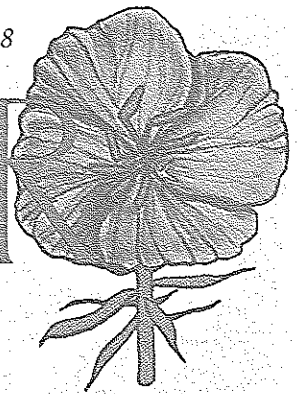


# WILDFLOWER



A nonprofit organization dedicated to researching and promoting wildflowers to further their economic, environmental, and aesthetic use.

## National Jubilee Honors Lady Bird Johnson

Springtime and its blossoms in Washington, DC, will be the backdrop for April's exciting Jubilee Celebration honoring Lady Bird Johnson's 75th birthday. On April 28 and 29, friends and admirers will gather in the nation's capital to pay tribute to the woman who propelled the beautification of America and the conservation of its resources to the forefront of the nation's conscience. Since her White House days, Mrs. Johnson has dedicated her life to preserving and promoting this country's natural heritage.

Friends and admirers of Lady Bird Johnson are invited to attend tours and special exhibits on April 29. The afternoon and evening activities include receptions and a dinner in the magnificent, recently opened Enid A. Haupt Garden at the Smithsonian Institute, and at the Hirshhorn Museum and Sculpture Garden. A reception in the Botanic Garden on the Capitol grounds and an open-air concert on the West Lawn of the Capitol will round out the day's events.

The National Wildflower Research Center, founded by Lady Bird Johnson in 1982, is the beneficiary of all proceeds from the Jubilee Celebration. Supporters of the Wildflower Center and friends of Mrs. Johnson are invited to join in this festive celebration. Call or write the Center for information on how you can participate.

*Marilyn Latting is Development Director at the National Wildflower Research Center.*

Thursday, April 28, will be a day of congressional tributes and accolades for Mrs. Johnson. At 11:00 A.M. the House of Representatives will hold a special ceremony to read resolutions passed in her honor. Souvenir programs will be distributed to guests. Following a congressional luncheon for the former first lady, the Senate will hold a similar ceremony at 1:00 P.M. President Reagan will present Mrs. Johnson with a congressional gold medal in recognition of her humanitarian and beautification efforts. An elegant dinner in Statuary Hall in the Capitol will conclude the day's activities. President and Mrs. Reagan, Mr. and Mrs. Richard M. Nixon, Mr. and Mrs. Gerald R. Ford, Mr. and Mrs. Jimmy Carter, Speaker of the House and Mrs. Jim Wright, Jacqueline Kennedy Onassis, and Mrs. Muriel Humphrey Brown are serving as honorary chairmen for the Jubilee Celebration.

## Limited Spaces Left For England Tour

England's reputation for fine formal gardening is known throughout the world. But lesser known is England's dedication to preserving its treasure of unique and varied wildflowers and native plants. The diversity of meadows, ponds, coastal and woodland landscapes provides England with a panorama of wildflowers, from common roadside species, to regional and exotic species found in its many nature reserves.

of England will showcase England's finest public and private gardens and nature reserves. Members of the tour will have the privilege of viewing secluded private parks and gardens, accompanied by knowledgeable guides and experienced botanists. In addition, tour members will enjoy the best of English hospitality while staying in private homes.

The Wildflower Center's second tour of the Wildflowers and Gardens

Registration deadline is March 15, 1988. Space on this tour is strictly limited to 22. For information call Wendy Wood at (512) 929-3600.



## President's Report

As of December 22 just past, we have completed the fifth year of our existence as the National Wildflower Research Center. Thanks to our founder, Lady Bird Johnson, a superb Board of Trustees, a highly supportive membership, and an inspired and motivated staff, we have made considerable progress. Our membership now numbers over 8,000. We are on the threshold of a venture that bodes well for our country, for it is so right.

We are deeply grateful to you for your most generous response to my end-of-year appeal. Your contributions will help narrow the shortfall I mentioned in my letter to you.

Our hard-working Lady Bird Johnson Jubilee Celebration Committee, headed by Dorothy McSweeney of Washington, DC, is arranging numerous events for this spring. We are indebted to Dorothy and her committee for the splendid manner in which they are organizing the celebration.

Thanks to the generosity of the American Conservation Association, the first edition of *Wildflower*, the Journal of the National Wildflower Research Center, came

off the press in January. ACA made us a grant of \$25,000, which will enable us to publish the first two issues of the Journal.

Through the kindness of the Meadows Foundation, of Dallas, we will be filling the position of Research Director for the first time. This much-needed position will enhance our research program and relieve our Executive Director, David Northington, to pursue other projects that await him in the wings.

