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November 2023

Dear Friends,

Turning onto the gravel road leading to the old barn, you feel the anticipation grow. As the setting sun bursts forth across the western sky, you scan the horizon to spot the bison herd grazing in the wind-swept grass. With the windows down, birdsong floods your ears and fresh air fills your lungs. All is right in the world, and it is the same feeling every time, as if you are returning home.

You have a special reverence for this place. It can seem like you found a kind of Eden. But Eden can be lost.

We are living through an era of challenge and change. The sheer magnitude of wide-ranging threats the world faces today seem overwhelming. These global issues have existential impacts here in Illinois, too. While these species do call Nachusa home, iconic grassland birds, including bobolinks and Henslow's sparrows, are in steep decline, while Blanding's turtles, rusty patch bumblebees, and eastern prairie fringed orchids are endangered statewide. Facing these facts, our duty has never been more urgently clear.

Friends of Nachusa Grasslands chooses action over apathy. In 2008, we set goals for a new, small, all-volunteer organization: promote volunteer stewardship, support science and research, and build endowed funds to support Nachusa in perpetuity. Fifteen years later we have garnered the support of nearly 1,000 donors, raised \$4,000,000 in endowments, funded scores of research projects, and sustained a vibrant volunteer community. Our mission has expanded to include land acquisition, and this year we protected our first property. It is truly inspiring what we have accomplished! Thank you!

But we will not rest on our laurels. Each day we must continue to choose action.

Ecological restoration is the future, and no one does it better than Nachusa. That a former cornfield can be transformed into a small-scale Eden bursting with bison, birds, and bees never ceases to amaze and inspire. It is enough to give you *hope*. Just as grasslands thrive with grazers, a prairie is not complete without its people. Put your resources where your heart is and help keep Nachusa thriving.

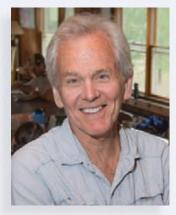
Sincerely,

Mike Saxton



PRESIDENT'S MESSAGE

By Bernie Buchholz



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Dear Friend,

Fifteen years ago we joined the age of prairie restoration. Together – volunteers, donors, staff, scientists – we have achieved great things. And going forward together we face the fundamental challenge of our time.

In 2008 we organized to advance the mission of Nachusa Grasslands. You and I – the Nachusa community – have been wildly successful. We have accomplished the following:

- Given 150,000 hours of quality, devoted volunteer stewardship.
- Accumulated endowments of \$3.3 million to permanently fund operations.
- Awarded \$421,000 in scientific research grants and created a \$670,000 science endowment.
- Completed our first land purchase –
 5 acres at imminent risk of development.

Please take a well-deserved bow...you deserve it...

...and now let's get back to work!

Over the next fifteen years we must do more. Let's create more habitat for threatened species by doubling the size of Nachusa; expanding the bison herd; advancing our understanding of restoThere can be no purpose more inspiring than to begin the age of restoration, reweaving the wondrous diversity of life that still surrounds us.

- E. O. Wilson

ration science; fully developing the potential of adjacent public conservation lands; recruiting and mentoring the next generation of volunteer leaders; and raising funds commensurate with these challenges.

Are you ready for the enormous challenges we face? It's our duty and our privilege to do this important work. Let's set an example for those who are on the sidelines and inspire our young people who will inherit this world. Let's be relentless in our pursuit of Nachusa's mission.

We have so much to be proud of and so much yet to achieve. Are you ready to begin?

With deep gratitude to our community,

Bernie Buchholz, President Friends of Nachusa Grasslands

VOLUNTEERS: THE HEART AND SOUL OF NACHUSA

By Bernie Buchholz and Susan Kleiman

Our energetic volunteers have given more than 150,000 hours of devoted stewardship over the past fifteen years. Why do volunteers love doing this work?

Why Volunteering Thrives at Nachusa Grasslands

At Nachusa Grasslands, volunteers are encouraged to do important work. Staff offer a model of dedication and commitment, while volunteers take ownership of their tasks and are never asked to do anything the staff doesn't do.

Bill Kleiman, TNC's project manager, says, "Our volunteers get the job done, and done well! We have a seasonal crew and a solid staff, but there is a lot of land here and so many essential projects are going on. We treat volunteers as colleagues and empower them to do the work."

