



WILDFLOWER

A non-profit organization dedicated to researching and promoting wildflowers to further their economic, environmental and aesthetic use.
Newsletter of the National Wildflower Research Center Vol. 2. No. 1 Spring 1985

A Glorious Spring

Spring of '85 has been as glorious a year for our wildflower work as last spring was disastrous! The credit must go to nature, but all of us are the joyous beneficiaries of this brilliant show. Ample fall and winter rains and fair rainfall this spring have given us displays designed to make the heart sing with their abundance and variety.

For the folks here at our Center, this has been the busiest time of learning, holding our tours, and harvesting you can imagine, as we try to make every day of these few weeks last at least forty-eight hours!

From the plantings at our test plots it is evident one of the two best bloomers were Phlox, in a magnificent variety of flamboyant pinks, reds-to-deep-rubies, to white and mixtures. The best performer without a doubt for color and mass was Gaillardia (indian blanket or firewheel). Invading weeds continue to be a problem, but our wildflowers have flourished in some bermuda turfs so we are eager to try—in our third season—other grasses, possibly buffalo grass as a companion grass to mow and maintain as lawn when the blooming season is over.

And there are other accomplishments as well, to list just a few—thanks to the Meadows Foundation of Dallas, we have completed and moved countless flats into a beautiful glass greenhouse with fully automated watering, heating and cooling systems; our direct mail membership effort has now added over 2,500 new members to our growing family of wildflower advocates; the Center's purpose has been explained to over 50 foundations and corporations, and happily we have secured support from many of these organizations.



I can't say enough good things about our staff and volunteers—the real workers in this “vineyard”—and their dedication, enthusiasm and the long hours they are willing to devote! I hope you, too, share my sense of pride and satisfaction in how far we have come during the past two and a half years. We feel we have an economic, useful and aesthetic role to play in the nation's landscapes—and we're on our way.

Lady Bird Johnson

Lupines in Landscapes

One of the most popular of our nation's wildflowers is the lupine. A member of the Legume (pea) family, the genus *Lupinus* includes some 200 species throughout the temperate regions of the world excluding Australia and Africa. There are over 20 species occurring in the United States, predominately in the southeastern through the western states. The genus name *Lupinus* stems from the scientific name for the wolf (*Lupus*) because it was originally thought that such luxuriant vegetative growth and profuse flowering must cause a voracious drain on

soil nutrients. Actually, lupines and most members of the legume family provide for their own nitrogen requirements by removing nitrogen from the atmosphere (78% of the air you breathe is nitrogen gas) and converting it into a form that their roots can absorb. This process of “nitrogen fixation” occurs in root nodules which are formed by a specific and beneficial bacterial infection.

Different lupines display a variety of flower colors from white through pink, purple, reddish lavender, and dark blue.

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Director's Report

One of our research goals at the Center is to advise the public on how to establish wildflowers more successfully in a variety of settings. Our research covers: seed pretreatment; ground preparation; the best time of year for seeding; seeding techniques; field germination; species selection and competition; watering; seed harvesting and seed storage. As we observe, record, and analyze data from our research plots this spring, we can make several conclusions.



—Seed germination in hard-seeded species, such as lupines, can be increased through scarification which includes scratching, poking a hole or sanding the seed. However we do not advise using these techniques as it is desirable to have residual seed in the soil for germination in future years. Especially with lupines, germination does not appear to be as much of a problem as poor seedling growth.

—“Feeding the chickens” as a method of broadcasting seed is not very successful unless steps are taken to increase seed-soil contact. Dethaching, flail mowing to soil level, and light chiseling in no-till (unplowed or untilled ground) settings all improve germination. Raking the seed into loose topsoil and rolling with a yard roller to lightly pack the seed into the topsoil also increases success.

—For large areas and for interseeding in turf or other heavy vegetation, a seed drill modified to handle wildflower seed has given the best results and drilling removes the weed problems that can be associated with tilling or plowing.

—Fall seeding is recommended. In the north early spring seeding will work for most species, however fall seeding is necessary for species requiring a winter cold period to initiate germination.

—The most successful species are usually those that are indigenous to the area and fortunately regional wildflower seed mixes are becoming more available from seed producers.

—Supplemental watering can be beneficial to establish a good stand of wildflowers, especially in a below-average rain-fall year. Winter moisture is especially important to species that germinate in the fall.

—A measure of luck to help with all the unknowns that still face us is always welcome!

As we continue our research observations, we will report additional findings in future issues of *Wildflower*. Let us hear about your experiences.

