INSIDE THE GARDENS

SPRING 2024 A QUARTERLY MAGAZINE FOR MEMBERS OF DENVER BOTANIC GARDENS There is an oasis of natural beauty near the west end of the gardens at York Street. The Laura Smith Porter Plains Garden is nestled among high activity zones and at first blush seems a bit transitional. Upon closer examination though, you see a sweep of authenticity, plants that thrive in conditions that predate 200 years of ecological manipulation. To survive in the high plains, or steppe, regions of the world, all life must be extremely tough. There can be a temperature range of 120 degrees between a summer high and a winter low. Water can be scarce, fires can rage. Without a nearby stream or river, the accumulated soil can be a harsh combination of sand and clay.

And yet, countless plants flourish, ones that would die in damp, rich soil. Ruminants graze on those plants, migratory birds devour seeds, insects pollinate and propagate. It seems life adapts to conditions and creates dynamic biodiversity.

The shifting climate is shaking up human planning and expectations. We are getting used to dramatic descriptions of weather conditions – atmospheric rivers, bomb cyclones, polar vortexes – phrases unknown to most of us just a few years ago. Through this uncertainty, botanic gardens offer the public a chance to do more than relax and enjoy tableaus of diverse ecosystems. They provide real-time lessons about adaptation and survival.

When we have been hit by massive temperature swings or intense hailstorms, there are gardens that are decimated and others that simply shake it off. Steppe plants can handle harsh conditions and manage to maintain habitats and offer aesthetic value. As Colorado anticipates shifting temperatures and water access, the Gardens is focused on identifying and promoting the use of steppe plants for sustainable landscapes. Check out our website to read about **ideal plants and designs** that you can use in your own gardens. We have a team working with local governments and private businesses to replace turf with plants that can handle native soil and scarce water.

A signature program, **Plant Select**[®], is a brilliant place to start. This alliance of the Gardens, Colorado State University and the green industry works together to find, research and deploy species that thrive in our steppe environment. There are numerous displays of these plants at both York Street and Chatfield Farms to spark your imagination.

The whole point is to engender a sense of stewardship, to recognize that we are not helpless, but can take action to do our part to sustain life, and to discover the satisfaction and joy that comes from taking responsibility.

Onward.

Brian Vogt Denver Botanic Gardens CEO



Contents

Center tor Global Initiatives	2
Featured Garden	3
Plant Portrait	4
Helen Fowler Library	5
Collaboration	6
Trips & Travel	7
Special Events	8
Exhibitions, Art and Learning Engagement	10
Featured Artist	12
Confluence of Art and Science	13
School of Botanical Art & Education	13
Programs	14
Children's Corner	15
Research	16
Chatfield Farms	18
Donors	20
Tributes	21
Trustees	21



Denver Botanic Gardens

1007 York St., Denver, CO 80206 Hours through May 11, 9 a.m. – 7 p.m., last admission 6 p.m. May 12 – Sept. 2, 9 a.m. – 8 p.m., last admission 7 p.m. Check the website for early closures.

Denver Botanic Gardens Chatfield Farms 8500 West Deer Creek Canyon Rd., Littleton, CO 80128 Pre-purchased tickets and advance member passes only. Hours: 9 a.m. – 5 p.m., last admission 4 p.m.

Check the website for early closures

General Information: 720-865-3500 Class Registration: 720-865-3580 Donations: 720-865-3528 Gift Shop: 720-865-3595 Membership Services: 720-865-3525 Private Events: 720-865-3551 Volunteering: 720-865-3609 Helen Fowler Library: 720-865-3570 Tours: 720-865-3539

Visit Our Website for More Information: Gardening Help from Colorado Master Gardeners Kathryn Kalmbach Herbarium Sam Mitchel Herbarium of Fungi

Editor: Tiffany Coleman Graphic Designer: Jessica Lammert Photographer: Scott Dressel-Martin

The mission of Denver Botanic Gardens is to connect people with plants, especially plants from the Rocky Mountain region and similar regions around the world, providing delight and enlightenment to everyone.

GARBENS

botanicgardens.org



The Gardens is grateful for funds from the Scientific & Cultural Facilities District (SCFD), which enable us to expand services and enhance the quality of our programs and exhibits.



American Alliance of Museums



American Public Gardens Association



CENTER FOR GLOBAL INITIATIVES

CONSERVING THE STEPPES

By Phillip Douglas, Director of Horticulture & Center for Global Initiatives



In the pursuit of partnerships for plant conservation, the Gardens works in the steppe regions of the world. This year, the Gardens continues work with the Plant Collecting Collaborative, a partnership of 18 international public gardens that focus resources and expertise in the development of ex-situ plant collections. In April, members of the Collaborative join botanists from the Institute of Botany of the Academies of Sciences of Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan in the ancient city of Tashkent. Together with these international partners, the Gardens and the Collaborative will reaffirm the Tashkent Accord, a joint agreement of all parties to conduct mutual research, plant exploration and conservation work in the steppe regions of Central Asia.

The Central Asian steppe contains an incredible diversity of flora and fauna, with striking similarities to the United States' own steppe region, the Front Range of the Rocky Mountains. The Gardens' work in the Central Asian steppe can be viewed any time of year in our Steppe Garden, where wild-collected accessions of plants from the region are maintained in ex-situ conservation collections. The Steppe Garden contains more than 2,000 unique plants collected from dry grassland ecosystems, with 703 from wild-collected origin.

Formally established in 2012, the Center for Global **Initiatives** brings international horticultural research and relevance to the Gardens through implementation of diverse and sustainable programs achieving global transformation by connecting people with plants.

FEATURED GARDEN

THE EVER-CHANGING **STEPPE GARDEN**

By Kevin Philip Williams, Manager of Horticulture

"The joy of life consists in the exercise of one's energies, continual growth, constant change, the enjoyment of every new experience. To stop means simply to die."

Gardens are places of perpetual change. Places to behold the cycles of life. Places to experiment with ideas and have conversations about the world around us. When the Steppe Garden opened in 2016, we didn't instate a completed vision, but instead offered a mutable space ready for the possibilities of the future. Every year we introduce new elements to the garden that allow us to connect our visitors more completely to the story of the steppes.