Many Ways to Volunteer

Volunteering at Nachusa goes well beyond the core work of habitat restoration.

Paul Mellen enjoys being his own boss in the Headquarters shop, where he repairs and maintains equipment; Tim Mescher supports researchers by maintaining 24 fenced exclosures within the bison units; James Higby skillfully edits our publications; Charles Larry promotes the project with photography and marvelous produces newsletter; Emmylou Studier writes personal handwritten thank-you notes to our donors; Mary Vieregg created a marvelous scientific research grant program, and now Linda Kuhn is leading that major effort; several dozen volunteers participate in prescribed fires; others lead popular hikes and bison tours. There is a volunteer opportunity here for everyone.







Every volunteer, long-term and newer, has their own story.

Worth the Drive

As unit stewards at Nachusa Grasslands for 21 years, Al and Mary Meier travel 240 miles round-trip to volunteer. Why do they drive past other areas where they could also volunteer? "At Nachusa we are empowered to do important work. We make the decisions about what we do and when we do it, and the staff is always there to support us."

Mary is also dedicated to helping operate the Friends of Nachusa Grasslands organization. Her attention to detail is legendary, with the result that the group's membership records are accurate and responsive to our needs. She also helps coordinate Friends social media projects as well as signups for volunteer workdays and public bison tours.

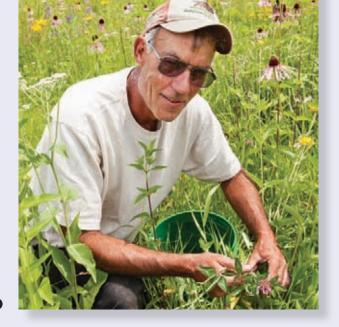
Longest Serving Volunteers

Mike Adolph has been restoring prairie since 1989. He recalls the early days: "My first work at Nachusa was one afternoon in '89, destroying multiflora roses that were more than six feet tall and would have taken three people joining hands to surround. It's no exaggeration to state that more than 10,000 roses have been removed from the unit."

"When work began on the invasives in the remnant pastures," Mike says, "our chief targets were multiflora rose, black cherry and honeysuckle." Early-project volunteers he recalls are Mike Crowe, Kevin Kaltenbach, Gene St. Louis, Sally and Max Baumgardner, Ed Pleskovitch, and Bob Shone. People still enjoy working with Mike, including his more recent pal, Bob Brown.

Mike is well regarded for his warm nature, persistent optimism, and dedication –all of which it takes to crawl through thickets of American plum to remove invasive shrubs. Always ready for a good laugh, Mike is





Continued from page 5

the only volunteer for whom we kiddingly have named a prairie holiday –Mike Adolph Day–in recognition of his special experience with brush piles.

Jay Stacy is our resident innovator, mentor, and storyteller. In a fateful first visit in the early 1990s, Jay Stacy famously came to Nachusa looking for an upland plover and a grasshopper sparrow. When he found both in the first moments of that visit, he was intrigued and soon captivated by the idea of creating more grassland bird habitat. Jay was an early employee of the project, but soon found that his unique and relentless dedication to restoration was best used as a volunteer, albeit one that has given up to 1,500 hours per year. He

was an early leader of high-diversity plantings and his legendary tours captivate visitors with his devotion and colorful anecdotes.



Jay says this work gave his life the purpose he had been looking for on that fateful first visit over three decades ago.

Lots of Variety

After seven years of attending workdays, Tim Ngo recently added Visitor Center docent to his field stewardship volunteering. He agrees with the visitors he meets that might be thinking, "I'd rather be here than anywhere else in the world right now."

Do What You Enjoy

Thirteen-year volunteer Mike Carr likes making his own choices. "We encourage volunteers to do what they enjoy. Some only pick seeds or are on the prescribed fire team, while others just work on weed removal. I spent 10 years just working on woodies removal before I decided to

think about picking and spreading woodland seeds."

He muses, "I have been told by family members that I am fulfilling

the dreams of my father. The time I spend at Nachusa volunteering is my mission, but it does have a connection to my dad. From the time I was very young, he taught me to love natural areas. His greatest frustration with them was the number of invasives we saw when we visited. For me, being involved in the removal of invasives and trying to increase diversity in native populations is a successful multi-generational effort. My contribution at Nachusa over the past 13 years brings me personal satisfaction, purpose, and peace."

