Missouri Native Plant Society

Petal Pusher

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EVENTS

FROM MISSOURI BOTANICAL GARDEN

EDGAR DENISON'S 85TH BIRTHDAY HONORED BY GARDEN

The 85th birthday of Edgar Denison, a longtime St. Louis resident and expert on the wildflowers of Missouri, was honored September 30th at a luncheon held at the Missouri Botanical Garden's Shaw Arboretum in Gray summit, Mo. Denison has been associated with the Garden as an adviser, lecturer and guide, among other roles, for many years.

Denison is perhaps best known for his Missouri Wildflowers, a field guide to wildflowers of Missouri and adjacent areas published by the Missouri Department of Conservation. Missouri Wildflowers, whose fourth edition is now in press, is the best-selling book ever sold by the Department.

"Edgar Denison is a valuable friend of the Arboretum," said John Behrer, superintendent of the Arboretum. "We have benefited greatly from Edgar's expertise on wildflowers and native plants, and we are delighted to have the opportunity to recognize him now."

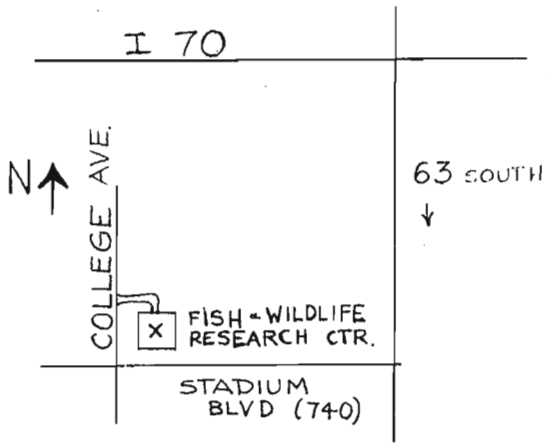
Denison's home on East Adams in Kirkwood boasts an extensive and beautiful wildflower garden, unequaled in St. Louis, which he has cultivated over the 56 years he has lived there. He has donated plants from his garden to the Arboretum, among others.

In addition to his work at the Arboretum, Denison is providing a tremendous service to the Garden by translating the correspondence of Dr. George Engelmann, a German-born St. Louis physician and botanist who make pioneering studies of many western U.S. plants and an adviser of Henry Shaw. The letters, written in 19th century German Script, are extremely difficult for modern-day transscribers to decipher, and Denison, who was born in Germany, is uniquely qualified to do the transcription.

DECEMBER BOARD MEETING

Saturday, December 9, 10:00AM to 4:00PM

The meeting will be held at the Dept. of Conservation FISH AND WILDLIFE RESEARCH CENTER IN COLUMBIA. Please note the change of location - the JC auditorium was already booked. The address is 1110 College Avenue, Columbia,MO See map below.



EASTERN NATIVE PLANT ALLIANCE PLANT ALERT

The Eastern Native Plant Alliance (a consortium of native plant societies, botanical gardens and arboreta, nurseries, universities and gardens clubs) met over the weekend of July 29-30. Participants gave particular attention to two nurseries selling Pink Lady's Slipper (Cypripedium acaule) and Trilliums (especially T. grandiflorum) as "nursery-grown" and "not wild collected". Private communications with the nurseries (Van Bourgondien and Spring Hill) as well as the Mail Order Association of Nurseries have not yet persuaded them to stop the

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practice. Therefore, ENPA participants agreed to write these and other nurseries requesting them not to label wild-collected plants as "nursery-grown".

ENPA urges all its members to join this campaign. Please compose your own letters based on the following points accepted by the Eastern Native Plant Alliance.

**No nursery in the world is propagating Cypripedium acaule. At the recent Chadd's Ford, PA, conference on orchid propagators from the U. S., Canada and the United Kingdom, the consensus was that no commercial propagation of this species is as yet possible. All plants of this species offered for sale come from the wild.

Plants dug from the wild may be placed in nursery beds, containers or barrels of peat until sold, but there is no evidence of propagation. Bare-root transplants of this species may send up a bloom in the first year, but in our experience, these transplants rarely last past the first several years. Therefore, the vast majority of bare-root C. acaule are dug from the wild, and will die in the customer's gardens.

**Trillium propagation is slow, generally inefficient and , consequently, expensive.

Trillium grandiflorum needs between 5 and 7 years to reach flowering size when grown from seed; when propagated by division, it usually yields one new division per plant per year. Cutting of the rhizome or bud to induce bud formation is possible, but still requires several years for plants to reach saleable size. Tissue culture propagation of this species is in the experimental stage. Therefore, at this time, commercial propagation on a large scale is not feasible.

