

Blue Ridge Wildflower Society

A CHAPTER OF THE
VIRGINIA NATIVE PLANT SOCIETY

Vol. 21, No. 4

October, 2004

- October 23** **Fall Work Day at the Randolph-Macon Woman's College Botanic Garden from 2:00 until 4:00 p.m.** Bring garden tools and help us prepare the garden for winter. Dorothy Bliss, 434-845-5665. Rain date is October 30.
- October 25** **General Membership Meeting, 7:00 p.m., Center in the Square.** Rich Crites will present a program on his trip to the southwestern United States.
- November 22** **An Evening of Shared Memories.** Bring 5 to 10 of your favorite slides or photographs or a short video from the past year to share with the group. A seed exchange will follow the program. Bring a friend and come meet at 7:00 p.m., Center in the Square.

About Our Seed Exchange

Seed exchanges provide an excellent opportunity for expanding the variety in your garden. Most of the seeds will be from wild flowers but someone will usually bring a few seeds from unusual or interesting cultivars. Our only request is that any seeds be properly labeled. Scientific names are good but common names are quite acceptable.

These seeds are free to members and guests so even if you don't do much gardening, you may have a friend who would like to take advantage of our exchange. You do not have to bring seeds (although that is certainly nice) to take home seeds.

Spread the word and give others an opportunity to see their gardens reflecting a little of nature's beauty.

Fall Plant Sale

Sandra Elder

A big bouquet of thanks to the following people for helping with our 11th plant sale in Lynchburg on September 25.

Dorothy Bliss, Elizabeth Henderson, John Snead, Robert Ferrell, Lucille and Paul Cowins, Evelyn McMin, Cindy Burks, Margaret Wenning, Rudy Albert, Malcolm Black and Thelma Dalmas. Some people attending the sale said it was their first visit to the Randolph-Macon Botanic Garden. Three new people signed up to help with garden maintenance. The informative posters and free brochures were well received and many native plants found new homes in Lynchburg and surrounding counties.

President's Report September 23, 2004

Butch Kelly

September 11 was a beautiful day. We had just recently endured hurricane Frances and received nearly six inches of rain. This day the hurricane was the farthest thing from anyone's mind. Twelve members of the Blue Ridge Wildflower Society had gathered at the Bernie Gross estate in Blacksburg. The reason for the assembly was to rescue the many plants in Bernie's garden. Bernie is moving and he wanted our group to get as many plants as possible. He has over 160 species of native plants in his garden. We worked for 4 hours and filled three pickup trucks with plants. Several folks took plants in their cars as well.

The plants will be put in the Randolph-Macon Woman's College Botanic Garden, Bent Mountain Elementary School Garden and the Virginia Western Community College Arboretum. Many plants will go into members' personal gardens and woods. Some will be stored for the plant sale in May. Some will be sold at the fall plant sale as well.

Some of the species were quite special. Grass of Parnassus was one fairly rare plant that he raised. Cardinal flower, blue lobelia, wild ginger, bloodroot, maidenhair fern, goldenseal and the list goes on.

Bernie says we are welcome to return next spring and get more plants. I think this is an offer we can't turn down. There are still plenty there for the plant sale and just to salvage into the wild. Our thanks go out to Bernie Gross for such a generous sharing of his 40 plus years work. My thanks go out to all those folks who helped. It was a great day which ended with a picnic at our house.

The Osage Orange Tree

Dorothy C. Bliss

My first encounter with the Osage Orange tree, *Maclura pomifera*, was many years ago in Riverside Park in Lynchburg. In autumn these trees are conspicuous because of their large greenish, wrinkled, fleshy fruits about the size of a grapefruit lying on the ground below the tree. Native to the region from Missouri to Kansas and Texas, today it has a widespread distribution and it occurs in more than half the counties in Virginia. It is sometimes called the Hedge-apple since before the common use of barbed wire it was used for fences because of the stout spines at the base of some leaves. One of my references mentioned that during World War I the roots were used as a source of dye for the olive drab uniforms. Another name, Horse-apple, is derived from the fact that the fruit is eaten by livestock. The Osage Indians used the wood for archery bows.