*Wildflowers Across America*, the Lady Bird Johnson and Carlton Lees book, is coming off the press in the spring. Produced by the prestigious Abbeville Press, of New York, the 318-page book will contain some inspired and inspiring text, as well as 400 full-color illustrations.

The clothbound edition of the 9-by-9 inch book will be priced at \$39.95. A Special Collectors' Edition, signed by the authors and bound in fabric from the Hinson Collections' *Wildflowers of America*, inspired by Mrs. Johnson, will cost \$95.

One of my objectives for 1988 is to convene a national conference of

wildflower organizations, of which there are a considerable number throughout the United States. My purpose is to exchange information so that we do not duplicate each other's work. With this in mind, I have made a grant application to a private foundation and am optimistic that it will be approved.

Another of my objectives is to provide a more permanent headquarters site and building for the Center. Our present building, of the Butler type, is functional, but we need a structure that is more substantial, more lasting. In this respect, I am in touch with a foundation in the hope that it will help us underwrite the cost of the new building.

Thank you again for your continuing support. I trust that 1988 will be a year of great happiness and health for each of you.

Nash Castro is President of the Board of Trustees of the National Wildflower Research Center.



## Spring Is Alive With Wildflower Activities!

◦ Celebrate the Fifth Birthday of the National Wildflower Research Center at a special Membership Spring Festival on Saturday, March 26. This annual spring event is the Center's way of saying thank you to its members. A number of wildflower seedlings, which were used in the fall for greenhouse research, will be on sale that day. In addition there will be unique activities to educate and entertain you. Your invitation will arrive shortly.

◦ From April 12 through May 22, the Wildflower Center will open its doors for the 1988 Spring Season. Come out and learn about the Center in a short audio-slide program, wander through the research plots, observe wildflower propagation in the greenhouse, take note of the native plant landscape around the buildings, and

pick up informative fact sheets on where, how, and what to plant in your area. Visiting hours are T-Th from 10:00 A.M. to 1:00 P.M., and Sundays from 1:00 to 3:00 P.M. Wear comfortable clothes and walking shoes. If you have a group of ten or more, please call ahead for reservations. The days fill up fast, so call Peggy Budd at (512) 929-3600 for reservations.

◦ The Wildflower Center's annual Spring Seminar will be on Thursday, April 14. Entitled *Wildflowers of Central Texas: From Seeds to Scenery*, the sessions will include an overview of Texas ecology, by David Diamond from the Natural Heritage Program; tips on wildflower identification by Marshall Enquist, author of *Wildflowers of the Texas Hill Country*; the wonders of seeds by Elinor Crank,

Wildflower Center botanist; and the secret to good wildflower photography by John Smithers of DeHart Media. Two duplicate sessions will be held from 8:45 A.M. to noon, and 6:15 to 9:30 P.M. at the LBJ School of Public Affairs, Austin, Texas. Register by mail or at the door, prior to each session. Tickets are \$10 for members and \$25 for non-members. For more information, call Beth Anderson at (512) 929-3600.

◦ Spring Wildflower Days will be the weekend of April 16 and 17 from 10:00 A.M. to 4:00 P.M. each day. These special shopping days at the Wildflower Center feature wildflower gifts, artists at work, wildflower walks with Center botanists, refreshments, and much more! Look for more details as spring approaches.

# Wildflower Photography

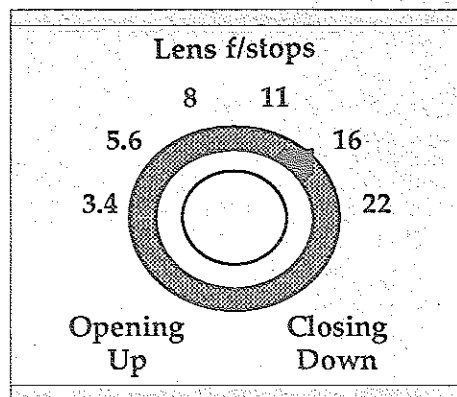
Spring's dazzling displays of wildflower color are just around the corner and now is the time to review some basic tips for wildflower photography success.

Photographers are artists who use cameras and film instead of paints and canvas. Just as in painting, there are many ways to compose a pleasing photograph.

Controlling the depth of field is one of the most common methods. Depth of field is the amount of foreground and background that will be in focus with the subject you are photographing.

Adjusting the aperture setting (f-stop) is one way to control the depth of field. Remember, when the aperture number is higher, the aperture opening is smaller. This creates a deeper depth of field. When the number is lower, the opening is larger, creating a shallower depth of field.