This year you'll notice two new features in the Steppe Garden, one big and one small, but both featuring exciting stonework. In a sizable change, the beloved plaza amphitheater bench will undergo a meticulous reconstruction using beautiful sandstone from Lyons, Colorado, to provide more comfortable seating and expanded planting and display space. On a smaller scale, the living stones bed will receive a thoughtful reimagining. Although southern African plants from Aizoaceae (fig-marigold family) will still be featured, they will now be set within a crevice garden structure crafted from locally sourced quartz, mica and granitic pegmatite. This alteration is designed to create intricate microclimates, mirroring the diverse habitats of the Knersvlakte, the guartz fields in the Succulent Karoo of South Africa.

Join us on this ever-evolving journey through the Steppe Garden as we refine, enhance and most importantly, continue to change.

- Aleister Crowley





ACANTHOLIMON

By Mike Bone, Associate Director & Curator of Steppe Collection

Acantholimon, or the prickly thrifts, are a group of fascinating species that grow in steppe regions. Mainly found in Central Asia, these plants are incredibly diverse. Most Acantholimon species have very sharp modified leaves and can range from silver to green. The flowers are often shades of pink and white but on some species the flowers can be quite dark. Most have attractive dried bracts that remain after the flowers are spent, giving them an extended season of beauty.

These plants have adapted to very dry and windy conditions and are mostly found on rocky slopes or other such disturbed or depauperate areas. There are currently 297 accepted species according to **The World Flora Online**. Denver Botanic Gardens has 40 listed in our living collections. These plants are not readily found in plant nurseries or even often in other botanic gardens. Their adaptation to our dry steppe environment makes them a challenge to grow in wetter climates.

We are continually looking for sources and opportunities to add to the diversity of our living collection, and *Acantholimon* is one of our unique features. In the fall of 2023, some of our staff were part of a collection trip to Tajikistan where several new-to-the-United States species were collected. They are now in the capable hands of our propagation team, who are growing them to add to our alpine and steppe collections.

STEPPE RESOURCES AT THE **HELEN FOWLER LIBRARY**

By Patty Wright, Public Services Librarian

Steppe regions contain a wealth of interesting flora, and a visit to the <u>Helen Fowler Library</u> can expand your knowledge of these plants. Here are some recommendations to get you started.

- In 2022, Denver Botanic Gardens' Center for Global Initiatives hosted the Global Steppe Symposium, with experts from around the world convening in Denver. The conference papers, published as "2022 Global Steppe Symposium Proceedings," are available for perusal.
- "Sowing Beauty: Designing Flower Meadows from Seed" by James Hitchmough includes plant lists from the world's major steppes and will show you how to design and sow seed mixes for dramatic effect in your landscape.
- Planning a trip to the Patagonian steppe? Check out "Flowers of the Patagonian Steppe/Flores de la Estepa Patagónica" by Lorraine Green and Marcela Ferreyra.

We hope you'll visit the Helen Fowler Library soon to explore the steppes!



- Explore the eBook "The Edge of Extinction: Travels with Enduring People in Vanishing Lands" by Jules Pretty, which covers the people and land of the steppe in Tuva Republic, Russia.
- "Steppes: The Plants and Ecology of the World's Semi-Arid Regions" by Panayoti Kelaidis, Michael Bone, Larry G. Vickerman, Dan Johnson and Mike Kintgen shares terrific photos and in-depth information about steppes around the world—and was written by five of the Gardens' horticulturists.

ABSTRACT EXPRESSIONS

By Kevin Philip Williams, Manager of Horticulture

In 2023, the Clyfford Still Museum unveiled <u>Abstract</u> <u>Expressions</u>, an immersive installation with both sound and garden elements, which I was honored to create in collaboration with composer and artist Nathan Hall. This innovative project aims to illuminate the profound connections between Clyfford Still's life and art, his relationship with the natural world and the enduring influence of Abstract Expressionism in the realms of music and garden design.

The garden installations highlight the deep connection between Clyfford Still and the North American steppes. Having spent his formative years between North Dakota, eastern Washington and Alberta, Canada, Still would have experienced a similar landscape in all locations, and subsequently, one that is kindred to Denver. The gardens are stylized versions of these steppes, featuring plants in common that naturally occur throughout all these locales.

On April 18 in the Freyer – Newman Center's Sturm Family Auditorium, I will present a lecture on this exciting project and explore how Abstract Expressionism and American artistic traditions intersect with naturalistic gardens, and what insights contemporary designers can draw from this artistic movement.

RELATED LECTURE

Total Psychic Entity: The Gardens of Abstract Expressions

Thursday, April 18, 6:30-7:30 p.m. Reception 7:30-8:30 p.m. \$15 public

Delve into the conceptual intentions and intricate creative journey behind the development of the gardens featured in *Abstract Expressions* at the Clyfford Still Museum. A reception follows, featuring delightful pies to sample—that all-American dessert era-appropriate for a mid-century artist.



in Philip Williams

TRIPS AND TRAVEL

Travel with Denver Botanic Gardens. Guided excursions feature botanical highlights, geographical wonders, culture, food and history. <u>See full itineraries and register</u>.

Coastal Carolinas' Savage Gardens and Botanical Hotspots

May 25-29

People have long been drawn to the unique and bizarre nature of carnivorous plants. The coastal Carolinas are the only place where Venus flytraps can be found in the wild. This is one of the country's best regions to observe a diversity of carnivorous plants in their natural habitat. Join Mae Lin Plummer, director of The IDEA Center for Public Gardens, along with local botanist Paula Gross and Ed Davis, associate director of UNC Charlotte Botanical Gardens, for an unforgettable trip to delve into the unique world of carnivorous plants and explore the stunningly beautiful ecology of coastal saltmarshes, ancient bald cypress swamps and culturally rich Charleston, South Carolina.

Magical Mexico – When Wine Meets Art

August 10-16

In the Mexican cities of Querétaro and San Miguel de Allende, wine and art converge in August – the time when the annual harvest in one of Mexico's most exciting wine regions coincides with San Miguel de Allende's Arts Festival. Join Denver Botanic Gardens' host Yvonne Garcia Bardwell for a sensory experience that combines the flavors of fine wine with the visual beauty of art in a region rich in history and culture.