Notable Quote

“Everyone who grows even the most seemingly common wildflower in their garden is doing their bit to preserve the so-called gene pool to keep this individual species alive and producing seed.”

Dr. Miriam Rothschild, Naturalist
Pererborough, England

Some of the most attractive lupines include lady lupine (*L. villosa*) and wild or sundial lupine (*L. perennis*) from the east and southeast, blue lupine (*L. angustifolius*) from the southeast and gulf states, and silver lupine (*L. argenteus*) from the plains states. In Texas lupines are the state flower and are called bluebonnets (*L. texensis*, *L. subcarnosus* and three other species including *L. concinnus* which is more common in the western states). Admonis lupine (*L. excubitus*) and Coulters lupine (*L. sparsiflorus*) add color from New Mexico to southern California.

Because of their beauty and high seed protein content of 35–40%, lupines are grown as crop plants in Australia, Poland, South Africa, Italy, Germany, and the USSR. The National Wildflower Research Center is initiating a study of seed germination and seedling establishment requirements in an effort to increase the success of seeding lupines as garden or landscaping plants. Obviously lupines are deserving of the time and attention they receive in nature and now, in our and other's research efforts.



A magnificent Texas bluebonnet.

Bluebonnet Legend

The bluebonnet, member of the lupine family, was originally called buffalo clover, wulff flower, or El Coñejo, Spanish for rabbit. Because of the flower's white tip, people were reminded of a cotton-tail and women, among the great influx of immigrants forming the southern United States after the Civil War, observed that the shape of the flower was similar to their headgear and named it bluebonnet. The bluebonnet was adopted as the official flower of Texas in 1901.

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Highways and Byways

In this issue we feature some unique areas around the country where you may see wildflower work in progress. The Bouverie Wildflower Preserve is a very special meadow situated in the Valley of the Moon in northern California. Along a picturesque section of Highway 12 lies this stretch of land which was given to Sonoma County by David Pleydell-Bouverie to establish a thriving wildflower preserve of beauty and serenity.

Just adjacent to the meadow is the Bouverie Audubon Preserve. This preserve offers a variety of ecological communities and habitats lying in close proximity to each other. Walks will take you through oak woodland and open grassland carpeted with wildflowers in the spring. Their biologist John Peterson is compiling a seasonal wildflower summary of the numerous species which occur in the area, from white baby blue eyes to meadowfoam. Lush riparian woodland, mixed evergreen forest, and stands of redwoods thrive in a steep canyon created by Stuart Creek. Higher up on the rolling hills is dense gray chapparal.

This preserve, too, was established by Mr. Pleydell-Bouverie, and in 1978 was placed by him in the hands of the Audubon Canyon Ranch, providing that it remain in its natural state and be developed as a nature education center. Nature

lovers may visit the preserve by appointment only. For information write: Bouverie Audubon Preserve, P.O. Box 474, Sonoma, California 95476 (707) 938-4554.

Another worth-while stop would be at the Denver Botanic Gardens in Denver, Colorado. Over twenty acres are available for learning and exploring, but an area of particular interest is the Gates Memorial Garden which is a simulated Rocky Mountain landscape of native trees, shrubs, and ground covers.

Visitors to Vermont should make a point of stopping in at the six acre Vermont Wildflower Farm, south of Burlington. A quarter-mile flowered walking trail loops through meadowland and woods, around ponds and brooks. Brass markers along the way record floral legend and lore. The site is an ideal environment for both alpine and low lying flowers which bloom from May through October. Expect to see hepatica, white trillium or black-eyed susans and goldenrod. Write or call the Vermont Wildflower Farm, U.S. 7, Charlotte, Vermont 05445 (802) 425-3500.

Visit one of these memorable places this summer to feast on wildflowers in your area. We welcome contributions to *Highways and Byways*, just write c/o the editor with your information.

From the Mailbox

From the Mailbox will be a regular feature of the newsletter. Any information you may have to contribute on meetings, seminars, and other wildflower events will be accepted. We cannot publish every contribution but we welcome them just the same.

- July 25-27 Conference on Landscaping with Native Plants at Western Carolina University.
- For more information contact Sue DeBord, Div. of Continuing Education, Western Carolina University, Cullowhee, NC 28723.
- Aug. 3-5 Native Plant Societies of the Western States
- Aug. 7 Federated Garden Clubs of Iowa
- Aug. 27-28 New Mexico Garden Clubs, Inc.
- For more information contact Mrs. C. Norman Colvard, Operation Wildflower Chairman, Box 890, Pocasset, MA 02559 (617) 563-3629.