Most single lens reflex (SLR) cameras have a preview button that allows you see which objects will be in focus at a given aperture setting. Only a few of the new all-automatic cameras have this feature.



## Deep Focus

Deep focus allows you to integrate the subject of a photograph with its surroundings. The subject will be in focus, as will objects in the foreground and background. There are several ways to achieve deep focus in a photograph.

Back-up a little. The closer the subject is to the camera lens, the less

there will be in focus in the foreground and the background. This is called a shallow depth of field. Taking a close-up shot of a single flower or bloom may cause the surroundings to be blurred. By backing away from the subject, you can include more foreground and background in the focused area. As this will make the subject appear smaller, you may need to recompose your photograph.

Use a wide-angle lens. Wide-angle lenses have a greater depth of field than standard lenses. They make objects in the background appear smaller than normal and increase the illusion of depth. A wide-angle lens would allow you to shoot a close-up photograph of a wildflower and keep the tree-covered hills in the distant background in focus. A 50mm normal lens at f/16 would require you to be 9 feet from the wildflower, but a 28mm wide-angle lens allows you to be as close as 3 feet from the wildflower, while keeping the distant hills in focus.

Use a higher aperture number. Use any lens and switch your camera to manual or aperture priority mode. Select a higher aperture number (f/8 to f/32) to increase the depth of field, but remember to slow the shutter speed or you will underexpose the shot. A flash or reflector can be used to make up for the lost light when using a higher aperture setting. Use the preview button to check the clarity of the elements you want in focus. A word of caution: using slower shutter speeds on a windy day may cause wildflowers to be blurred in your photographs. On those days try to take your photographs just before dusk and after dawn when there is less wind.

Use a higher speed film. ASA 200 or 400 films allow you to close down the aperture a stop or two more than slower films, while using the same shutter speed. Closing down the aperture setting increases the depth of field. Keep in mind, however, that higher speed films look grainier, have higher contrast,

and are less colorful than slower films. Since the color of wildflowers is important, I recommend you use slower speed film and a tripod.

## Selective Focus

Selective focus allows you to isolate the subject of a photograph from its surroundings. The subject will be in focus, while background and foreground objects will be out of focus. There are several ways to achieve selective focus in a photograph.

Use a lower aperture setting (f/8 or f/5.6) and increase the shutter speed to compensate for the extra light on the film. This will allow you to photograph a close-up of a wildflower, selectively focusing on the pistil and stamens, but keeping the petals as a soft-focused background. Selective focus can be used to isolate a patch of wildflowers from grass in the foreground and shrubs in the background. Focus on the wildflower, then while using the preview button adjust the aperture until the surrounding area becomes blurred. Now adjust the shutter speed.

Move closer to the subject. Just as backing away from the subject will increase the depth of field, moving closer will create a shallower depth of field, isolating the subject from its surroundings.

Use a telephoto lens. Telephoto lenses decrease the illusion of depth and make background objects appear larger than those you see with a normal or wide-angle lens.

## Using a Tripod

Blurred photographs can be the result of incorrect focusing or movement of the camera while the photograph is being taken. A tripod holds the camera steady and allows you to use slower shutter speeds while patiently composing the photograph. If possible, always use a tripod when photographing wildflowers.

*John DeHart Smithers is the owner of DeHart Media in Austin, Texas and is the photographer for the Wildflower Center's Seeding Identification Project.*

# A Sage For All Times

The genus *Salvia* is a member of the Labiatae or mint family. There are hundreds of species of *Salvia* throughout the world, but the majority are located in temperate and tropical regions. Texas has 23 species, from tall mountain perennial species to low-growing ground covers. The colors range from red to blue. The common name for *Salvia* is sage.

*Salvia penstemonoides* is a rare sage endemic to the Texas Hill Country. The first documented sighting of the plant was in 1849, when it was discovered along Salado Creek near San Antonio. The last sighting of this plant was in 1946, until its rediscovery in 1987. The Big Red sage, as it is called, grows to 5 feet tall with crimson-colored blooms. This striking show would be hard to miss, so with no sightings since 1946 the plant was feared to be extinct.

Fortunately a local botanist, Marshall Enquist, unknowingly rediscovered the plant while taking photographs for his recently published book, *Wildflowers of the Texas Hill Country*. With

further investigation and the help of the local Native Plant Society, the Nature Conservancy, The State of Texas Heritage Society, the San Antonio Botanical Garden and a native plant grower (who had also discovered several specimens), over 250 individual specimens have been sighted.