Botanical Wonders of Eastern Turkey

May 8-21, 2025

Explore the steppes of Turkey with Curator of Steppe Collections Mike Bone and renowned plantsman Christopher Gardener. Turkey is at a convergence of two different floristic regions, the Mediterranean and the steppes of Asia. The result is an incredibly diverse plant palette. Begin in Cappadocia with its ancient cultural and geological wonders and floral treasures. Then explore the montane steppe in eastern Turkey, where many transition zones give rise to wildflower displays. Travel through Turkic villages and explore mountains and fertile valleys in search of natural wonders.

SPECIAL EVENTS



EARTH DAY CELEBRATIONS AT YORK STREET AND CHATFIELD FARMS

Sunday, April 21, 10 a.m. – 3 p.m. Included with admission.

What better way to celebrate Earth Day than at Denver Botanic Gardens? Get inspired by the natural world, learn how to support the health of your neighborhood's flora and fauna and be a steward of our planet's health. Enjoy free tours, art activities, gardening demonstrations, live music and more! Get details online.



SPRING PLANT SALE

Friday & Saturday, May 10 & 11, 8 a.m. - 4 p.m. Member-only shopping hour, 8-9 a.m.

Admission is free, reservations are required.

Join us as our York Street location transforms for Spring Plant Sale. Speak with our plant experts and horticulturists while shopping 15 different divisions spread across the Gardens. Extensive offerings include unique native, steppe and other adapted plants that are curated to thrive in Colorado's climate. Whether you want a variety of flora to reimagine your whole garden or one perfect houseplant, you'll find it here.

Members save 10% on all purchases. Get details and make reservations online.

SPRING PLANT SALE PREVIEW PARTY

Thursday, May 9, 4-7:30 p.m. \$55 advance, \$60 at the door (if available)

Don't miss our early access Preview Party! Enjoy the first pick of plants along with tasty treats and beverages.

BUTTERFLIES AT CHATFIELD FARMS

Friday, May 24 member preview

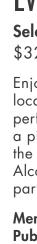
Saturday, May 25 open to public

Open daily 9 a.m. – 3 p.m. Included with admission.

This whimsical, seasonal habitat is home to hundreds of native butterflies such as swallowtails, monarchs, mourning cloaks and painted ladies. Learn what types of plants you can add to your own garden to attract butterflies and other pollinators. Get details online.









Member pre-sale is May 15-17, based on membership level. Public ticket sales start May 20. Get tickets and details online.



8 | SPRING 2024

BIG DAY OF BUGS

Friday, June, 10 a.m. – 3 p.m.

Included with admission.

Visit our York Street location to learn more about the importance of pollinators and what you can do to support pollinator habitats, health and biodiversity. Enjoy free tours, gardening tips, art activities, live music and information from community partners such as Butterfly Pavilion, Xerces Society, Colorado State University and The Pollinator Network. Get details online.

SUMMER CONCERT SERIES PRESENTED BY UMB BANK

Experience performances by top recording artists in an unparalleled venue: the UMB Bank Amphitheater in the heart of the Gardens at York Street. Bring a picnic to enjoy on the lawn or purchase food onsite or in advance online. Leisurely stroll through the gardens before the show. Alcohol not available for purchase onsite; BYOB allowed. Produced in partnership with Swallow Hill Music.

Tickets on sale now! Get tickets and details online.

EVENINGS AL FRESCO

Select dates in June & July, 4:30-7:30 p.m.

\$32, \$22 member

Enjoy live music from local artists in an acoustic format at our York Street location. Each date features a vibrant mix of talented local musicians performing against a stunning backdrop of peak summer blooms. Pack a picnic, gather your favorite friends and family members, and wander the Gardens during the golden hour on these relaxing musical evenings. Alcohol not available for purchase onsite; BYOB allowed. Produced in partnership with Swallow Hill Music.

Member pre-sale is May 15-17, based on membership level. Public ticket sales start May 20. Get tickets and details online.

LAVENDER FESTIVAL AT CHATFIELD FARMS

Saturday & Sunday, July 20 & 21, 9 a.m. – 4 p.m.

\$9-\$15, must purchase tickets in advance

Experience more than 2,000 lavender plants in peak bloom at this annual festival. Vendors sell all types of lavender-themed products from lotions and soaps to edible delights and wearable goods. Enjoy live music and food and drink vendors throughout the two-day event, plus demonstrations and classes. Chat with our gardeners and farmers. There are even activities for kids—so there's truly something for everyone. Be sure to purchase tickets early!

EXHIBITIONS, ART AND LEARNING ENGAGEMENT



Tali Weinberg, *Bound*, temperature data for 300 places around the globe, petrochemical-derived medical tubing, plant fibers, plant and insect dyes, 2018. Photo by Philip Maisel.



Hung Liu, *Crossing the River: Chasing*, color lithograph, 2003. Photo CU Art Museum © Hung Liu.



Alexandra Kehayoglou, *Paraná de las Palmas River* (detail), textile wool 2021. Photo by Alexandra Kehayoglou Studio.



Jacobo and María Ángeles, *Jaguar-Eagle*, fiberglass and acrylic paint, 2024.

Current and Upcoming Exhibitions

Tali Weinberg: The Space Between Threads

Through June 9

Experience weavings and sculptures about the connections between our own lives and the vast changes taking place all around us. Using data about our warming climate, Tali Weinberg's textiles weave together science and art to tell intertwined stories of land and water, people and landscapes, and ecological and human health.

RELATED WORKSHOP

Weaving Data Into Landscapes

Sunday, May 5 or Monday, May 6, 10 a.m. \$135, \$115 member

Join artist Tali Weinberg for this workshop, which guides participants through the process of creating small weavings on a hand-held loom.

Process Makes Perfect: Printmakers Explore the Natural World

Through July 28

Learn about contemporary lithographic printmaking through artworks exploring the beauty of nature. Featuring color lithographs and process works from the University of Colorado Art Museum's Sharkive, *Process Makes Perfect* presents works by Don Ed Hardy, Hung Liu, Emmi Whitehorse and Red Grooms.

OPENING SOON

River's Voice: Textiles by Alexandra Kehayoglou

April 14 – December 8

Step into the fragile beauty of vanishing landscapes through monumental textile artworks. *River's Voice* features Alexandra Kehayoglou's carpet works highlighting the Paraná de las Palmas River in Argentina and the surrounding wetlands. Including a work that spills onto the floor, the exhibition invites visitors to remove their shoes and literally walk through the beauty of the Argentinian wetlands.