Frog Monitoring Expands Interests

Newer volunteers Eric Wiltshire and Kay Handel thoroughly enjoy monitoring frogs, but Eric says, "I think what we enjoyed the most was where frog monitoring led us. Kay created our own frog habitat, we discovered a bird we didn't recognize while frog monitoring, and at our home we planted native flowers that we saw while walking to our site. It's where frog monitoring is leading us that really gets us excited!"

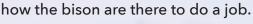
Bison Visitor to Tour Leader

Fortunate to be on a bison tour with NIU professor Holly Jones, Teresa Haggestad learned about the herd and the prairie. "I never considered that I would be capable of being a bison tour leader because I am

not an ecologist, a biologist, or an animal scientist." But in a conversation about volunteer opportunities, she learned that Nachusa needed more bison tour leaders.

"I led my first tour, providing my guests with a solid two-hour prairie experience with a good view of the bison. Everyone seemed interested in what I had to say, and I did not bounce anyone out of the back of

the truck. It was a win! I feel like I have accomplished my tour mission if the group has questions, because that shows that I have fed their curiosity, and they, like me, want to continue to learn more about the prairie and the bison. I want them to know how important the prairie is to all of us and



My hope is that I have inspired someone on my tour to volunteer."

For 15 years, Friends of Nachusa Grasslands volunteers have been devoted to restoring critical natural habitat. Working both in the field doing the tasks of restoration and at their computers building an organization that funds endowments and supports a thriving scientific program, devoted volunteers are the heart and soul of Nachusa Grasslands. There's no limit to the volunteer opportunities that lie ahead.



CELEBRATING SCIENCE

By Dr. Elizabeth Bach With statistics compiled by Mary Vieregg, MSc

From the beginning, Friends of Nachusa Grasslands has encouraged scientific research at the preserve. The first science grants were awarded in 2011: \$500 to Michael Saxton to study soil seed bank germination and \$500 to Kimberly Schmidt to examine ornate box turtle populations. In the twelve years that have followed, Friends has awarded over \$400,000 through 120 science grants. The 2023 cohort includes \$73,000 awarded to sixteen different research projects. The first Friends-funded project to be published appeared in 2013. Since that time, 68 additional publications, in journals such as Science and Proceedings of the National Academy of Sciences, have included Nachusa data.

Nachusa Grasslands is a place that has inspired decades of exceptional stewardship for one of the rarest ecosystems in the world. At its core, science at Nachusa is about sharing that deep sense of place and expanding the community of people motivated to restore habitat for a world beyond us. Friends of Nachusa science grants have invested in scientists at the

very beginnings of their careers, supported established scientists, and encouraged retirees pursuing passion projects. Many of these scientists come back to Nachusa. following their curiosity, and pushing the edge of ecological knowledge. Many have completed degrees and landed career positions, where Nachusa continues to shape their work and perspective. Science grants have deepened relationships with nearby schools such as Northern Illinois University and has led to new relationships with researchers further afield in Illinois and beyond.

In the pages that follow, you will hear from three research groups who have developed long-term research programs at Nachusa Grasslands. These scientists and the work they do embody the deep respect and connection to place that we all share at Nachusa. The Nachusa community looks forward to continuing these collaborations and welcoming new scientists each year who enrich and expand both the Nachusa community and the scientific community. Thank you, Friends, for all you do.



BLANDING'S TURTLE MANAGEMENT

By Dr. Elizabeth Bach

In 2014, consulting ecologists Tom Anton and David Mauger encountered an adult Blanding's turtle as part of a Friends of Nachusa Grasslands-funded survey for reptiles and amphibians. Blanding's turtles are a state-endangered species, and this finding spurred additional surveys and action to learn more about Blanding's turtles at Nachusa and how to conserve them.