Even though a large colony has been located, the plant is still in danger of extinction. Heavy browsing by deer and destruction of habitat still threaten the plant's survival. *Salvia penstemonoides* will be placed on the Texas Rare Plant List and possibly the national list.

The National Wildflower Research Center was given *Salvia penstemonoides* seed and now has 75 individual seedlings. These plants will be reintroduced into the wild as soon as they come of age. The Center is proud to be a part of this effort to help keep this rare and beautiful plant alive and flourishing.

*Elinor Crank is a research horticulturist at the National Wildflower Research Center.*



Rare *Salvia penstemonoides* (Red Sage) seedlings flourishing at the Wildflower Center.

## Texas Wildflower Hotline

Relatives visiting this spring? Looking for the best wildflower fields to photograph? The National Wildflower Research Center phones will be sizzling this spring with directions to wildflower hot spots throughout Texas. You can stay up-to-date on when and where to go for those spectacular photographs. From March through May, dial (512) 929-3607 for a recorded message of species in bloom and routes to travel. Grab your cameras and get ready for those glorious wildflowers!

## From the Field

March 3 - 4, 1988 - *High Altitude Revegetation Workshop*; Holiday Inn, Prospect Street, Fort Collins, Colorado. Special sessions dealing with adapted plant materials, current research, case studies in high altitude revegetation. **Contact:** Gary Thor, Department of Agronomy, Colorado State University, Fort Collins, CO 80523.

March 5 - 13, 1988 - *The 1988 New York Flower Show, Gardens of Springtime Delight* at Pier 90 New York. Displays and exhibits by regional botanical gardens, growers, and nurseries. **Contact:** The Horticultural Society of New York, 128 West 58th Street, New York, NY 10019 (212) 757-0915.

March 15 - 18, 1988 - *Third Annual Landscape Ecology Symposium, Observations across Scales: The Structure Function and Management of Landscapes*; University of New Mexico, Albuquerque. **Contact:** Bruce Milne, Department of Biology, University of New Mexico, Albuquerque, NM 87131.

March 19, 1988 - *Dyeing Eggs with Natural Plant Dyes*; State Arboretum of Utah, Salt Lake City. Learn to color eggs for spring using Navajo wool dyeing techniques. **Contact:** State Arboretum of Utah, Building 436 Room 116, Salt Lake City, UT 84112 (801) 581-6483.

March 21 - 22, 1988 - *Wildflowers for Landscaping and Natural Areas, A Conference and Art Exhibit on Wildflowers for Michigan* at the University of Michigan, East Lansing. **Contact:** Department of Park and Recreation Resources (517) 353-5190.

April 14, 1988 - *Wildflowers of Central Texas: From Seeds to Scenery*; LBJ School of Public Affairs, Austin Texas. Includes an overview of Texas ecology, tips on wildflower identification, and photography. **Contact:** Beth Anderson, National Wildflower Research Center, 2600 FM 973 North, Austin, TX 78725-4201 (512) 929-3600.

## Highway Legislation: An Important Step

A recent splash in the waters of federal legislation is making waves across the country, which should leave a wash of color in its wake. The Surface Transportation and Uniform Relocation Assistance Act of 1987, passed in April, mandates the planting of wildflowers as part of any landscaping project on the Federal Aid highway system. The regulation includes a waiver, stating that if a state certifies that natives cannot be grown satisfactorily, or if the planting areas are limited or needed for agricultural purposes, alternatives may be used. Another provision allows for the acceptance of native seed or seedling donations from civic organizations or individuals. The Federal Highway Administration (FHWA) added a final rule in September 1987 that requires 25 cents of every \$100 in federal highway landscaping funds be spent on native plantings. Kudos for this far-reaching legislation go to Senator Lloyd Bentsen (D-Texas), who was the major force behind the bill.

Though the planting of wildflowers along highways is not a new concept, the mandatory aspect presents a fresh perspective for most states. Before the amendment, native plantings along highways were mainly the result of a program called Operation Wildflower. This program, established in 1973 by the FHWA, brought together the National Council of State Garden Clubs, state highway agencies, and the FHWA in an effort to use wildflowers effectively in landscaping. Under a general set of guidelines, each state with an Operation Wildflower program began wildflower planting projects independently, with mixed results.

According to Eugene Johnson, spokesman for the FHWA, the reactions of various states to the new 1987 legislation corresponds to their success rates in previous wildflower plantings. Those states with visible success view the new legislation in a favorable light, whereas states with

less successful results are more skeptical. Mandating the use of native plants in highway department landscaping has sparked new interest in learning more specific information about soil types, growth habits, and a plethora of unknowns related to indigenous species. Initially each state will have to set its own standards for planting, though the FHWA has longrange plans to research and develop such standards on a national basis. Many states already have workable techniques, based on years of incorporating natives into their landscapes.