Spirit Guides: Fantastical Creatures from the Workshop of Jacobo and María Ángeles

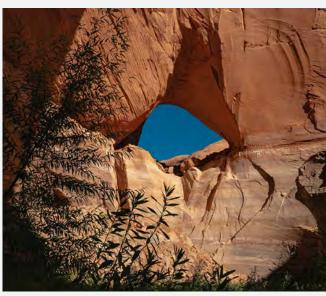
April 28 – September 8

Encounter fantastical creatures sited throughout the living galleries of the York Street gardens. Created by the workshop of Mexican artists Jacobo and María Ángeles, these brightly colored and richly patterned sculptures depict imaginary hybrid animals that act as both spirit guides and astrological embodiments of human character.

Elliot Ross: Geography of Hope

June 23 – September 29

Discover the resilience and beauty of Glen Canyon's ecosystem through the large-scale photographs of Elliot Ross. Dammed and flooded in 1963 to create Lake Powell, the desert walls of Glen Canyon have recently emerged from the water after two decades of drought in the American West. The reappearance of this vast canyon system and the ensuing ecological resurgence serves as both a stark reminder of climate change and a testament to nature's resilience.



Elliot Ross, *Portal*, digital exposure produced with archival inkjet, 2021.



A RIVER'S STORY

By Moira Casey, Assistant Curator of Exhibitions

Opening April 14, the exhibition *River's Voice: Textiles by Alexandra Kehayoglou* invites you to step into the extraordinary beauty of the Paraná River Delta in South America, a network of islands and wetlands that play a key role in the continent's hydrology. Argentinean artist Alexandra Kehayoglou pays tribute to this unique environment, focusing on its beauty and the breadth of native flora and fauna that it supports.

Kehayoglou creates her artwork with a hand-tufting carpet-making technique, resulting in a tactile landscape that softly welcomes you as you explore it. The feature piece of the exhibit is a 40-foot by 14-foot carpet depicting a bird's-eye view of the delta. Visitors are invited to immerse themselves in this work by gently touching the carpet and walking on it. Additionally, a series of smaller works called *Prayer Rugs* focuses on details of the wetlands in various seasons and stages, offering visitors a contemplative space to connect with the landscape.

A hybrid ecosystem both aquatic and terrestrial, the Paraná Delta wetlands consist of over 5,400 square miles of lush, varied vegetation. Lagoons, streams, marshes, grasslands and riverside forests provide unique habitats for hundreds of birds, marsh deer, fish, capybaras, river otters and more. Located 30 miles from Argentina's densely populated capital, Buenos Aires, the wetlands are struggling in the face of destabilizing humaninduced pressures. In addition to drought and wildfire caused by climate change, increases in pollution, deforestation and the introduction of invasive plants are destroying natural habitats and endangering wildlife. Through her unique depictions of the landscape's story, Kehayoglou defies hopeless messages of environmental doomsharing instead a vision of beauty and strength that revitalizes our human connection to the land.

THE CONFLUENCE OF ART AND SCIENCE

By Jennifer Riley-Chetwynd, Director of Marketing & Social Responsibility; Co-director, One World One Water Center

The Freyer – Newman Center was created at the intersection of art and science, employing both disciplines to connect people with plants. Several artists currently on view (including Kehayoglou, at left) approach the exploration of this intersection in fluid form by incorporating water themes in their works.

Given our location in the semi-arid steppe, Denver Botanic Gardens has a longstanding commitment to educating on water-wise horticulture and agriculture.





Since 2017, the Gardens has jointly managed an interdisciplinary water studies program – the One World One Water Center (OWOW) – with Metropolitan State University of Denver. If these water-themed exhibitions pique your curiosity to learn more, consider pursuing a water studies online certificate through OWOW. Gardens members receive a 10% discount... in addition to the ability to drop impressive water knowledge on future visits to the galleries.



SCHOOL OF BOTANICAL ART & ILLUSTRATION

Intersections Lecture: Raise Some Heck ONSITE AND ONLINE

Wednesday, May 8, 6-7:30 p.m. \$12, \$10 member

Tyler Thrasher, social media's most beloved mad scientist, returns with this artist's talk. Hear more about Tyler's artistic practice, plant hybridization techniques, social justice work and more.

ADULT PROGRAMS

Cheese 101

Tuesday, April 30, 5-6 p.m. \$35, \$30 member

Learn how cheese is made, the different categories and types of cheeses, try cheese pairings and get tips on how to make a delightful cheese tray.

Backyard Chicken Keeping 101

Thursday, May 23, 5:30-7:30 p.m. \$33, \$28 member

Learn the basics: how to choose birds, coop/run prep and requirements, feed/treats, predator protection, egg production and health issues of chickens.

Fairy Garden Terrarium Workshop

Saturday, June 8, 9:30-11 a.m. \$56, \$51 member

Create a whimsically decorated fairy garden terrarium bursting with color, magic and wonder. All materials are provided.

UPCOMING SCOUT PROGRAMS

Cub Scout Make and Take: Miniature Greenhouse Gardens

Saturday, April 13, 9:15 a.m., 10:45 a.m. or 1 p.m. \$12 per project

All levels of Cub Scouts are invited to join us in a spring seed planting project! Cub Scouts create a miniature greenhouse out of CD cases and plant seeds in eco-friendly seed starting pots.

Hydro Heroes at Chatfield Farms

Saturday, April 20, 10 a.m. – noon \$12 per scout

Girl Scout Cadettes, Seniors and Ambassadors learn about water and the ecosystems in Colorado. Scouts use STEM techniques to examine water quality, learn how Coloradans get and use water and create hydro art.

Girl Scout Juniors: Create a Garden Exploration Day

Saturday, May 18, 10:45 a.m. or 12:45 p.m. \$12 per scout

Girl Scouts learn the basics of garden design while exploring the Gardens. Create a miniature indoor garden to take home.

PLAINS CONSERVATION CENTER IN AURORA

Prairie Pup Adventures

Select Tuesdays, 9-10 a.m. \$8 per preschooler

Preschool-age children investigate a topic using hands-on science, art and nature exploration to learn about the animals, plants and people who call the prairie home. Upcoming themes: April 9, Reptiles; April 23, Flowers; May 7, Pronghorn; May 21, Cheyenne Native Americans.