Over the past ten years, Blanding's turtle research has deepened and expanded both at Nachusa and across northern Illinois. Dr. Richard King from Northern Illinois University joined the team in 2016, placing radio transmitters on adult turtles and coordinating cage placement to protect nests from predators. The work evolved with consistent support from Friends of Nachusa Grasslands. In the early days, hatchlings were released directly back into the nearest wetland. In 2019, the Nachusa "turtle team" developed a relationship with partners to incubate eggs and "head-start" the hatchlings. "Head-starts" are kept active and growing through the winter before being released the following spring. The hope is that larger individuals can resist predation attempts. The research has also led to additional habitat restoration at Nachusa, including the removal of additional tile drainage pipe from turtle habitat.

There have been setbacks. An emerging fungal disease halted all head-start efforts in 2022, and the Nachusa team reverted to caging nests and directly releasing hatchlings into wetlands. Some of the few adult females have died from natural causes. However, Mauger found juvenile Blanding's turtles for the first time during his annual surveys in 2022 and 2023.

The work of the Blanding's turtle research team embodies Nachusa's efforts to be a community working to protect natural habitat for Illinois plant and animals now and in the future. Richard King, Dave Mauger, and Tom Anton are well-known faces at Nachusa. The research team has helped build partnerships with other conservation organizations and researchers. They have gained additional funding to further bolster the impact from Friends of Nachusa Grasslands' long-term investment. Findings from the work have been shared widely through scientific publications, conference presentations, and popular press coverage.

It's likely that these efforts will need many more years to fully see the conservation return on investment. Friends of Nachusa science grants are providing unique longterm support for this species and the habitat on which it relies.



NACHUSA RESEARCH SPURS WEB OF CONNECTIONS

By Dr. Nick Barber (San Diego State University) and Dr. Holly Jones (Northern Illinois University)

When we first toured Nachusa together Project Director Bill Kleiman in 2012, we knew it was the start of something special. However, neither of us could have predicted how the research program we built together would yield a web of interconnected practitioners and scientists throughout the United States. As soon as Bill told us of the plans to reintroduce bison, we sprung to action to study the impacts of bison reintroduction, fire, and restoration age on prairie plants, invertebrates, mammals, birds, and ecosystem functioning. We have mentored over 50 graduate and undergraduate students and two postdoctoral fellows who have worked on Nachusa projects since we began our research in 2013. Our work at Nachusa Grasslands helped plant the seeds of knowledge that have blossomed into this nationwide web of connections and collaborations.

As a Master's student, Angie Burke studied small mammal responses to bison reintroduction and now works as a Community and Conservation Specialist for The Nature Conservancy in Ohio. Ryan Blackburn, whose Master's research

focused on bison diets and how drone imagery can predict ecosystem processes, went on to get his PhD from Northern Arizona University and is now a Postdoctoral



Fellow at the Smithsonian Institute. After her Master's research on dung beetle communities at Nachusa, Sheryl Hosler will soon defend her PhD dissertation at the University of Illinois, Chicago. Former undergraduates Maria Weston and J Heise both went on to Master's degrees at Grand Valley State; J now works for a consulting company, while Maria is a natural resources specialist for the USDA Natural Resource Conservation Service in Michigan. For these students and so many more, Nachusa Grasslands has provided a starting point to build the expertise and skills that they use as scientists across the country, further extending the influence of this important place and the community that cares for it.



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NACHUSA LAUNCHES CAREERS

By Dr. Bethanne Bruninga-Socolar (Albright College)



In February 2023, I was awarded a Friends of Nachusa Grasslands science grant to conduct a 10th year of research on Nachusa's wild bees with my long-time collaborator, Sean Griffin. Sean and I first started studying Nachusa's bees in 2013 as first-year graduate students, and in 2023 we returned to Nachusa as first-year professionals in our dream positions, I as an Assistant Professor at Albright College in Reading, PA and Sean as Director of Science and Conservation at the Lady Bird Johnson Wildflower Center in Austin, TX. For both of us. Nachusa is where we found the support, community, and inspiration that we needed to become successful scientists. One of my first emotions when I got the offer of my tenure-track job in 2022 was relief that I had a clear path for maintaining my relationship with Nachusa.

We first arrived at Nachusa in 2013, excited to explore a simple but important question in ecological restoration: does plant-based restoration positively impact non-target animals, particularly wild bees? We quickly found that bee communities at Nachusa do reach high levels of abundance and diversity in just a few years after initial planting. Further, the varied application of prescribed fire and bison grazing pressure over space and time supports bee communities

by providing diverse nesting resources across the preserve, and this may be more important than floral resources for maintaining Nachusa's bee diversity for the future.

