

A non-profit organization committed to the preservation and reestablishment of native wildflowers grasses.

Mark your calendar for the annual

Night of the Wildhowers: Burlap and Blooms at the Backyard

Saturday, October 15, 1994 The Backyard at Bee Cave (outside Austin) Featuring Kelly Willis

Night of the Wildflowers, the annual fundraising event of the National Wildflower Research Center's Wildflower Associates, will be held on October 15, 1994 at the Backyard at Bee Cave. More than 600 people will gather in the natural amphitheatre under the oaks to enjoy regional Texas cuisine, dancing to the music of Kelly Willis, and a silent auction featuring get-away vacations, arts and crafts, and more Tickets are \$50

per person and underwriting opportunities are available. Please contact the Center's Development Office at (512) 929-3600, for more information and to be added to the invitation list. The Wildflower Associates currently has a membership of about 90 active Austinites, who serve as advocates for the Wildflower Center throughout the community Funds raised by the Wildflower Associates are used for educational programs at the Wildflower Center.



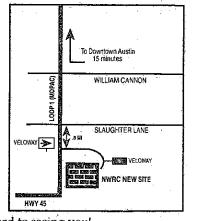
Embroidered patches and enameled metal lapel pins with the oval Wildflower Center logo are now available. The green and white patches are 2-3/4" x 2", and the pins are 3/4" x 1/2" Each is \$7.00 postpaid. To order, send check or money order, with a note, to the National Wildflower Research Center, Department DB. Show your support of the Center by wearing these attractive accessories.

New Site Preview Featured at Membership Open House

The Wildflower Center staff invites you to a members-only VIP tour of the new facility during the annual Membership Open House and Ice Cream Social Join us Thursday, August 4, 1994 from 5:00 to 7:00 p m, for a sneak preview of our beautiful new site in southwest Austin Take a tour of the new facility-in-progress, register for exciting door prizes, and enjoy an evening of bluegrass music and Austin's own Amy's Ice Cream

Our Grand Opening is scheduled for April 1995, but for now we'd love to show you the buildings and site and share our plans for expanded educational programs. We hope you'll be among the first to see our new home at 4801 La Crosse Avenue, Austin, Texas (see map)

Currently the site is not open to the public, but we are making an exception for the Membership Open House. Please let us know if you are coming so we can comfortably accomodate all members wishing to attend Call our toll free number, 1(800) 925-1835, and give our RSVP answering machine your name and the number attending (Immediate family members are welcome.) The site will be cleared and cordoned off to ensure your safety, however, all guests will need to sign a release form. We look forward to seeing you!



Striving to serve our members better!

The Wildflower Center's members are very important to us. You are our most important friends, our ambassadors, our educational outreach, and you also provide an important source of information to us. In a sense, you are both our employers and our customers, providing important financial support and supporting our mission through your words and actions

We realize that over the last several months we have been unacceptably slow in processing annual dues payments and benefits. If you have called or written our Membership Office to notify us of these delays, thank you. If you have suffered quietly, we appreciate your patience and support. It has taken several months to install our new computer system; however, it is now

fully operational, friendly, and should serve us well in the years to come.

In order to better serve you, we have added a wonderful new person to our Membership Office, Brenda Cardenas. Please write Brenda if the interval between the mailing of your membership payment and receipt of your membership card was longer than three weeks. She will adjust your annual cycle to the date we responded, not the date you paid.

It's been nearly ten years since the start of our membership program. We have tried to be responsive, provide positive membership benefits, and we are proud of our record over these years of growth. We have enjoyed reading the many letters written to us by our satisfied members. However, the letters of complaint we have earned over the past several months have truly

distressed us. I want you to know we are working hard to deserve your loyalty and support and I personally apologize for any inconvenience these delays may have caused. Ours is an important mission and, with your continued support, we will be effective in its pursuit. Please let us know how we can serve you better.



David K.
Northington, Ph.D., is the Executive
Director of the
National Wildflower
Research Center:

Wildflower

Founder: Lady Bird Johnson

Executive Director: David K Northington, Ph.D.

Editor: "F. M. Oxley

Graphic Designer: Elaine Walker

Copy Editors: Angela Barton, Julie Barrett Heffington

Illustrations: Barbara Brooks Clubb, Faith Addison

Wildflower (ISSN 0898-8803).
Published bimonthly. A portion of \$25 membership dues pays for your annual subscription to Wildflower, National Wildflower Research Center, 2600 FM 973 North, Austin, TX 78725-4201. Phone: (512) 929-3600. Material may be reprinted with the permission of the editor. Second class postage paid at Austin, Tayae.