On my recent visit to the Patrick Henry National Memorial at Red Hill near Brookneal, I enjoyed seeing the museum and various original and restored buildings but the most impressive feature was the knobby trunked Osage Orange tree. This tree dominates its surroundings with a canopy span of 96 feet, height of 64 feet and a circumference of 326 inches which is equivalent to a diameter of 8.65 feet. Several of the massive branches were supported by timbers. In the American Forest's list of "Big" trees, this tree is both the national champion and the Virginia champion for the species. The age of this tree has been estimated at around 250 years and was probably a young tree when Patrick Henry purchased Red Hill in 1794.

Out of curiosity I couldn't resist checking the list for Franklinia. The national champion grows in Wyndmoor, Montgomery County in Pennsylvania. It's measurements are circumference 78 inches, height 37 feet and spread 42 feet. These data were submitted in 1986 so presumably the tree is even larger today. I can not envision this

tree with a trunk about 25 inches in diameter. The specimen in the R-MWC Botanic Garden would be dwarfed beside it.

If you are interested in the 2004-2005 National Registry of Champion Trees you can find a listing on line at www.americanforests.org/resources/big_trees.

The American Carrion Beetle

Dorothy C. Bliss

While walking along the path in my woods a few weeks ago I noticed a large mass of beetles busy along a fissure or crack in the bark of a large oak that is in poor condition. They were relatively large - 20 mm - black beetles with a bright yellow thorax and a black spot in the center. I think their beauty and large size as well as thoughts of the destructive wooly adelgid and the Asian long-horned beetle whetted my curiosity and I wished to identify them. I collected a few and looked through several of my insect guides but had no luck. Dr. Douglas Shedd of R-MWC checked the internet and discovered that this was the American Carrion beetle, *Silpha Americana*. Not an introduced pest but a very helpful insect ecologically since it lives on carrion or dead material. In this case they were consuming the dead and dying tissue of the diseased oak. I was amused by one of the reports that included the statement, "when clean this is a very attractive insect." Clean or not it is useful in removing dead material and I will not disturb them but let them dine in peace.

Elk

Betty Kelly

The first time elk set foot on the continent of North America was during the time of the land bridge between Siberia and Alaska. They came westward from Tibet or western China's Tien Shan Mountains. They spread all over the continent. During the Lewis and Clark expedition in 1804-1806

they were mentioned 570 times. Unfortunately, they are not that widespread today. They have become extirpated from many parts of the east including the area now known as the Great Smoky Mountain National Park.

Taxonomists do not agree on how to classify the species. Some say it is a separate and distinct species, *Cervus canadensis*. Others believe it is exactly the same as the red deer that inhabits Asia and Europe because, if given the chance, they can interbreed.

Elk in the east were known to roam deciduous forests in eastern Canada and the United States and as far west as Arkansas and Minnesota. The loss of habitat and hunting by early settlers has caused the extinction of *C. canadensis* in the east. Our knowledge of these animals comes from remains that are in museums.

A different species of elk are found in western United States. They are described as majestic, swift, agile and a persistent survivor. They can be quiet as they move through the woods or one can be as loud as a dozen elk. It hardly seems that one could move quietly when a fully mature male weighs on the average of 700 pounds and could reach up to 1,000 pounds. A female usually weighs 450-500 pounds. A calf may weigh around 35 pounds at birth. Within six months the calf will weigh 150 pounds.

The coat of the elk is slightly darker in the autumn after being light reddish to medium reddish in the summer. The neck of a bull elk is dark on its underside. The seasons of summer and spring bring a new coat of hair. They have an unkempt look when they are getting new hair.

The footprint of an elk is a two-sided pattern with rounded tips and it is slightly tapered much like other even-toes ungulates. Deer tracks are smaller in comparison and moose tracks are larger. If they are running, their footprint will show each hoof flared apart for more stability.

Elk feed mostly on grass. Several animals will watch for any nearby danger as the rest of the herd grazes.