Production of this species by division requires stock beds containing thousands of plants that are maintained year-round (not sold every year). No known nursery maintains thousands of these plants in beds as permanent stock plants for division. Therefore, any nursery selling large quantities of this species must be obtaining these plants from the wild. As with Cypripedium, plants usually are dug from the wild, placed in nursery beds or barrels in the fall or early spring, and then sold as soon as possible.

** In North Carolina and perhaps other states, "nursery-grown" means that a plant has been held for one growing sequence (one flush of growth, perhaps as short as a few weeks) and does not address the issue of a plant's origin. In other words, the term is irrelevant to this conservation concern.

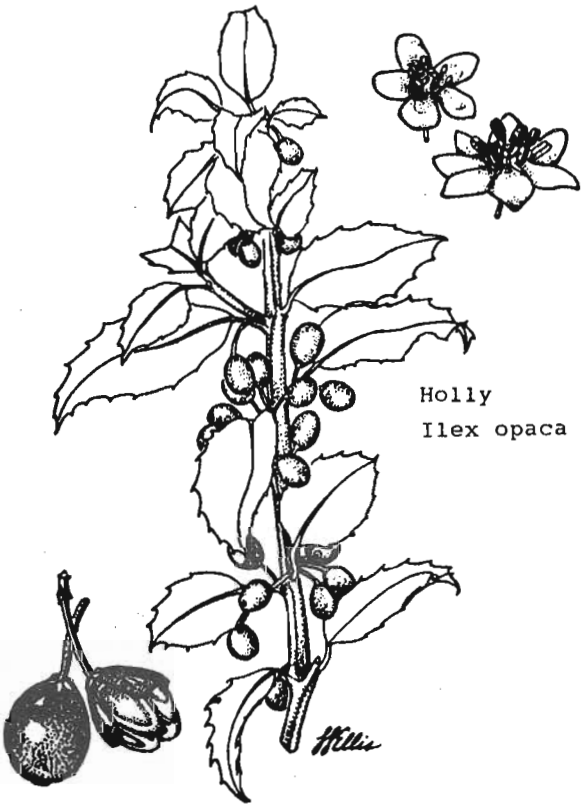
** Therefore, the term "nursery grown", when applied to plants that cannot be commercially propagated, is misleading and potentially deceptive to the public. The connotation of "nursery grown" is that plants have been propagated by a nursery. However, in the case of these two species at least, such propagation is not commercially possible at this time. Similarly, claims that plants collected from the wild and placed in holding areas are "not wild collected" leads the public to believe that the plants are propagated.

Collection of plants from the wild for commercial sale is a complicated issue. At the local level, unscrupulous and damaging collection of native plants occurs, but the effect of commercial collection over the entire range of common species has yet to be established. Until accurate data on the effects of commercial trade is compiled, ENPA recommends purchasing only propagated plants. In the meantime, proper labeling of native plants is essential. Therefore, we urge all plant society members to write to the organizations listed below. Please request that the terms, "nursery grown" and "not wild collected" be applied only to plants that are propagated and subsequently grown to saleable size in the nursery.

K. Van Bourgondien and Sons, INC.
Box A
Babylon, NY, 11702

Spring Hill Nurseries
6523 N. Galena Rd.
Peoria, IL 61632

Mailorder Association of Nurseries
8683 Doves Fly Way
Laurel, MD 20707



Holly
Ilex opaca

THE ROADSIDE TRIO
by Silvia Forbes

(Continued from last issue)

QUEEN ANNE'S LACE

Queen Anne's Lace, Daucus carota, is also called Bird's Nest Weed, Devil's Plague, Lace Flower, Bee's Nest plant, Bird's Nest Root and Wild Carrot. Both parts of the scientific name mean carrot; Daucus being the Greek name and carota the Latin name. The name of Bird's Nest Weed comes from the tendency of the inflorescence, as it ages, to contract into the shape of a bowl, or bird's nest, into which the seeds fall. The common name of Queen Anne's Lace comes fron the lacy appearance of the blossoms which look like the lacy layers of a headdress that a queen would wear. A legend tells of a queen making lace who pricked her finger with the needle. The drop of blood from her finger became the center purple floret.

This plant was introduced from Eurasia and now is commonly found in dry fields, roadsides, along railroads, gravel bars, woodlands and waste places throughout most of the United States, North America, South America and Asia. In Missouri, it is found in almost every county blooming from May to October.

Queen'Anne's Lace is a biennial herg with branching stems rising from a fleshy taproot, growing to a height of five feet. A member of the Parsley or Umbel family, it blooms with numerous white flowers in flat-topped clusters, called umbels, spreading up to 4 inches across. The central floret is usually purple though it may occasionally be white or pinkish. Below the inflorescence are pinnatifid bracts. The leaves of the plant are deeply dissected giving a fernlike appearance. In wet weather, the stems of plants which have not been pollinated become soft and flexible causing the heads to bend over. This feature protects the pollen from the rain. The plant has a strong odor which attracts many different pollinators.