Family Workshops

Select Saturdays, noon – 1:30 p.m. \$10 per person

Fun, hands-on opportunity for families to enjoy a guided exploration of a theme, and a project for adults and kids to create together. Designed for families with children ages 5-10. Upcoming themes: April 13, Prairie Plants; April 27, Prairie Safari; June 8, Homestead Gardening.

> Learn more about Plains Conservation Center and programs offered here

The state of the s

STEPPE INTO FUN

Pop quiz! What exists on every continent except Australia and Antarctica? Steppes! Not like stairs or stepssteppes. Found in the rain shadow of large mountain ranges, steppes are a type of biome that have cold winters and hot summers.

Pop quiz again! Can you name a large mountain range in Colorado? That's right, the Rocky Mountains! The Rockies create a rain shadow, forming the Great Plains—a steppe region. Home to various grasses—like those seen in the Ornamental Grasses Garden or Laura Smith Porter Plains Garden—the Great Plains steppe is the perfect inspiration for creating a "grass head."

MAKE A GRASS HEAD:



Collect some soil, grass seed and a cup or planting pot. The cup or pot will be the head.



Sprinkle in a generous amount of grass seeds.

CHILDREN'S CORNER

By Helena Nitz, Family and Children's Program Coordinator



Get creative: Add eyes, nose and a mouth to your cup or planting pot.



Gently cover your grass seeds with more soil and give your seeds a nice drink of water.



Once decorated, fill your container with soil, stopping about 1 inch from the top.



Depending on the grass seed, you'll see little grass "hair" in about a week. Let it grow or give your grass head a haircut.



MOVING PLANTS OUT OF HARM'S WAY: THE ROLE OF TRANSPLANTING IN CONSERVATION

By Rebecca Hufft, Ph.D., Associate Director of Applied Conservation, and Michelle DePrenger-Levin, Population Biology Research Associate

Plant conservation can take on many forms. While conserving plants where they naturally occur is always the best choice, it isn't always possible. Historical, ongoing and planned land use activities can threaten individuals and whole populations of species. Additional management strategies that we use in such cases include ex situ seed collections (to preserve seeds in long-term, cold storage as a backup to any loss of plant populations in the wild), restoration (improving habitat, ecosystem functions and biodiversity) and transplanting (moving plants out of harm's way). For one rare plant that only occurs near Kremmling, Colorado, we are using this last method to try and protect plants threatened by a planned road improvement project.

Federally listed, rare plants are protected on public lands but there can sometimes be conflict between protection of these species and other land use needs. In such cases, the loss of individuals can be unavoidable. This conflict is occurring for an energy project in western Colorado where needed improvements to power lines threaten the endangered *Penstemon penlandii*. Roads that cut through *P. penlandii* habitat on Bureau of Land Management lands need to be widened and improved to update and maintain power structures. We are working with the utility entity and federal government to study the effectiveness of transplanting the impacted plants out of right-of-way impact zones to nearby suitable habitat.

The species occurs on shale badlands between Troublesome Creek and Sulphur Gulch, a patchy band of 1.5 by 0.5 miles. In 2008, we led a survey to estimate plant density and estimated a population of 10,000 to 100,000 individuals. While this large size puts the population at lower risk of extirpation, monitoring of five sampling sites by the Bureau of Land Management has documented declines in density from 2010 through 2021, likely because of drought. Due to its federal protection status, restricted distribution and the concern of population declines, mitigation of the plants that will be destroyed is required.



Conserving plant populations where they naturally occur is the preferred option because transplanting individuals is stressful to plants. We tested transplanting 100 individuals in the spring when there are cooler temperatures, wetter conditions and plants are putting their energy into growth and survival. Ninety-four percent of these plants survived their first month after transplanting. We moved another 100 plants in the fall when root systems are developed but plants may be putting their energy into reproduction instead of survival. Over the next three years, we will monitor the survival and growth of our transplanted individuals. This information will inform plans by the land managers and help determine if this is a viable option for similar situations.

THE INCREDIBLE CREATURES OF CHATFIELD FARMS

By Grace Johnson, Assistant Manager of Horticulture at Chatfield Farms



Aside from beautiful native and xeric gardens, large swaths of sustainable farm fields and popular annual festivals, Denver Botanic Gardens Chatfield Farms has yet another asset: wildlife. Situated at the base of Deer Creek Canyon, the property includes many natural and restored areas. Spotting wildlife is a daily occurrence for staff and visitors alike.

Small ponds and a riparian area host a variety of aquatic bird species, such as Great Blue Heron, Black-crowned Night Heron, Red-winged Blackbirds and even American White Pelicans. Many migratory ducks and double-crested cormorants appear early in the summer before taking their leave when temperatures drop. Swimming amongst the birds are muskrats, beavers, tiger salamanders and painted turtles. The northern leopard frog, a tier one species of greatest conservation need, is abundant in Chatfield Farms' wetlands.

In the wide-open spaces, it's common to see mule deer grazing, prairie dogs burrowing, and coyotes and bobcats on the prowl. Less common, although perhaps most captivating, are the black bears and elk herds of the foothills that find their way to the farm. Herds of elk have been seen near the pumpkin fields and mother bears with their cubs in tow periodically wander the creeks in search of chokecherries. These shy guests like to explore Chatfield Farms at the quieter times of the day and move elsewhere as the gates open to the public.

Pocket gophers, voles and field mice – typically considered garden pests – have a home at Chatfield Farms, although the farmers and horticulturists may grumble at their presence. Bull snakes, garter snakes and rattlesnakes do their part to balance the food web and seek out pests. Red-tailed Hawks, Cooper's Hawks, Sharp-shinned Hawks and Great Horned Owls have all built nests and raised clutches in the shelter of the farm's tree canopy. Rufous and Broad-tailed hummingbirds build their tiny nests and raise their babies nearby, as they find a surplus of food among flowers and insects. Countless species of insects – bumblebees, tiger swallowtails, monarch butterflies, honeybees, metallic sweat bees, box-elder beetles and sphinx moths – all similarly thrive within the gardens here.