During eating they can easily be attacked by a predator such as the mountain lion. It should be noted, though, that the elk's vision, hearing

and senses are keener than man's.

Besides grasses, these herbivores have been known to eat mountain sorrel, elk thistle, fireweed, cow parsnip, scarlet false-mallow, American bistort and penstemon. They also feed on chokecherry, golden currant, serviceberry, red osier dogwood, bitterbush, yellow-flowered cinquefoil and willow. Some of these plants are not found in the eastern United States. When winters are fierce, they have been known to break through barbed wire fences to eat alfalfa hay.

They eat rather rapidly and a lot at a time since their four-chambered stomach makes this possible. Their nutrition is extracted from the fourth stomach, the abomasums.

Their feces consist of dark brown pellets which are sometimes clustered. They may leave scat as often as 20 times a day in the summer when food is plentiful. When the weather turns cool and the snow blankets their range, the elk seek food at lower elevations. In the western states they have to compete with moose for hay that is put out when the snow is so deep that their survival is questionable.

Their habitat was diminished greatly by a fire in 1988 in Yellowstone National Park. The fire did not kill many elk, but it did destroy winter feeding grounds. That winter of 1988-89, many elk perished due to lack of sustenance in the area.

Turning to spring brings new issues. In the west the elk calf is food for the grizzly bears when they come out of hibernation. The green vegetation is not ready for them yet. Cougars, coyotes and wolves are also a threat to elk calves. They will, additionally, search out dead elk carcasses that did not make it through the winter.

When wildflowers and grasses are abundant in July, August and part of September, 85% of their time is spent eating and the other 15% is spent resting. They can usually be found then in open meadows. The calves stay close to their mothers during this period. Near the end of September, the calves are usually ready to take care of themselves.

An experimental project began in 2001 to help return some of the elk to one of their native habitat in the east.

The area chosen was the Great Smoky Mountains National Park. This will help fulfill a phase of the mission of the GSMNP. That mission is to restore the park to its original species. Elk, an original species, were last seen in the Tennessee part of the park 150 years ago. They were last seen in the North Carolina section 200 years ago.

The GSMNP was approached by the National Elk Foundation some 20 years ago to start returning elk to the area. Paperwork was begun and it was determined that this area still had the necessary habitat for elk. So the exciting phase of placing elk in the park began.

Cataloochee became the sight in 2001 for 25 elk to live. They were first placed in a fenced-in enclosure. The fence was six feet high. This method of releasing animals was called the "soft release" method. Park personnel went to great lengths to keep the animals from direct contact with humans. The enclosures were covered with barriers to keep humans and elk separated.

Specific data is kept on all of the elk population. They were drugged with a projectile drug by a dart rifle which was shot from a vehicle. The people had to work quickly to tag their elk's ears, give them shots, record their sex, do a DNA analysis and check for lactation. In five to ten minutes the elk would be awake and back in the forest.

They were given radio collars. There are special collars for the males that can stretch during the breeding period. The collar can last up to 8 years. Each elk has their own channel. If the elk sits for two hours, the beep sounds differently and may indicate some type of trouble. The information gained from the collar can be downloaded into a computer.

The late spring is calving time. The female ventures 8 to 10 miles from the herd to give birth. The first year of the experiment 6 female calves were born. Eight were born the second year and 5 were born the third year. This is probably not all of them since it was difficult to locate the young.

When they were located, their weight, sex and measurements were recorded. They were aged by the softness of their hooves. A collar is

placed on them so the mortality rate can be determined. The survival rate is 50 percent which is not very high. One factor affecting this is the predators, the coyotes and bears, which eat young calves. Another factor is the fact that female elk does not know how to defend its young.

Their longevity in the park will be determined at the end of the five year research project. In the meantime, visitors to the released area need to be educated to stay away from these wild animals. The elk need to be conditioned to stay away from people.

Their future will be discussed by the park staff and the Cherokee that live in the released area. Thus far the Cherokee have been very satisfied with the project. The habitat, predators, vegetation and visitors all play a major role in the future of this magnificent animal.