Beyond the scientific knowledge we're gaining, the community of science and practice at Nachusa is where I'm learning the collaborative skills that underpin successful scientific work. I am continually inspired to be a better collaborator and mentor by watching Nachusa's staff and stewards at work. Nachusa has given me the space and support as an early-career scientist to grow those skills, through many mistakes and wonderful successes. Through Friends funding, Sean and I have mentored eight undergraduate students and post-bachelor's technicians, many of whom have continued to work in ecological restoration. My mentorship experiences at Nachusa confirmed my desire for a teaching-focused career.

Thank you, Friends, a thousand times over, and see you on the prairie!



LAND FUND AND ENDOWMENTS ADVANCE THE NACHUSA MISSION

Fifteen years ago, many of us were unfamiliar with the workings of endowments. Now we are using them to meet our financial goals – permanently funding both Nachusa operations and scientific research grant-making.

OPERATIONS ENDOWMENTS

Goal: \$5 million principle

\$1.6 million \$3.4 million

Friends Endowment for Nachusa Grasslands (CFNIL) and Nachusa Grasslands Stewardship Endowment (TNC)

Annual Distributions Fund Operations

When Fully Funded \$225,000

Current \$140,000

SCIENTIFIC RESEARCH ENDOWMENT

Goal: \$1 million principle

\$370,000 \$630,000

Friends Endowment for Nachusa Science (CFNIL)

Annual Distributions Fund Science Grants

When Fully Funded \$40,000

Current \$7,000

LAND PROTECTION FUND

Goal: \$50,000 Annually

To assist with land acquisitions, in 2021 we started adding to the Land Protection fund at \$50,000 annually. In May 2023 we made our first acquisition, protecting five acres of critical habitat which had been threatened with incompatible development.

Funds Available \$48,000

Land Purchased \$77,000

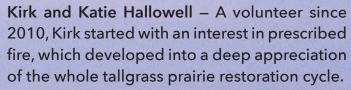
HERITAGE HEROES INITIATIVE

Legacy Commitments Reflect Enduring Values

Prairie people take the long view. Some among them are Heritage Heroes – folks wishing to leave a legacy of support as an expression of how much they value Nachusa Grasslands. Since 2009, twenty-eight individuals or families have made a legacy commitment.



Judy Dennis – Hearing the story of Nachusa's long-term restoration effort got her thinking about what she could do to ensure that the project would always be here for her family and friends.







Harriet Choice – Looking for a strong Midwest outdoor writer, Ms. Choice was introduced to John Madson, author of the iconic Where the Sky Began: Land of the Tallgrass Prairie. She became friends of Madson and his wife and caught prairie fever when they led her through her first tallgrass prairie.

Daniel Thompson – Daniel has been interested in the natural world throughout his life. His legacy commitment honors the Nachusa volunteers' dedication and their many successes. He strongly supports Friends' aggressive funding of scientific research.





Ira Johnson and Steve Diller – Ira frames his commitment to Illinois prairies as the "island and bridges of nature to sustain our ecosystems." Steve "can't think of anything more important...than the restoration of threatened ecosystems. If that doesn't happen, no other charitable giving will matter."

Mark Hochsprung – "I love the idea of having land set aside and preserved for perpetuity. I'm not out to change the world. I'm just doing my part."



If you'd like to learn about the Heritage Hero initiative, please contact Bernie Buchholz via email at NachusaGrasslands@gmail.com

2023 SCIENCE GRANTS

Kathryn Bloodworth, PhD candidate, University of North Carolina at Greensboro. "Fire effects on multiple ecosystem outcomes: a meta-analysis for the land managers of tallgrass prairie." This grant will conclude the Friends' financial support of a comprehensive three-year effort to understand the role of fire frequency in conserving multiple ecosystem outcomes. This includes but is not limited to its effects on birds, insects, small mammals, soil characteristics, woody plants, grasses, and forbs across a wide variety of settings (including Nachusa Grasslands) in the tallgrass prairie region. This analysis should provide land managers with information they need to make vital decisions on fire frequency for specific desired outcomes. \$4,873 (in 2023).