The diverse landscape of Chatfield Farms hosts a spectacular range of wildlife through its many landscapes. It is one of the many touches that make the property so special. The next time you visit, be sure to keep an eye out for these many charismatic creatures.







Donors of Distinction

Gifts Received November 1, 2023 – January 31, 2024

Mr. and Mrs. Bruce

Clinton

Kathy Cole

Conwick

DALYTE

Trust

Guild

Fund

Detmer

Alison Dinn

E2 Optics

Ebrahimi

Fund

Missy Eliot

Eppler

Foundation

Citizens of the Scientific & Cultural Facilities District Katherine and Paul Aertkei Alpenglow Foundation American Online Giving Foundation Karen E. Pfeifer Michael Kolotylo Raytheon Technologies Andrew and Erin Anderson Gail Anderson and Barbara Edwards Eleanor and Michael Andrade Applewood Seed Company Liz Armstrona Richard and Anne Baer Kim Baker and Jill Nelson Dennis Baldwin Tracie Barnes Ms. Susan Barnes-Gelt Mr. Robert Bartlett Jr Mrs. Laura Barton and Mr. William Matthews John and Mary Bayard Mr. and Mrs. Bennett Bertoli Bertoli Living Trust Alison and Thomas Betts **Biscuits and Berries** Julie and Michael Bock Dawn Bookhardt Laurence and Susar Boothby Lindsay Boothby Mrs. Brooke and Mr. Ion-Frik Borger Kaia Borgen Katherine and Biorn Borgen **Borgen Family Foundation** Mary Bradley Christing Brickley Mark and Jan Bundy Mr and Mrs James Burdick Mrs. Cameron Burn Frances Burton lim and Sharon Butler **Butler Rents** Mrs. Patricia Buys Frank and Jen Callahar Susan Carr Katherine Casey and Ion Taylor Lee Ann Cast Laurel and John Catto Caulkins Family Foundation Charities Aid Foundation of America Charles H. Kurtz Family Foundation Charles Schwab Janette W. Chase Children's Hospital Colorado The Chill Foundation Christopher J.F. Graff Charitable Foundation Raoul and Karen Clark Marilyn R. Cleland

Allison and Mark & The Clinton Family Fund Andrea Ferauson Teresa and Kelly Ferguson Brodie Cobb and Elizabeth Ohm Fidelity Charitable Gift Fund Ben Garnett Charitable Colorado Cascade Fund Colorado Center for Doerr Giving Fund Reproductive Medicine Evans/Hahn Colorado Gives Foundation Foundation Hollis Family Fund Shannon Connerv Jane Nagel Charitable G. K. and Virginia Foundation Judith Seaborn Katherine Coyle Charitable Gift Fund CrossFirst Bank Nagel Family Fund Valerie and Nicki Finberg Daniels Family Charitable John and Sarah Finn Ms. Tamara Fischer and Ravlene Decatu Mr. Jeff Kellogg Dr. Robert Dellavalle and Ms. Mary D. Fowler Dr. Lisa Schilling Mick and Roxane Denver Botanic Gardens Fredericks Ms. Cory Freyer The Denver Debutante Ball Mr. and Mrs. John E. The Denver Foundation Freyer Barton Family Alan Frohbieter Foundation Mr. and Mrs. Robert K. Chispa Fund Fuller Congdon Family Fund Cait Fuoco I See The Moon Fund Beth and David Gaboury Kunz Family Fund Peter T. Gadwa The Molo Charitable Benjamin Garnett Thomas and Beatrice Heidi Garwood and Taplin Fund Stuart Horowitz Walter C. Emery Caleb and Sidney Gates Family Foundation Pat Giarritano and lanina Kozacka Marguerite and Tom Mrs. Sissy M. Gibson The Gilman Family Catherine Dews Edwards Foundation and Philip Edwards Scott Gilmer David and Anne Diamond Dr. Philip Good and Christine Carcano Joy and Chris Dinsdale Linda Good Wilson and Ms. Robin Doerr Mark A Wilson Lynne Doherty and William Gorsky Kevin McDonald Chris Graff Ann W. Douden Greater Kansas City Roger Dunn and Community Foundation lim Liechte Gaboury Family Mr. Peter D. Durst, C.H. Foundation and Ms. Ellen Seale Barbara B. Grogan HALCYON, a hotel in Mr. and Mrs. Fred Cherry Creek Thomas Haller Ebrahimi Family Catherine Hance Foundation Patricia Hanninaton Echter's Nursery & Lucy Congdon Hanson Garden Center and Charles Hansor Edward Jones Charitable Ms. Marilyn Harris and Gift Fund Mr. Bob Harris Roger Dunn Giving Harris Charitable Foundation Trust Eleanor and Henry Karin and Kent Harvey Hitchcock Charitable Susan and Michael Foundation Hawes Elevated Third Gregory L Hawkins and Lvnn A Hawkins Victoria Emery Dr. Kristy Hawley and Epicurean Catering Mrs. Nancy Hawley Victoria and Stephen Matthew and Helen Hayes Estate of Anne T. Bobal F B Hebert Factor Design Build Arlene Hirschfeld and A Fairfield and Woods Barry Hirschfeld

Ms. Susan McLoon Hodsor Mr and Mrs Graham F Hollis Jack & Leslie, Morey & Dr. Michael C. Hosokawa Kathryn Huwaldt Mr. and Mrs. Michael Imhoff Larry and Kathleen lackel Margaret Jackson lacauard Hotel & Roofton Jewish Community Foundation Fredericks Family Charitable Fund J.M. Jones and Jim Mohle Mr. Jack R. Jones Karen Jones Delphine and Chris Kahler Mr. Donald J. Kany and Mrs. Susan C. Kany Karen J. Glanert Charitable Trust George Kemp Kevin and Dorota Kilstrom Ms. Laura F. Kirk and Mr. David Carpenter lennifer Korman George and Barbara Kovacs Dr. Anne Kubik Mr. and Mrs. Frank A. Kugeler Mr. and Mrs. Charles H. Kurtz Mr. and Mrs. Jerry D. ladd Land Title Guarantee Company Christopher K. M. Leach and Chad Skrbina Cynthia and Brian Lefevre Cindy Linguist Karen E. Lochbaum and Thomas Shallow Loretta and Leiah Norgren Foundation Daniel Lutz Mandelbaum Family Charitable Foundation Mr. and Mrs. Robert L. Manning, Jr. Mr. and Mrs. Stephen S. Marsters Marguerite and Max Martin Mrs. Sharon Martin Terry Mather Howard Matz Dr. William Mauldin and Margie Mauldin Medora Mavne Douglas R. McCallum and Diana L. Neff Mrs. Eileen Honnen McDonald and Mr. Ed McDonald John McKinney and Joan Shea-McKinney Carrie and Michael McLaughlin Caroline McMorrow The Louis R & Dorothy M Meister Foundation Melville Foundation Anne B. Mills Gene and Dee Milstein Ronald and Bonnie Milzer Meaan Mistler and Scott Chrisbacher Mrs. John C. Mitchell III Doug and Kathy Hodgson Nicole Mlinarik