POSTMASTER: Send address changes to Wildflower, NWRC, 2600 FM 973 North, Austin, TX 78725-4201:

WILDFLOWER CENTER NEWS

The Wildflower Center Education
Department is co-sponsoring Camp
Wildflower! this summer with the University of Texas Outreach Office. The two week program is designed to teach young Hispanic girls about native plants, the ecosystems in which they live, and teach the girls the skills needed to help improve the environment

CBS This Morning broadcasted live from the greenhouse during the Wildflower Center's busy spring season. Resource Botanist Angela Barton spoke with Harry Smith about endangered plants and the various non-endangered species growing at the Wildflower Center.

The Discovery Channel interviewed Education Director Julie Barrett Heffington and Horticulturist Denise Delaney for a feature on wildflowers. Filmed on the Wildflower Center grounds, the interview is scheduled to air nationally in August

Publicity and Marketing Manager, Patricia Alholm, attended an International Marketing Workshop in May sponsored by the Texas State Department of Commerce Tourism Division. The workshop focused on working with the tourism industries in Mexico, Japan, Canada, Germany, and the United Kingdom.

The Wildflower Center was enthusiastically received at the National Tour Association Spring Exchange in Memphis this past April A Wildflower Center representative participated on the exchange floor of the NTA Spring Exchange

The Wildflower Center extends a big THANK YOU to our Wildflower Days Festival sponsors: Newsradio 590 KLBJ AM, HOT 93.3 KHHT, Bartlett Cocke/Austin Commercial, Above & Beyond Travel, and the Wyndham Austin Hotel Your sponsorship helped make the Festival a fun and educational success.

Thanks also are due to KKMJ MAJIC 95.5 FM for sponsoring our Wildflower Hotline again this year. The Hotline typically receives more than 4,000 calls over a two month period and highlights the best wildflower viewing spots in Texas.

CONTAINERIZE NATIVE SUMMER COLOR

The days are longer and hotter, sure signs that summer is upon us. The summer months are generally not the best time to plant anything, however, planting in containers provides a viable option.

ADVANTAGES

Plants grown in containers provide an instant splash of color, can be moved when light conditions change, are readily available, and easier to access than ground-level plantings. They also are a great way to introduce children to the pleasures of growing plants.

CHOOSING THE CONTAINER

Choose the plants first or the container first, it doesn't really matter as long as you choose an appropriate size plant to go with an appropriate size container. Consider the mature size of the plants and aim for about a 1:1 or 2.1 ratio of foliage to root system. For example, one purple coneflower has a maximum size of 12 inches across and fits nicely in a 10-12" pot. Larger pots can accommodate more than one species of plants.

You can use just about anything that will hold media and water as a plant container It's best to choose something that will allow drainage or you run the risk of over-watering and suffocating the root system. There are the good old standbys such as whiskey barrels, clay pots, wooden boxes, or the whimsical such as an old wagon, a hollowed out tree stump, or old watering can Consider the space you would like to place a container in and make your selection based on the size, shape, color, and cost. For interest, try grouping several containers of varying sizes. Designs look more natural and less contrived if they are grouped in odd numbers. If you don't have any patio or step space, try a hanging basket or window box. Be creative!

CHOOSING THE PLANTS

When selecting plants, keep in mind their light and water requirements, growth habit, shape, texture, and color. Definitely try some native plants. Bunch grasses add a nice, fine texture. Many annual and perennial wildflowers are now available container-grown from nurseries. Experiment with a mini-wildflower meadow. Choose three to five species that will compliment each other. Use something evergreen as a base, a species that will cascade over the side,

and other plants that will provide interest and color



CHOOSING THE MEDIA

It's best not to use soil directly out of your garden because it tends to compact, detering healthy root systems. Regular garden soil may also contain pathogens which can introduce diseases to your plants. Most plant roots need water and air at the same time in order to thrive, your potting mix needs to have a high water holding capacity and pore spaces to provide aeration Many different potting mixes are available commercially. Read the label carefully for content. Many tend to have a high percentage of peat moss, which, when wet, holds ten times its weight in water, but is very hard to rewet. A drop or two of very mild dishwashing detergent will help break the surface tension and make wetting the peat moss easier A 1.1.1:1 mix of peat moss, perlite, vermiculite, and potting soil is a good allpurpose media. There are numerous other possible combinations of media components depending on availability, cost, etc. If you mix your own media, be sure to mix it in a well-ventilated area.