Bruninga-Socolar, Bethanne PhD, Albright College. "Monitoring Nachusa's wild bees: long-term trends and importance." Dr. regional Bruninga-Socolar and Dr. Sean Griffin will be continuing their 10-year long native bee monitoring program at Nachusa in the context of asking two questions with their data collection: "To what degree are native bee abundance and diversity being maintained at Nachusa?" and by comparing Nachusa's bee populations with those of nearby prairie preserves, "What role does Nachusa play in maintaining native bee abundance and diversity regionally?" This work will add both depth and breadth to one of the few data sets available on long-term native bee populations. \$10,000.

Reb Bryant, PhD candidate, The University of Kansas. "Testing the effect of native arbuscular mycorrhizal fungi (AMF) on prairie restoration success at Nachusa Grasslands." This grant will conclude the Friends' financial support of a three-year project designed to study the question of whether or not the inoculation of specific native arbuscular mycorrhizal fungi (AMF) into the soil of greenhouse-grown plants can facilitate the plant abundance of "hard-to-establish" plant species in prairie restorations. If successful, this work may provide a "library" of AMF cultures that can be used to increase biodiversity in future restorations. \$14,525 (paid in full in 2021).

Molly Carlson, MS candidate, University of Illinois at Urbana-Champaign. "Predation on burrowing crayfish at Nachusa Grasslands." This study will follow up on the 2022 survey of Nachusa crayfish completed by M. Carlson, Dr. Christopher Taylor, and D. Swedberg. The goal of this year's research is to examine the predation dynamics between Nachusa's burrowing crayfish and the preserve's other prairie and wetland species. The project will provide the first long-term video documentation predation of events on burrowing crayfish which play significant ecological roles but are understudied. \$4,925.



Andrew Davies, MS candidate, Northwestern University and Chicago Botanic Garden. "Genetic diversity and fitness decline in kittentails (*Synthyris bullii*)." Kittentails are threatened plants in Illinois, and Nachusa's populations of kittentails have some of the highest genetic diversity of twelve populations sampled in Illinois and Indiana. Seeds from two of Nachusa's kittentail populations (along with seeds from four other off-site populations) will be used in a garden drought experiment at the Chicago Botanic Garden to compare drought tolerance of their offspring. The goal of this particular experiment is



to provide data on the plant's ability to persist through the increasing summer drought conditions predicted by climate change models. The larger goal of this genetic research is to study whether genetic variation among populations can be used to sus-

tain kittentail populations both at Nachusa and regionally. \$8,000.

Luke Daniel Fannin, PhD candidate, Dartmouth College. "Functional ecology of competing photosynthetic pathways in a North American tallgrass prairie." This grant supports additional data collection to answer a question first investigated at

Nachusa by Fannin in 2021. He will be collecting and analyzing additional plant and bison dung samples in order to compare bison grass preferences during different seasons of the year. By continuing to compare certain functional traits of specific grass species



(fiber, toughness, and abrasivity) with bison forage selectivity, he may provide insight into bison foraging decisions and the potential long-term effects of bison grazing on Nachusa's plant diversity. \$1,644.

Jacob R. Hopkins, PhD and Andrea Fetters, PhD, The Ohio State University. "Grazing effects on plant-pollinator-microbe interactions." Ecological research often focuses on the effects of one component on just one part of the whole ecosystem. The goal of this research is to quantify the effect of bison grazing on the interactions of three ecosystem components functioning as a unified system. Specifically, Dr. Hopkins and Dr. Fetters have designed an experiment to explore the effect of bison grazing on the collective interactions of the grazed plants, their pollinators, and the underground microbial underpinnings of the plants. \$4,400.

Robert Jean, PhD, Environmental Solutions and Innovations. "Community dynamics, flower preferences, and para-

site loads of native bees and domesticated honey bees at Nachusa Grasslands." This study will revisit the 2022 study of differences in bee community composition, floral preferences, and parasite loads of native bees and



2023 SCIENCE GRANTS continued

domesticated honey bees at various distances from a large honey bee aggregation/apiary located adjacent to Nachusa Grasslands. This study may shed some light on what effect, if any, domesticated bees have on native bee populations, including the federally endangered rusty patched bumble bees residing at Nachusa. \$8,000.