Queen Anne's Lace is an ancestor of the cultivated carrot. Jan Phillips, in Wild Edibles of Missouri, says that roots collected in the spring taste fair, but later, they become too woody and inedible and should only be used as seasoning. Seeds are also edible and have a strong carrot taste. They may be dried and used in cooking similar to caraway seed. Young leaves may be eaten fresh in a salad or cooked in soup. Flower heads can be dipped in pancake batter and fried for eating. In Germany, a substitute for coffee is made by chopping up the roots into small pieces and browning them.

An infusion of the seeds and roots of Queen Anne's Lace has been used medicinally to increase the flow of urine (diuretic). The boiled, mashed root has been applied as a poultice to treat bruises and cuts. The root has also been grated and applied to burns. The fruits have been eaten to stimulate menstruation and the seeds eaten to treat intestinal worms. It was once thought that eating the center purple flower would cure epilepsy.

Some people who come in contact with the wild carrot leaves may acquire dermatitis, especially when the leaves are wet. Also, there have been reports of cattle having been poisoned by eating the leaves. When the plant is eaten in quantity by cows, the results are similar to chicory in that it gives the milk a bitter flavor.

Other common uses are the flowering stalk in dried floral arrangements and the whole plant in dyeing, giving a light yellow color.

YELLOW SWEET CLOVER

Yellow Sweet Clover, Melilotus officinalis, has also been called Yellow Melilot, Melist, Sweet Lucerne, Plaster clover, King's Clover, Wild Laburnum and Hart's Tree. Its scientific name, Melilotus, is Greek for "honey-lotus", while officinalis means the plant has had medical applications. The name Hart's Clover has been given to it as deer (harts) browse on it.

Native to Europe and adjoining Asia, this plant has been introduced into Australia, South America and most of North America. In Missouri, it is found in most counties along roadsides, railroads, fields and waste areas. This annual or perennial herb of the legume family blooms from May to October, its small, yellow, pea-like flowers gracing stalks up to six feet tall.

An important characteristic of this plant is its sweet, fragrant odor. The blossoms and leaves of about twenty species of wild clovers were dried and used to flavor tobacco smoking mixtures and were also used in snuff. The odor is due to an aromatic compound, cumaric anhydride ($C_9H_6O_2$), which also occurs in Sweet Bedstraw (Galium triflorum) and Sweet-scented Vernal Grass (Anthoxanthum odoratum). The flowers have been used to make perfume and the dried plant has been used like lavender by laying it among linens to scent them. It is claimed that when packed with furs and clothing, it protects the article from moths besides giving them a pleasant odor.

The plant is not eaten by itself but water distilled from the flowers is used to improve the flavor of other ingredients. The flowers and seeds are the chief ingredient in flavoring the Gruyere cheese of Switzerland as well as being an ingredient in the green Swiss cheese called Schabzieger. It can also be drunk as a tea by steeping one third cup fresh or one and one half teaspoon dried blossoms for five minutes in one and one half cups boiling water and adding honey to taste.

Medicinally, Yellow Sweet Clover has been used in many ways. It has been used as a plaster for swollen joints as well as an emollient (soothing agent), a digestive aid and when mixed with wine, a remedy for taking away pains of the ears and head. The juice of the plant was dropped into the eyes to clear them. It was applied as a plaster or in ointment, or as a fomentation, as a remedy for the relief of abdominal and rheumatic pains. It was used along with chamomile, mallow and other ingredients as a bath for melancholy. Flowers have been extensively used, boiled with lard, as a salve for ulcers, burns and open sores. A strong infusion was used to stop coughing spasms.

Old herbal remedies stated the head should be washed with the distilled herb for loss of senses and apoplexy (loss of muscular control),

and, boiled in wine, is good for inflammation of the eye or other parts of the body. The herb is considered to have emollient (soothing) and carminative (expelling gas in the digestive tract) properties.

Yellow Sweet Clover is highly regarded as a bee plant for honey production and also as a green manure for hay and pasture. It has the abilty to withstand dry, sterile soils, to produce nitrogen in the soil, as do most legumes, and is a better seed producer than White Sweet Clover. For pasturage, this legume is thought to cause less bloat among livestock than some other legumes. It has been used in the food of cattle to whet their appetites. Coumarin in the clover may become toxic in improperly cured or spoiled hay but varieties have been developed which lack coumarin. Characteristics of the disease produced by improperly cured hay are low clotting ability of the blood and extensive hemorrhages.

Stem, leaves and flowers of Yellow Sweet Clover have also been used in dyeing which produce yellow, gold and brown hues.

As you can see, although these plants are not native to our flora, they have many useful properties. Since they are so prevalent, it is unlikely that we will be able to remove them from our landscape, so we should enjoy them for their many wonderful qualities.