Modern Market Fatery Marie and James Monroe Mr. and Mrs. John Morrison Ms. Kim Morss and Mr. Richard Dehncke Jane and Robert Nagel Natalie's Orchid Island Juice Company Oak Park River Forest Community Foundation Kovacs Family Fund Colleen A. O'Connor and Matthew Mcelhiney David E Oswald and Laurie Sankey Mr. and Mrs. Thomas P. Owen Kris and William Paddock Lorraine Parker and Elizabeth Starrs Kirsten Pederson Pikes Peak Community Foundation Ent Credit Union Community Fund Ms. Alita Pirkopf Kathleen and lim Potter Marcie and Koger Propst leanette Prvor Quantum Fiber Laurin Quiat Mr. Gary B. Randall Cleo and Jonathan Rauchway Raymond James Charitable Kim Baker and Jill Nelson Family Foundation Fund Paddock Bill & Kris Donor Advised Fund **RBC** Wealth Management Ms. Martha Records and Mr. Richard Rainaldi Dr. Charlotte A. Redden Robert and Myra Rich Scott Richards and Terrie Fontenot Sarah Riddlebaraer Bruce Rindahl and Angela Burdick Carmond and R.J. Robbins Kimberley Roberts Ted and Bernie Roland Richard Roman and Clara Restrepo leanne and Chris Root Gregory Ross and Brad Wellens Carol Ann Rothman Mr. and Mrs. John L. Ruppert Cheryl and Dan Ryan Dr. Richard and Jo Sanders Saul Schottenstein Foundation B Taylor Schollmaier and Kimberly Schollmaier Mr. and Mrs. Barney Schotters Gail Schraishuhn Dr. John Schultz Schwab Charitable Fund Ann B. Mills Donor Advised Fund Brian and Cynthia LeFevre Charitable Fund Ferguson Family Fund John McKinney Donor-Advised Fund The Schollmaier Family Fund

ludith Seaborn Ms. Ashley Cole Seidman Judy Sellers Mrs Merrill Shields and Dr. M. Ray Thomasson Patti Shwayder-Coffin and Steve Coffin Stan Siefer Singer Family Foundation, Inc Ms. Andrea Singer Pollack and Mr. Bill Hankinson Mr and Mrs Thomas Sisk, Jr. Stephen Snyder Connie Sprovieri Kathryn B. Spuhler Emilie Ailts Staible Mrs. John H. Stampe Sterling Ranch Development Company Stifel Strompolos Family Foundation Kristin and George Strompolos Sturm Family Foundation Marianne and Tim Sulser Sulser Goup Kenneth N. Swartz and Pamela Simko Lori C. Szczukowski and Lee Newman Shelley and Philip Tamminga Mrs. Thomas E. Taplin TCI Wealth Advisors Joey Terriquez The Art Of Concrete The Marcus Foundation The Records-Johnston Family Foundation Inc. Tigris Sponsorship and Marketina Judi and Bryan Tointon Ann Torgerson Two Octobers **UBS Financial Service** United Airlines Paco Varela and Tim Wilson Mr. Brian R. Vogt Lisa Von Gunten Don and Bonnie Walls Ms Ellen K Waterman WCR/Economy Data Foundation Ira Wertenteil and Cindy Powders Mr. and Mrs. Edward D. White III Dr. John L. Wiberg Matthew and Candace Wickstrom Joanna and Aaron Widmann Mariorie Widmann Wild Heritage Gardens and Design, LTD Stacey and Michael Wilson Kenneth and Janet Wolfgram Wong Strauch Architects Ann H. Young Wallace A Zellme Zorba's

Honor/Memorial Contributors

Gifts Received November 1, 2023 – January 31, 2024

IN MEMORY

In memory of Bruce and Chick Alexander Rebecca Safarik and Roger DeWitt

In memory of Joyce Bell

Rick and Leah Squires

John O. Benavidez

In memory of

Burdick Family

Patricia Duggan

Marti Pausback

In memory of

Sabre Moore

Cherie Johnson In memory of Nora Anne Jones Mr. Jack R. Jones Virginia Ammon

> In memory of Norma Kincaid Ms. Patty Polsky

> > In memory of

Gloria Koshio

Group

Erika Enger

John S. Longcamp

Fairfield and Woods

Foundation

Kimberly Kaufman

Elizabeth McCabe

Nancy McGee

Maren Nielsen

Arleen Peterson

Daniel Lutz

In memory of

Kaitlyn[']Magill

In memory of Sid Malmberg

Mr. Tom Hail

Ms. Laura F. Kirk and

Mr. David Carpenter

Ms. Gretchen Pate and

Bill and Chris Leonard

Nancy and Greg Worth

In memory of Teri S. Lutz

Marlené Lederer

James and Lorraine Adams

Neil and Carol Kesselman

Personalized Travel Service

In memory of John Leonard

In memory of

In memory of Gladys Kirk Ms. Laura F. Kirk and Mr. David Carpenter

In memory of Caroline John

Evelyn and Stanley John

Barbara Johnson

Evelyn Avanesian

In memory of Beth Kubik Dr. Anne Kubik

Grace Benavidez In memory of John Kundts In memory of Sue Boelter **Raylene** Decatur Amanda Shindledecker Carmond and R.J. Robbins