Richard King, PhD, Northern Illinois University, with Thomas B. Anton and David Mauger, Independent researchers. "Head-starting: A new phase in Blanding's turtle management at Nachusa Grasslands." This grant represents the Friends' ongoing support for the multi-organization effort to increase the population and promote the persistence of state-endangered Blanding's turtles. During 2023, this research team will be 1) trapping Blanding's turtles, trying to capture animals released as hatchlings, and head-starts in previous years, 2) tracking adult females to monitor egg development and protect nests from predation, 3) tracking 2022 head-starts with operational radio transmitters, and 4) attaching tracking transmitters to any additional juveniles found onsite. \$4,750.



Joshua Klostermann, PhD candidate, University of Missouri. "Multitrophic interactions among insects nesting in bison wallows." During his 2022 field season at Nachusa, Klostermann discovered unknown host/parasite interactions between bee, wasp, and fly

species living in bison wallow sites at Nachusa. Soil samples in conjunction with emergence trapping and photography have the potential to reveal how the wallow habitat is supporting these organisms and their interactions. This grant supports the ongoing investigation of these rarely studied communities. \$1,000.

Ashley McDonald, PhD candidate and Jennifer Schultze, MS candidate, Southern Illinois University. "Assessing the efficacy of predatory control and prevalence of zoonotic pathogens in northern Illinois raccoons." This ongoing study at several sites in northern Illinois is providing data to 1) determine the long-term feasibility and efficacy of predator (raccoon) control and 2) determine the prevalence of zoonotic pathogens in raccoons. It uses camera traps to monitor the distribution of raccoons before, during, and after removal. Tissue samples from the humanely trapped raccoons are analyzed for nine pathogens to determine the rac-

coons' potential human health impact. Understanding the efficacy of raccoon control is important for Nachusa managers because of the efforts being made to support Blanding's turtle popula-



tions as well as other threatened and endangered raccoon prey species. \$3,000.

Susan McIntyre, MS, Assistant Scientist, Illinois Natural History Survey. "Vegetative succession and seed fate in bison wallows." Bison wallows are of great interest to stewards at Nachusa. Are abandoned wallows an opportunity



for overseeding less-competitive conservative plant species? Are they instead just opportunities for weedy invasives to take root and spread into the surrounding area? Or does it depend on the floristic quality of the surrounding area or the soil type? Or maybe it depends on how many and what kinds of seeds are carried away by ants and other consumers. This ongoing study investigates these questions using vegetative sampling, soil sampling, seed separation techniques, seed predation studies, and time-lapse photography. \$6,558.

Gavin McNicol, PhD, University of Illinois at Chicago. "Effects of ecosystem type and environmental gradients on native Midwest ecosystem-climate interactions." Dr. McNicol and his team will continue quantifying the greenhouse (GHG) balance of Nachusa's qas prairies, woodlands, and wetlands. Measurements of plant photosynthetic uptake of carbon dioxide will be added to the data collected on respiration of carbon dioxide, methane, and nitrous oxide fluxes in 2022. Additionally, they will investigate the effects of elevational

gradients, plant communities within an ecosystem, seasonal changes in soil moisture and temperature regulation, and local weather conditions on GHG dynamics. \$8,000.

Erin Rowland-Schaefer, PhD candidate, Northern Illinois University. "Understanding complex direct and indirect drivers of tallgrass prairie small mammals across scales." This project continues the long-term study of small mammal populations at Nachusa relative to its plant communities and its management regimens, such as prescribed fire. \$3,000.

Pallavi Singh, PhD, Northern Illinois University. "Identifying factors that influence bison health." This ongoing study is designed to assess the intestinal microbial population of bison at Nachusa and the various factors that influence it. Among those factors are seasonal temperature and seasonal dietary variations. \$1,850.

Elizabeth Small, MS candidate, Northern Illinois University. "Impact of plant composition, height, thatch, and density on small mammals in restored tallgrass prairies." This grant supports the decade-long work on small mammal populations at Nachusa. Specifically, this study will examine how plant community composition, height, thatch, and density can affect the diversity, survival, and abundance of small mammals. \$3,000.