PLANTING

To prevent soil from washing out of the drainage holes, place some cracked pieces of pot, a wire mesh screen, or some large rocks on the bottom of the pot. Saucers



are considered optional unless water draining from the bottom of the pot is a problem.

When removing the plant from its original container, check to see if the root system is healthy. Healthy roots should be a whitish color, with no signs of mushiness. If the roots have become compacted and are growing in circles in the bottom of the pot, cut the circular roots off. Plant so the roots are at the same level as in their original container. To make watering easier and less messy, leave an inch or two of space between the top of the pot and the media line. Water thoroughly

WATERING AND CARE

The best way to determine watering needs is to stick your finger into the media about one inch. If it's moist, don't water. If on the dry side, water to completely moisten the media. It sounds very simple, but more plants die from improper watering than for any other reason.

Because the soil provides insulation for the roots, plants in pots will always dry out quicker and freeze sooner than plants in the ground. Smaller pots, hanging baskets, and pots exposed to hot, dry conditions will need to be watered more frequently. Clay pots dry out quicker than plastic; dark colored pots faster than light colored pots. During the summer months, you may have to water every day.

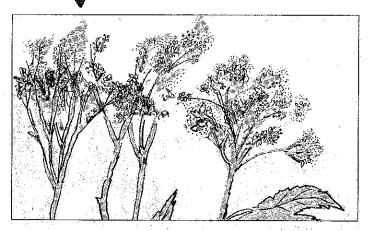
If you use a soilless media, there won't be much nutrition available for the plants. Using a diluted water-soluble fertilizer such as fish emulsion or seaweed, or adding some slow-release fertilizer pellets when planting will supply your containerized plants with needed minerals and nutrients

Add a little bark mulch or sphagnum moss to cover the media. This helps retain moisture and gives the pot a finished look

Just because you don't have room for a wildflower meadow or habitat garden doesn't mean you can't have a little wildness on your doorstep or patio Planting natives in containers is also a great, inexpensive, easy and fun way to spend a summer afternoon

Denuse D. Delaney Horticulturist National Wildflower Research Center

MOTEBOOK



Botanical Name: Filipendula rubra

Pronunciation: Fil-1-pen'-dula ru'-bra

Common Names: Queen of the prairie, meadow sweet Family Name: Rosaceae (Rose Family)

Range: Pennsylvania to Minnesota and southward to Georgia and Kentucky Habitat: Moist prairies and

open places **Bloom Period:** June through
August

Rising regally above the lush wildflowers of the eastern Great Plains region, the majestic Queen of the prairie is easily recognized by its height. The slightly hairy, branched stem of Filipendula rubra grows up to eight feet tall and supports a feathery cluster of peach to pink tinted blossoms.

The tufted blooms of the Queen of the prairie are as impressive as the plant's

stature. Although individual flowers are small, approximately 1/2 inch across, they form a cluster at the stem apex that can be four to 10 inches across and up to one foot long. Stamens are long and plentiful, about 20 to 40 for each flower, and resemble plumage.

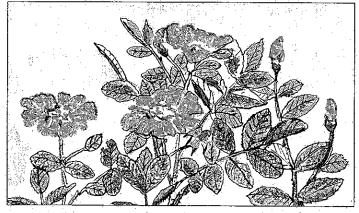
Large pinnate leaves may reach three feet in length and are alternately arranged along the stem. Lateral leaflets, deeply cut to form up to five lobes, are oppositely attached to the rachis. Much larger in size than the other leaflets, the terminal leaflet has seven to nine coarsely serrated lobes.

The fruit of Filipendula rubra is a smooth, narrowly shaped, one-seeded capsule which is slightly twisted. The seed matures four to six weeks after the flower blooms.

Because of its stately beauty and easy cultivation,

Queen of the prairie is much sought after by gardeners. Because Filipendula rubra spreads naturally by rhizomes, propagation by division is the most rehable method. Ideal times for root division are spring, prior to leaves emerging, or fall, before the plants become dormant. Seeds may be sown immediately upon collection.

Filipendula rubra has an interesting history as a medicinal plant. Used by Native Americans and pioneers as a mild analgesic, research has shown Queen of the prairie contains salicylic acid which has the same properties as aspirin Teas, decoctions, and tonics made from the plant were used to treat influenza, arthritis, fever, and bladder ailments. An astringent was also made from the plant and used to soothe skin rashes and blemishes.