In memory of Ashley Boothby Laurence and Susan Boothby

Lindsay Boothby In memory of Dolly Buchanan Phyllis and Jack Brown

In memory of Michelle L. Carter Don Ruggles and

Nancy Sager-Ruggles In memory of Gladys Cheesman Evans

Evans/Hahn Foundation In memory of Jean Cole

Ms. Ashley Cole Seidman In memory of Robert and Willow Connerv

Shannon Connery In memory of

Susan Jay Dinn Alison Dinn lennifer Korman

In memory of Anne T. Bobal Estate of Anne T. Bobal

In memory of Peder Furuseth Tara Clifford and Greg Yankee

In memory of

In memory of

Anonymous

In memory of

Cheroutes

Jim Hammersmith

In memory of Heidi

In memory of Teri Hampton

In memory of Leonard and

Richard and Carole Hieaer

Mildred Hiegert

In memory of Jila

Carroll McCorkle

In memory of

Hammell

Heather Turner

Susan Lauria

Carol Gossard

Mr. and Mrs. Dennis

Anna R. Garrev

In memory of Brandon Mandelbaum Mandelbaum Family

Charitable Foundation

Morse Family Foundation In memory of Rick Gildar In memory of J. Landis Martin Emily Marberry

Mr. and Mrs. Lise K. Erin Michelle Gilmer Bellmar In memory of Anne Mather

Terry Mather In memory of Joann Mauro

& Her Daughter Cathy Frank J. Mauro In memory of **Richard Grozier**

John C. "Jock" Mitchell, III Mrs. John C. Mitchell, III Mr. and Mrs. Stephen L. Waters

> In memory of Quentin[®] "Kim" Mitchell, Jr. Mrs. John C. Mitchell, III Mr. and Mrs. Stephen L. Waters

In memory of Margaret Nilsson Doug Pierce

20 | SPRING 2024

In memory of Donna Park Carolyn Chamness Katherine Degrow Emily Meyer Abby Williams In memory of Charlie Parr Katherine Coyle In memory of Frances Pecinovsky Hewlett-Packard Marilyn Schmitt In memory of William E. Pile Brent Woodard In memory of Mindy S. Quiat Laurin Quiat In memory of Robert K. Reiber Lawrence Berliner In memory of Shiloh Lou Ryan Katie and Joshua Ryan In memory of Barry S. Sarver Brenda Riske In memory of Sylvia Scher Suzi Scher In memory of Peggy Warner Shields Mrs. Merrill Shields and Dr. M. Ray Thomasson In memory of Susie Smith **Brittany Varisco** In memory of Tait Steinbrenner Tari Sicairos In memory of Kenneth Switzer Dr. Charlotte A. Redden In memory of Louise Turnbul Laura Turnbull In memory of Arthur & En Watada Tomiko Takeda In memory of Naomi Waxman Heather and Marc Moss In memory of Ed and Ann White Dr. Andrew Sirotnak and Mr. Jamie Waring White Jamie W. White In memory of George[´]Linn Wilson Jeanette Pryor IN HONOR In honor of Terri Bailey Ms. Kay Gilchrist In honor of Leona Berger Dr. and Mrs. Herb L Jacobs In honor of Mike Bone Ms. Anita Cox In honor of Grandma Boo **Plumley Family** In honor of Maryanne Brush Ms. Kay Gilchrist In honor of **Margaret Colbert** Dr. Diane Pincus

In honor of Leslie and Howard Farkas The Clinton Family Fund In honor of **Mike and Heather Miller** The Clinton Family Fund In honor of Heidi and John Galleaos Anonymous In honor of Mary Ellen Hansen Dr. Diane Pincus In honor of Mary Heuwinkel Breegne Kotulak In honor of Bill and Alice Hosokawa Dr. Michael C. Hosokawa In honor of Johanna Elizabeth Kelly Mr. and Mrs. Robert K. Fuller Arlene Hirschfeld and A. Barry Hirschfeld In honor of Allison Kerr Max Andrews In honor of Patrick Maley Thomas Halle In honor of Kathy Mannis Julia and Don Kane Diane Lifshen Dr. Diane Pincus Suzy and David Rosenthal In honor of Frank Mauro Joe Mauro In honor of Marge and **Charlie Miglis** Judy Rough In honor of Miki Morimoto Dennis Mormoto In honor of Riya Nakazono Dr. Nadine S. Nakazona In honor of Jack Patrick Phyllis and Jack Brown In honor of Rob Price Alison Karas In honor of Gayle Rebish Sherri Stieg In honor of Arnold Samuels Mrs. Karen S. Jones In honor of Caryl Shipley Martin and Jo Semple In honor of Annie Slocum Ms. JoAnne Friedman and Gracie Friedman In honor of Jim and Sheree Sutton BJ Parks In honor of Nancy Thomas Ms. Liesl Thomas In honor of **Margaret Thompson** Patricia Primmer In honor of Venus Anonymous In honor of Larry Vickerman Ms. Leslie Baldwin In honor of Brian Vog Arlene Hirschfeld and A. Barry Hirschfeld Caroline Schomp In honor of Kevin Williams Mrs. Barbara S. Stanton

2024 Board of Trustees

OFFICERS

Mike Imhoff, Board Chair Mary Lee Chin, Vice Chair Diane Barrett, Secretary Abe Rodriguez, Treasurer Kathy Hodgson Immediate Past Chai

TERM TRUSTEES

Rabbi loe Black lose Carredance Dr. Clint Carroll Andrew Cullen Papa M. Dia Melissa Eliot Sen, Rhonda Fields Veronica Figoli Cory Freyer Dr. Dorothy Horrell Ding Wen Hsu Christopher Leach Wy Livingston Ron Otsuka Ion Rauchway Yrma Rico Hollie Seeley Dr. Brad Stevinson Marianne Sulse Mike Toia

MAYORAL TRUSTEES

Dr. Nina Casanova Tiffany Herrick Eliot Hoyt

LIFE TRUSTEE

Mrs. Thomas E. Taplin

TRUSTEES EMERIT

Judi Newman Scott Richards Harold Smethills

EX-OFFICIO TRUSTEES

Christina Caulkins, President Denver Botanic Gardens Endowment Inc Jolon Clark, Denver Parks & Recreation Julie Egan, Denver Debutante Ball Colleen O'Connor, President Denver Botanic Gardens Guild Cynthia Scott, President, Garden Club of Denver

botanicgardens.org | 21



Stay connected to the Gardens! Use #MyDBG **botanicgardens.org**