Utah is ablaze with wildflowers! To know what's blooming, where and when, call or write the Utah Wildflower Hotline, State Arboretum of Utah, University of Utah, Salt Lake City, UT 84112 (801) 581-5322.

Wildflower Scouts Needed

One item of information that we need in our files is a list of what the most common, highly visible wildflowers are in any given geographical area and when they bloom. We have developed a simple form that knowledgeable wildflower lovers can fill out by season. If you know the wildflowers of your area and have a little spare time to make a record of their occurrences, please write to us and we will send both the form and a brief explanation of how to fill it out. Be a wildflower scout for us and help us respond to inquires from others in your area.



Wildflowers

*They grow in random, scattered splendour
A magical blending of the land's bright hues.
Stretching across the hills and valleys
In never-ending majesty.*

*We call these magic flowers 'wild'
Wild because they scorn man's power
And grow and thrive without his care
Wild because through drought and storm*

*They ride the winds to bring the
seasons that lift the heart.*

*A glorious tapestry.....
God's own needlepoint!*

*Forever brilliant
Forever wondrous
Forever magic
Forever 'wild'!*

*Bette W. Castro
May 1984*



Events, Events, Events

Dallas Blooms for Wildflowers

Two spring events benefiting the National Wildflower Research Center brought wildflowers into full focus for the people of Dallas recently. An elegant one-of-a-kind houseparty, which was generously underwritten by the McDermott Foundation and personally overseen by Lady Bird Johnson, contributed over \$100,000 to the Center.

Trustees Margaret McDermott and Mrs. Edward Rose invited the Dallas group who visited the Center, toured the private areas of the LBJ Library and Museum, and enjoyed cocktails with Governor and Mrs. Mark White at the Governor's Mansion. Completing the first day was a dinner in the recently redecorated home of Lowell and Patricia Lebermann. Participants included Margaret McDermott, John and Ann Coker, Peter and June McGuire, Mike and Sharon McCullough, Roland and Nanette Boyd, Carl and Susie Summers, Virginia Nick, and John and Sue Harvison of Fort Worth.

The guests viewed spectacular hill country wildflowers, toured a typical Sunday House and the Nimitz and Pioneer Museums in Fredericksburg, and took a quiet walk in the countryside before enjoying dinner at the LBJ Ranch and flying back to Dallas.

Texas Homes and Bloomingdales presented the "State of Style" on May 5 at a party in Dallas benefiting the Center. The spectacular celebration of Texas style honored Texas style-setters in design, architecture, art preservation, food, and entertaining. Lady Bird Johnson was honored for her dedication to beautification in the state and the nation.

The National Wildflower Research Center committee included Mrs. William A. Custard, Mrs. Roger Horchow, Prudence Mackintosh, Mrs. William B. Madden, Laurey Peat, Mrs. William McKenzie and Mrs. John L. Schoelkopf, and was coordinated by Mrs. Edward Rose. Proceeds from this event produced by Texas Homes and Bloomingdales netted the Center more than \$10,000.



Warrie Lynn Price and Lady Bird Johnson at "The Night of the Wildflowers" New York, May 22, 1985.



Dallas Houseparty during cocktails at the Governor's Mansion Austin, Texas. From left to right: Margaret McDermott, Gov. Mark White, Lady Bird Johnson, Mrs. Mark White, Mrs. Edward Rose.



Judy Connatser, Lady Bird Johnson, Kelly Moncrief at the Texas Homes and Bloomingdales event, Dallas, May 5, 1985.

New York, New York!

The Night of the Wildflowers in New York was a "glittery gala" in the words of social commentators, when wildflowers were the focus of attention at this special benefit event for the Center.

Party-goers were greeted with morris dancing, a traditional English Spring ritual to ensure that crops grow and flowers bloom, before stepping inside the Seventh Street Armory to a splendid display of the wildflower gift garden. Here Lady Bird Johnson and Helen Hayes greeted such guests as Barbara Walters, Phyllis George, the Lawrence Rockefellers, the James Prices, and Molly Parnis. Flowery finery turned the armory into a dream spring world, with over \$250,000 being raised for the Center.

Look for a feature article in our next newsletter on the "Day of the Wildflowers" symposium in New York.

Wildflower Potpourri

Wildflowers on VHS

The Center's 12 minute slide show narrated by Lady Bird Johnson and Cactus Pryor is now available on VHS. You may rent the cassette for \$5.00 plus a refundable deposit of \$25.00, or purchase a cassette for \$25.00. If you or your organization is interested in this offer, please contact Jennifer Lindgren at the National Wildflower Research Center.