There will be many potential problems to study before the project is deemed a success. One big problem is the management of the increasing human visitation to the Cataloochee area. How does the park service avoid another problem area like Cades Cove? Perhaps electric or propane powered bus tours would be the best method of controlling human visitors and protecting the elk. Let's hope this is a success story as the GSMNP strives to fulfill its mission.

Bibliography

Bauer, Erwin A. "Elk" Stillwater, MN: Voyageur Press, Inc., 1995, pp. 11-48
Doby, Jennifer. "Reintroducing Wildlife to the National Park: Elk in Cataloochee"

This summer, Butch and Betty Kelly took a class, "Ecology of the Great Smoky Mountains" through Wytheville Community College. The Kellys received two of the three A's given in the class. We are pleased for and proud of the Kellys. Though not about wildflowers, we wanted to publish her research paper. Butch will have an article in the upcoming VNPS Bulletin.

Editor

Lynchburg Area Members

Dorothy C. Bliss

Autumn in the R-MWC Botanic Garden

Through August and September the Garden has been colorful with blooms of various asters and goldenrods. The cardinal flowers and blue lobelias were particularly showy this fall and now have been replaced by the white and pink turtleheads which are at their peak. Below the Franklinia tree the ground is colorful with a carpet of the evergreen leaves and red berries of wintergreen or teaberry. In early September on the uppermost branches a few flowers of the Franklinia could be found among the leaves and fallen on the ground below. These large white flowers with a conspicuous yellow center remind one superficially of a Magnolia bloom but this tree belongs to the Tea Family.

The deer problem continues! Among their favorite plants are the black-eyed Susans, jewel weed and Canada violets. For the first time the leaves of purple alumroot were eaten.

Although rainfall until today – September 8 – has been more than 8" below normal for this time of the year, most of the plants have thrived. The spotted Joe-pye-weed is nearly 10' tall and the many clusters of lavender flowers so heavy the plants are bowed down.

While clearing out a tangle of growth over the large arrowwood, *Viburnum dentatum*, Sandra Elder discovered the invasive porcelain-berry vine, *Ampelopsis brevipedunculata*. This is a climbing vine of the grape family with leaves 3- or 5-lobed resembling those of red maple. The vine bore many clusters of berries, some nearly white or light green and a few developing the sky-blue color for which it is noted. A native of Asia this invasive plant has been sold by nurseries for many years. The Atlas of Virginia records its occurrence in 10 counties in Virginia. However, it is not recorded for this area but there must be other specimens growing in the nearby woods or Blackwater Creek region. Birds are the chief agent of dispersal. It is very invasive and will destroy native vegetation. We will keep a close eye on this section of the Garden to remove any seedlings that might emerge from fallen berries. The arrowwood shrub

over which this vine was clambering is much distorted and will be cut back.

Call for Volunteers R-MWC Botanic Garden

Our regular volunteers need help! If you like plants, wish to learn more about them and enjoy working with your hands in the out-of-doors, here is your opportunity. We'd love to have you join the crew in the R-MWC Botanic Garden. Please call me (Dorothy C. Bliss 434-845-5665).

Fall Work Session in the Botanic Garden Saturday, October 23, 2:00 - 4:00 p.m. Rain date: October 30

Fall clean-up in the Botanic Garden

Mulching, weeding, dead-heading etc. Bring garden tools. If questions, call Dorothy Bliss at 434-845-5665.

Now Available: Brochure on English Ivy Alternatives

The Potowmack Chapter recently published a brochure offering native plant alternatives to the invasive English ivy for sites with dense shade or steep shady slopes. A pdf version is available under native plant references on the VNPS website, www.vnps.org, or copies are available from the chapter directly: VNPS Potowmack Chapter, PO Box 5311, Arlington, VA 22205.

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Richard J. (Butch) Kelly, *President*
(540) 384-7429

Pamela M. Wieringo, *Editor*
(540) 343-8596

P.O. Box 20385 • Roanoke, VA 24018

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