Botanical Name: Rosa arkansana Pronunciation: Ro'-za ark-ansan'-a

Common Names: Wild rose, prairie wild rose, pasture rose, cattle rose

Family Name: Rosaceae (Rose Family)

Range: New York to Alberta, southward to Texas and Colorado

Habitat: Prairies, ravines, stream banks, roadsides and railroads

Bloom Period: May through August

Although less showy than the cultivars, our native roses have a character that cannot be recreated. *Rosa arkansana*, also known as the wild rose, is one of the most beautiful indigenous North American roses.

During the months between May and August, the fragrant pale pink blossoms of this low growing shrub can be seen along stream banks, roadsides, and in prairies. Flowers are composed of five petals and five sepals with many stamens and pistils. The blossoms are one to two inches across and clustered in groups of three or more at the ends of prickly branches.

Pinnate leaves are alternately arranged along the

stem and each leaf bears between nine and eleven leaflets.

By August and September, the fruits, known as "hips," ripen. For centuries, rose hips have been used as a source of food and medicine. Claimed to be an excellent source of vitamins C and A, rose hips have been used to alleviate fever and other cold symptoms. Other parts of the plant, including the root, bark, and insect galls, were used to prepare medicinal teas or poultices.

During medieval times in Europe, people dried rose hips and strung them together to form prayer beads. It is from this custom we have the term "rosary" today.

July/August 1994



Fifth International Symposium on Earthworm Ecology, July 4-9, Columbus, OH Contact: Clive A. Edwards, Dept of Entomology, Ohio St. University, 1735 Neil Ave, Columbus, OH 43201, (614) 292-8209.

Native Plants in the Gardened Landscape, July 7 or 8, Kennett Square, PA Course offered from 9am-12 noon Preregistration required Contact: Longwood Gardens, PO Box 501, Kennett Square, PA 19348-0501, (610) 388-6741.

Wildflower Discovery Workshop, July 10, Storrs, CT Connecticut State Museum of Natural History workshops for grades 9 to adults. Registration required in advance Contact: Carol Davidge, (203) 486-5690 or 486-4460

Sustaining the Ecological Integrity of the World's Largest Floodplain, July 12-15, LaCrosse, WI Co-sponsored by Ecological Society of America, Contact: Terence Boyle, Natl Park Svc., Aylesworth NW, Colorado State Univ., Fort Collins, CO 80523

14th North American Prairie Conference, July 12-16, Manhattan, KS Contact: NAPC, Kansas State Univ Div of Continuing Ed., 247 College Court Bldg, Manhattan, KS 66506-6006, (913) 532-5566.

Rangelands in a Sustainable Biosphere, July 23-28, 1995, Salt Lake City, UT International Rangelands Congress Contact: General Secretary, 5th IRC, P.O. Box 11637, Salt Lake City, UT 84147, (801) 524-5054

Berkshire Botanical Garden Plant Society Fair, Aug 6, Stockbridge, MA The fair is part of Garden's two-day Summer Festival and 25th Annual

Flower Show. Contact: Berkshire Botanical Garden, PO Box 826, Stockbridge, MA 01262, (413) 298-3926.

Soil and Water Conservation 49th Annual Meeting and Expo, Aug 7-10, Norfolk, VA "Catch the Conservation Wave" Contact: (800) THE-SOIL or 843-7645.

Science & Public Policy, Aug. 7-11, Knoxville, TN. Ecological Society of America and American Institute of Biological Sciences annual meeting. Contact: Louise Salmon, AIBS, 730 11th St NW, Washington, DC 20001, (202) 628-1500.

AHS National Children's Gardening Symposium, Aug. 12-14, Chevy Chase, MD. Educational plant and gardening programs for children Pre-K through 8th grades. Contact: (800) 777-7931.

Ecological Progress to Meet the Challenge of Environmental Change, Aug 20-26, Manchester, England Contact: Secretary, Sixth International Congress of Ecology, Dept of Environmental Biology, The University, Manchester M13 9P1, UK.

Native Plant Seminar and Sale, Aug. 26, Stevenson, MD Contact: Irvine Natural Science Center. (410) 484-2413.

Issues in Landscape Planning, Restoration and Management, Aug. 26-27, McLean VA. The 1994 Eastern Native Plant Alliance Meeting. Contact: Greg Edinger, (215) 862-2924.

