us to destroy ourselves.

The problem of extinction is extremely complex, but it is a problem that humans have the intelligence and the science to solve, if we only have the will and the vision to do so. It is a problem that must be dealt with at all levels - the individual, the community, the state, the country, and the world.

The above article is a reprint from **The Kentucky Native Plant Society Newsletter**, Vol. 2, No. 1, February 1987.

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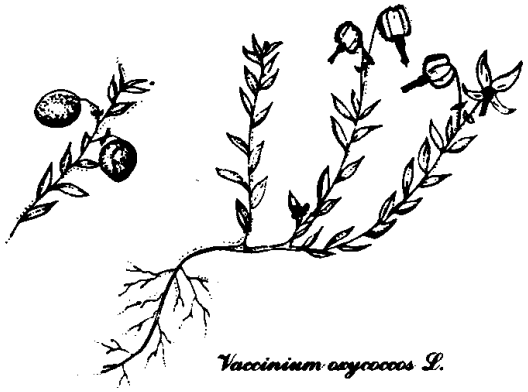
Vaccinium macrocarpon Ait.



Vaccinium oxycoccos L.

CRANBERRIES OF OHIO by Guy L. Denny

There are two species of cranberries native to Ohio. The American or large cranberry, **Vaccinium macrocarpon,** a potentially threatened species, is known from 17 sites in 11 counties. The much rarer small cranberry, **Vaccinium oxycoccos,** an endangered species in Ohio, is known from only two sites, both in Portage County.

The cranberry has become as much a part of Thanksgiving as turkey and pumpkin pie. Like the distinctively American celebration of Thanksgiving, the large cranberry is also distinctively American.

Large cranberry was one of the first native foods that Pilgrims learned to relish and it soon became one of the first and few crops to be grown commercially for export. Over half of the world's suppy of cranberries today comes from Massachusetts, primarily from the southeastern part of the state including Cape Cod and Nantucket Island. Other significant cranberry production comes from Wisconsin and the pine barrens of New Jersey. Most commercially grown cranberries such as the Cape Cod bell are merely cultivated varieties of the wild large cranberry.

Large cranberry occurs in open bogs, wet shores and other poorly drained sites from Newfoundland west to central Minnesota and then south to northern Illinois, northern Ohio and central Indiana. It occurs locally in the Appalachian Mountains and coastal plains to Tennessee and North Carolina.

The roundish, dark red berries are about 3/8 to 3/4" (9-14 mm) in diameter. They are usually harvested after the first frost. Cranberries contain too much acid to be appetizing if eaten raw. However, these extremely sour berries are used in making delicious sauce, jellies, jams, pies and juices after cooking; a great deal of sugar is used to reduce the tartness.

Unlike most members of the Heath family (Ericaceae), cranberries are not tall branchy shrubs, but rather viny, ground-hugging woody plants. Their creeping slender stems tend to root at the nodes and send up erect branchlets to a height of only 4 to 8 inches. The nodding pinkish-white flowers with four distinctively recurved petals and a tight cluster of protruding beak-like stamens appear in early summer. Each is perched atop a long stem or pedicil that emerges from the leaf axils.

The name "cranberry" is reported to be a corruption of "cranberry," the name originally given to this plant by early colonists. The origin of the name "craneberry" is said to be in reference to the flowers, which somewhat resemble the silhouette of the head and neck of a crane. Another explanation is that the colonists observed cranes feeding within cranberry bogs and mistakenly thought these birds were feeding upon the berries.

The generic name Vaccinium is of ancient origin, presumably from the Latin vaccinus meaning "of or from cows." The specific name macrocarpon means "large-fruited."

Unlike large cranberry, which is native only to North America, small cranberry

is also native to circumboreal Northern Europe and Asia. In fact, when Carolus Linnaeus first described this plant to science it was from specimens he collected in his homeland of Sweden. Small cranberry has a much greater distribution and tends to be significantly more northern and western in range than large cranberry. In addition to Eurasia, it also occurs in cold sphagnum bogs from Greenland, Labrador and Alaska south to Newfoundland, Nova Scotia, New England, New Jersey, northern Pennsylvania, Ohio, Michigan, Wisconsin, Minnesota and into the Appalachian Mountains of Virginia and West Virginia and the Cascade Mountains of central Oregon.

As its common name implies, the small red fruits of small cranberry are only about 1/4" (6-12 mm) in diameter. In our country these berries are generally ignored by pickers because of their small size. However, in Europe these smaller sour berries are the cranberry of commerce. The specific name oxycoccos is of Greek origin meaning "sour berry."

In the southern part of its North American range, small cranberry occurs in the same habitats as, and sometimes alongside of, large cranberry. The two species are similar in many respects but small cranberry is usually distinctly smaller in all of its features.

Under certain growing conditions, however, there is much variability among the field characteristics of these two species that makes them easily confused.

Generally, small cranberry has a smaller fruit and smaller pointed leaves (with strongly rolled-under edges) than large cranberry. The larger, oval blunt-tipped leaves of the large cranberry, on the other hand, are flat or only alightly turned under at the edges. The pink-to-red flowers of small cranberry tend to emerge from the top of the stems while the white-to-pink flowers of large cranberry emerge from along the stem.

However, one of the most reliable differences between the two is that small cranberry has more wirey stems and begins to bloom in May whereas large cranberry has woody, stouter stems and begins to bloom in mid-June. Also notice the two small, reddish bractlets on small cranberry, located at or well below the middle of the threadlike flower stalk. On large-cranberry plants, these two bractlets are larger, green leaf-like structures commonly situated well above the middle of the stouter flower stalk.

The best opportunity for viewing large cranberry is to visit Cranberry Bog State Nature Preserve at Buckeye Lake, Licking County. This preserve is so named for the abundance of large cranberry on the island. Once visitor facilities are developed at Kent Bog State Nature Preserve in Portage County, one of only two known sites for small cranberry in Ohio, visitors will be able to view this endangered species as well.

Guy Denny, Assistant Chief of the Division of Natural Areas and Preserves, ODNR.

NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO

Founding Chapter Of

THE OHIO NATIVE PLANT SOCIETY

6 Louise Drive Chagrin Falls, Ohio 44022

NON-PROFIT

Tom Sampliner
2472 Overlook Rd. Suite #8
Cleveland Hts.,OH 44106

ADDRESS CORRECTION REQUESTED

Memberships are **DUE FOR RENEWAL** on January 1, 1987. Please continue to support your Society and renew at the **highest** possible category. Those of you who send us Sustaining and Patron memberships are enabling us to go on with our worthwhile projects. An active membership just about pays for the newsletter costs. However, economics aside, we need **EACH** of your memberships and each year we get stronger and better. The 1987 Program and Field Trips schedule will be worthwhile.

Please enroll me as a member of the NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO.

☐ ACTIVE.....$ 7.50 ☐ SUSTAINING ...$25.00
☐ FAMILY .....$15.00 ☐ PATRON.....$50.00

Membership runs from January through December and is not pro-rated.

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