Member's Open House

Over 250 members joined us at our first Member's Open House on May 29. It was a brilliant, sunny afternoon, and our guests moved from viewing the slide show, strolling through the greenhouse and field plots, to finally refreshing themselves with delicious lemonade and cookies. Mrs. Johnson was present for part of the afternoon to meet and greet our visitors, some of whom came from as far afield as California. We all enjoyed spending time with our members and look forward to meeting again at our next Open House, if not before!

And finally the winners of our drawing:
 poster—Judith Martin of Austin
 tote bag—Marie Wesby of Kerrville
 book—Laverne Crawford of Wimberley

Texas Wildflowers by Campbell and Lynn Loughmiller

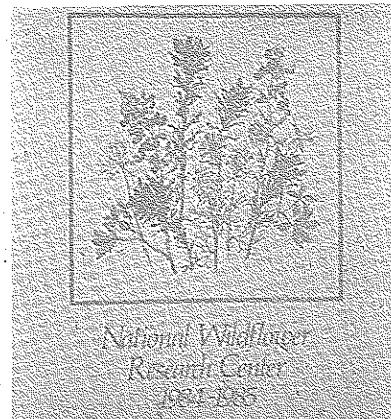
For more than three decades the Loughmillers have photographed the wildflowers of Texas, and their exquisite photographs which represent all regions of the state are reproduced in this book. A portion of the proceeds from the sale of each copy will come to the National Wildflower Research Center.

If you wish to purchase a copy write:
 University of Texas Press
 P.O. Box 7819
 Austin, TX 78712

Tours—A Success

The first tour season of our facilities and showy field plots attracted over 800 wildflower enthusiasts who visited the Center in April and May. Staff and docents led the tour groups who viewed the slide shows, took in the automated greenhouse, and finally wandered down the mowed paths to our meadows. Even under the hot Texas sun, it appeared that our visitors felt their wildflower field trips were the highlight.

It was gratifying to find such interest in the Center from the community. We thank each of you for coming and for your comments and critiques. All our "data" will be used to ensure next year's tours are a fresh and informative experience.



The limited edition wildflower poster.

Limited Edition Poster and Membership

All new \$250, \$500, and \$1000 members will now receive our fine, limited edition poster signed by Lady Bird Johnson.

The poster is also available for a limited time for \$22.00 a wonderful gift to keep on hand. If you wish to purchase one just write to the Center.

Other categories of membership are available and are detailed on the membership form in this newsletter. Your generous support of the Center is greatly appreciated!



Landscaping at Barton Creek Square.

Joint Research

It has been most rewarding to participate in a joint landscaping research effort with Barton Creek Square, a project of Melvin Simon and Associates, Inc. in Austin. Our thanks to Walter Vackar and the mall for their funding and support.

Although data is still being collected, we have learned which wildflowers, native grasses, shrubs, and trees can be established in such a setting. These efforts are invaluable, for only by learning from small projects can we apply this knowledge to large-scale landscaping efforts.

National Wildflower Research Center Invites You to Become a Member

Your membership donation is tax deductible to the extent allowed under Federal and State laws. For information concerning the benefits of each level of membership, please contact the Center.

- \$15 Contributing Member
- \$100 Key Member
- \$1000 Benefactor

- \$25 Supporting Member
- \$250 Center Sponsor

- \$50 Sustaining Member
- \$500 Trust Member

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We Need Your Help

The Center still needs a variety of office, research, and clearinghouse items. Information from our readers still tops the list! Your knowledge about wildflower projects, wildflower research, and organizations working with wildflowers would help us build our reference library.

Slides of wildflowers and native plants in urban as well as rural settings are another item we need. Please label all slides and include your name.

Our office and research equipment needs (and wish list) include: two IBM correcting selectric typewriters, a close-up (macro) lens for a Cannon T50 camera, a cassette tape recorder, a 12-passenger van, a Burroughs letter-quality printer, 40-50 horsepower PTO tractor, VCR and color TV monitor, a slide storage unit, and underwriting for *Wildflower* issues.

If you can help us, please call or write.

Newsletter Mailing List

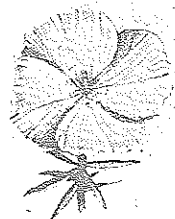
The tidying and clearing-up of the newsletter mailing list is progressing well, thanks to all the changes we have received from our *Wildflower* enthusiasts. But your help is still needed. If you are receiving more than one newsletter, or if your name and address are listed incorrectly, please return the corrected label to us. A small prize will be sent to each respondent!

Wildflowers in Literature

- "The flower of sweetest smell is shy and lowly."
William Wordsworth
- "I know a bank where the wild thyme grows."
William Shakespeare

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