Native Plant Society of New Mexico Annual Meeting, Aug. 26, Santa Fe, NM. Contact: NPSNM, 465 Salopek #8, Las Cruces, NM 88001.

Travel Opportunities for Wildflower Center Members

The National Wildflower Research Center has successfully completed the 1994 Ecotour program and 1995 promises to be even more exciting! Although the Wildflower Center's travel program is over for the year, we are aware of some other travel opportunities we thought might interest our members. Call our Travel Office for details on these other exciting trips!

• Maine's Acadia National Park is where land and sea collide to create a diversity of habitats un-matched on the

Atlantic Coast. Mt. Desert Island has one of the richest assortments of wildflowers in the northeast and the birding is equally spectacular Acadia is also beaver country and home to white-tailed deer, otters, red foxes, and bobcats. Tours offered July through October

 South Dakota's Custer State Park, recently named one of the ten best state parks in America by National Geographic Traveler magazine, is home to one of the largest herds of bison, as well as pronghorn, mule deer, elk, hawks, and bighorn sheep The area's fabulous wildlife watching is set against a distinctive backdrop of jagged granite spires, ponderosa pines, and rolling prairie. Bring a camera and plenty of film! Tours offered during September.

 Autumn in the heart of Vermont: a light frost retreating from the sun's morning rays, gentle breezes rustling

kaleidoscopic leaves; fall migrants on the move; resident wildlife busily harvesting nature's bounty; crystal clear panoramic views. New England's fall foliage is the best in the world, with sugar and red maples producing the most brilliant shades of

read on page 6

red, yellow, and orange Fall tours offered September and October July tours are also available and feature the blooming arctic tundra atop Camel's

Hump and Mount Mansfield

• The topography, geography, and geology of Vermont's Green Mountains join to create an interesting mix of forest types. Moist hemlock ravines, dry oak-hickory woodlands, northern hardwoods, and patches of boreal forest offer a diverse array of wildflowers and wildlife Meadow wildflowers.

abound and fruits and seeds are maturing during the late summer and early fall. Watch swallows, flycatchers, and other insectivorous birds pursue their quarry by day and bats on the wing at night. Tours offered during July and September.

• Summer in New Hampshire's White Mountains is the perfect time to investigate a sparkling alpine lake, learn about forest ecology, or head above the tree line to Mt. Washington's Alpine Garden in search of arctic wildflowers. Fall in the White Mountains is unsurpassed, with the glistening white bark of paper birches contrasted against the dazzling colors

of the fall foliage Tours offered August through October

• Autumn in the Shenandoah National Park brings its own beauty as the fall foliage sets the mountains ablaze and wildflowers carpet the forest floor Stroll the scenic trails listening for woodland songbirds and watching for whitetail deer, black bear, fox, or even a bobcat Tours offered during October

For more information on these exciting tours, write to. Travel Office, National Wildflower Research Center, 2600 FM 973 North, Austin, Texas 78725-4201 or call 512-929-3600

Natives Naturally! Join the National W Members of the National Wildflower Research Center support wildflower and other native plant work across the nation. Benefits include Wildflower, the newsletter and Wildflower, the journal; 10% discount on unique Center products such as wildflower books, calendars, and T-shirts; advance notice on tours and discounts to Center seminars; free wildflower information from the Center's Clearinghouse; a membership card; and other benefits. \$25 Supporting Member. All benefits listed above	Please enter a membership in the category checked at left: Name:
 \$50 Sustaining Member. All the above plus a set of specially commissioned wildflower note cards. \$100 Key Member. All the above plus wildflower fote bag and invitations to special events. \$250 Center Sponsor. All the above plus full-color wildflower address book. 	gift, please enter your name and address below Donor Name: Address. City/St./ZIP: Phone:
5500 Frust Member and \$1,000 Benefactor. All the above plus special privileges. Thank your Your contribution is partially tax deductible. Contact the Development Office for detailed information on tax-deductibility.	 Make your check payable to. NWRC Mail to. Membership, National Wildflower Research Center, 2600 FM 973 North, Austin, TX 78725-4201 11/4

NATIONAL WILDFLOWER RESEARCH CENTER 2600 FM 973 NORTH, AUSTIN, TEXAS 78725-4201

Second Class Postage Paid at Austin, Texas

NATIONAL WILDFLOWER RESEARCH CENTER 4801 LaCrosse Blvd. Auslin, Texas 78739 (512) 292-4200

Wildflowers Work!

Volume II Number 4 July/August 1994.

Printed on recycled paper