IS THE GRASS LAWN A RELIC OF THE PAST?

Besides the automobile, the dishwasher and the frequent-flyer coupon, one thing the 20th century has learned to rely on is the lawn: a fine, green, smartly cut lawn, with a texture not unlike the flat topped hair cut.

Like the flat-top, neatly manicured lawns proliferated in the 1950's as suburbia become the promised land for the middle class.

For centuries, lawns had been mostly weeds and wild grasses, serving primarily as backdrops with which to showcase flowers, trees, shrubbery and ornaments. But, as millions of people migrated to the suburbs, the grass lawn became the ultra-civilized standard of beauty, a property value enhancer, a place for children to play, the royal carpet on which Dad grilled his famous cheeseburgers.

The grass lawn demanded a lot of attention, a lot of mowing, a lot of chemicals and a lot of water. Now, as people fret over how the spring and summer will treat their lawns, praying that the searing heat and desert dryness of last year don't besiege this ailing landscape once again, a small band of naturalists is renewing a call to return lawns to their natural prairie state.

One of the leaders is Lorrie Otto a naturalist and lecturer from Bayside, Wis., a Milwaukee suburb, who says turning a lawn into a prairie meadow is a gift to America, kinder and gentler than continuing to besot the land with chemical fertilizers, than continuing to exhaust drinking water for what she says is a questionable cosmetic purpose.

Prairie flowers don't need the water chemicals and consistent attention lawns require, Otto says, and what's more, they're beautiful.

Her front lawn, for example is a great shock of yellow. It conprises, among other varieties, perennial sunflowers, black-eyed Susans, wild asters, prairie coneflowers, wild bergamot, prairie dock and prairie goldenrod. (The goldenrod does not cause hay fever, she says, although the myth has the persistence of a perennial.)

"We should celebrate where we live," Otto says. "We have these marvelous flowers that were here before the pioneers arrived. This vegetation has adapted to the soil and water and conditions, and we don't hace to waste drinking water, and we don't have to make a lot of noise." In case you didn't get it, Otto isn't crazy about lawn mowers.

If you must have a lawn for recreation and outdoor barbecuing, retain a little grass in part of your back yard,, she says, and that'll take care of it .

But converting to a prairie meadow may require a little courage. Some people who've done it have drawn their neighbor's nasty looks and, in extreme cases, threats.

According to the National Geographic Society, a family near Buffalo, NY received threats that their house would be burned down. On top of that, their cat was stoned, birds were shot on their property and a court fined them $100 for "creating conditions hazardous to health."

Otto's response to that event was anger, of course. "These people should be honored instead of being dragged into court," she says.

She understands that aesthetic standards don't change easily, however, and adds that neighbors and even courts can be persuaded that prairie gardens are not dangerous or ugly.

Twenty years ago, when Otto planted her prairie garden, a neighbor reported that property as abandoned and the city mowed it down, she says. Then she brought an inspector and the city attourney to her home and showed them that the vegetation was not noxious weeds but flowers, time-honored flowers that dotted the landscape before settlers began appearing in the Upper Midwest.

"They felt terrible," she says, "and the city paid me for the damage."

Since them, Otto says, many of her neighbors have come to love her garden, and six have converted their front lawns to similar prairie meadows.

Otto ways although wildflower gardening is low-maintainance, it is not maintainance free. It requires some weeding, mulching and feeding, cut after two or three years, the required amount of attention drops off considerably.

You can't say that about lawns.

by Aron Kahn, Knight-Ridder Newspapers
Kansas City Star, April 27, 1989.

LETTER FROM THE EDITOR

On my way to the December 1985 board meeting at Burr Oak Woods, Blue Springs, Mo., I never felt a premonition of change. The hair never raised on the back of my neck. No cats of any color crossed my path. I walked into that meeting a mild-mannered wildflower enthusiast and walked out a newsletter editor. And now, with 24 issues of Petal Pusher under my ribbon, I still wonder about the newsletter gods and their perverse sense of humor. But, then, perversity in the Universe tends toward maximum.

Four years later, it is once again time for a change. This is the last issue of this newsletter for me. Sylvia Forbes of the Columbia chapter will be your new editor.

I'd like to thank all of you who managed to take notes on field trips and sent me great articles of our outings.All of you who listed plant finds, made maps, organized lodging. All of you who wrote down impressions of your travels. All of you who send notice of new plant finds. It is not the editor who makes a newsletter, it is the readers. This newsletter has been an amalgam of your concerns and joys. If it has worked for the society, it is because you have worked, too.

I need to concentrate on Flora of Missouri project now . I think that is enough for anyone. So, I will end this editorship with an old Chinese saying: (S)He that knows that enough is enough, will always have enough.

Sincerely,

Linda J. Ellis