To the nursery industry, Johnson poses the question, "What native plant species would be good for urban settings, in a controlled bed situation?" A large percentage of federal funding goes toward high use, urban areas. "Landscape designers look at wildflowers and find they don't match the setting," notes Johnson. "Nurseries need to concentrate on low growing species that can be used for streetscapes, narrow areas between curbs and sidewalks." Federal backing should give the nursery industry added momentum to increase research efforts using wildflowers and native plants. For large seed companies producing regional wildflower mixes, the emphasis should shift toward mixes scaled down to include indigenous species for specific sites. In response to the expanding needs of both the public and private sectors, the seed industry and related interest groups are working together to set standards for quality control of wildflower seeds.

As for the National Wildflower Research Center's role in this legislative act, Dr. David Northington, Executive Director, foresees the Center as a vital resource for highway departments across the country. "With our constant refinement of planting techniques, growing data on wildflower species, and cooperative research projects in various regions,"

## Book Review

*Rocky Mountain Alpines* prepared for Alpine '86, Second Interim International Rock Garden Plant Conference, Timber Press: Portland, Oregon, 333 pp, 1986.

At last, a book that assembles a wealth of information about Rocky Mountain plants with naturalists, botanists, horticulturists and gardeners in mind. A must for all lovers of alpine plants as well as professional and amateur rock gardeners. This well-written collection of papers is filled with discussions on the climate, history, geology, and flora of the Rocky Mountains and brings one closer to understanding the natural forces that govern remote alpine areas.

The *Second Interim International Rock Garden Plant Conference* held in Boulder, Colorado, in June 1986, marked the 50th anniversary of the first conference held in London, England, in 1936. *Rocky Mountain Alpines* was written before the conference by many experts, including the speakers.

The diversity and geographical range of the Rocky Mountains is a major obstacle to growing plants from this region. Approximately 10,000 to 12,000 species of plants occur and the habitats range from the summit of a 14,000 foot mountain to alkaline desert canyons. This book contains papers from experts who have studied many of the major ecological zones and have contributed authoritative accounts of the indigenous alpine flora.

The major topics include a historical and geographic perspective, cultivation and propagation instructions, and landscaping advice. The topics inspire one to look more closely at the native flora and perhaps explore means with which to bring these plants into home landscapes.

Notably, this book should serve as a warning that the alpine plants of the region are not indestructible. Many species are remote and seemingly difficult to collect, but pressure from  
(Continued on page 6)

## Highway Legislation...

(Continued from page 5)

Northington predicts, "we'll be able to advise highway departments on what to plant, how to initiate such plantings, and properly manage rights-of-way for longterm success." The National Wildflower Research Center will serve as an intermediary between highway departments and the nursery industry.

*Beth Anderson is a resource botanist at the National Wildflower Research Center.*

## Book Review...

(Continued from page 5)

collectors has had an adverse impact on plant populations. Alpine plants are not readily available commercially, but one hopes that as a result of this book more Rocky Mountain alpine will be brought into cultivation.

*Annie Paulson is Clearinghouse Coordinator and a resource botanist at the National Wildflower Research Center.*

## Wildflower

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Editor: Mae Daniller  
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## Membership Application

Members of the National Wildflower Research Center support wildflower work across the nation. You will receive *Wildflower*, the Newsletter and *Wildflower, Journal of the National Wildflower Research Center*, 10% discount on unique Center products, special advance notice of and discounts to Center seminars, wildflower tours, a membership card and priority handling of requests to the Center's Clearinghouse of wildflower information.

- \_\_\_ \$25 Supporting Member. All privileges listed above.
- \_\_\_ \$50 Sustaining Member. All the above plus a set of specially commissioned wildflower notecards.
- \_\_\_ \$100 Key Member. All the above plus wildflower garden apron and invitations to special events.
- \_\_\_ \$250 Center Sponsor. All the above plus annual limited edition wildflower poster.
- \_\_\_ \$500 Trust Member and \$1000 Benefactor. All the above plus special privileges.

Thank you! Your contribution is tax deductible to the extent permitted by applicable law.

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- Make your check payable to: NWRC
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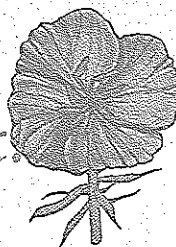
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# Wildflowers Work.



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