OUR DONORS

JULY 1, 2022, TO JUNE 30, 2023

*PRAIRIE PERENNIALS

Donors who have given to the Friends of Nachusa Grasslands in consecutive years at the same or a higher level

Restoration Benefactors – \$5,000 or More

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in memory of

Irene V. Santee

Conservation Champions – \$1,500 to \$4,999

Mike Adolph Carol Brown* Mary Walsh and Dave Crossett **Etnyre Foundation** for equipment and material supporting our docents at the Nachusa Grasslands Visitor Center Kim Fischer* Ralph "Red" Frank* Linda and Jerry Hartz* James and Betty Higby* in memory of Edward T. Higby Carolyn Bengtson and Jonathan Hutchison Karen Hutt June and Steve Keibler* in memory of John Engstrom Erin Moloney and Eric Kingery*+ Nancy Maze* Steve and Mary Meiners* Michael L. Mekeel Peter and Jody Nichols Michael Mekeel and Frances Offenhauser* Scott Baker and Sara Parikh Steven and Robin Read* Monica Sentoff in memory of Stephen Sentoff Susan Stillinger* Cara Therrio

Anonymous+

+HERITAGE HEROES

Donors who have committed to including the Friends of Nachusa Grasslands in their estate plans

Supporters - \$1 to \$1,499

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Lorraine Gawlik* in memory of Sally Baumgardner Don and Vicki Gladfelter John Godawski* Roger Golec* Sue A. Goudy* Jan Grainger* Cynthia Gray Teresa and Tom Greenway* Cristina and Richard Griffin* Bob Gross in memory of Edna Gross Victor and Jean Guarino* Peter Guiden* Nancy Gumm* John and Jan Gundy Kirk and Katie Hallowell+ Robert and Marietta Hance* Michael Hansen* in memory of Carl and Betty Hansen Michael and Kathleen Hartke* Ann Haverstock* **Amber Hays** Trudy Hennessy* Wes Herwig Bernie Hicks+ in appreciation for a tour led by Susan Kleiman Jeffrey and Sandra Hirter in memory of David Lepperd The Hoffman Family* A. Anne Holcomb* Joseph and Margo Reaver* Dennis Holtman in memory of David Lepperd Lonnie Horton* Carolyn Hotchkiss* John and Ingrid Hotchkiss* Eugene Hotchkiss* Janie and Terry Houchin* in honor of Mary and Al Meier John Huck* in memory of Roxana M. Huck Dee Hudson Jim and Kathy Huffman* Steve Hussey* Karen Hutt Travis Ickes* Ronald Ingraham

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Dato Dr. Robert Inger and Datin Tan Fui Lian in honor of Jack and Carol Huggins Allan Lindrup* Stephen Liphart and Lorrie Liphart* Paul Little* in memory of Laurie Bollman-Little Dan Loescher Quinn Long in honor of Mike Saxton Ann Lowry* James and Kathleen Lubawski in appreciation for a tour led by Bill and Susan Kleiman and in honor of Dr. and Mrs. George Stacy Clark and Pam Lumsden* Susan and Joseph Lunn* Walter and Cheryl Lutz Rebecca Macklin in memory of Henry S. Rex The Mapel Family David Mauger in memory of Embl Female 1L1R, the first Blanding's turtle captured and marked at Nachusa Grasslands that died Francis and Georgann McBride in memory of Henry S. Rex Greg and Kay McKeen in honor of Jim and Mary Vieregg Jo Ann McNaughton-Kade* Mary and Alan Meier+ Rodney and Marilyn Meiners in appreciation for a tour led by Mark Herman and Mark Jordan Paul and Deb Mellen* Timothy and Jennifer Mescher* Peter and Jan Meserve* Nancy Moen Evan Moore in memory of Tim Keller

OUR DONORS

JULY 1, 2022, TO JUNE 30, 2023

Continued from page 19

Lisa and Jerry Moore* Gillian Moreland* Debby Moskovits* Bonnie and Gary Mueller in memory of Kim Schnorr Dave and Nancy Napalo* Peter and Jody Nichols Nancy Nichols* Alyssa Alt and Andrew Notbohm in memory of Henry S. Rex Randy Nyboer* David Oldenburg* Pete Oliver Jan Steward* Drs. Anna and Ralph Orland* Stewart and Deborah Pagenstecher* Mary and Perry Paliga* **Panoptic Solutions** Mike Carr employee match Susan and Don Panozzo* Joseph and Margaret Pasteris Albert Patapack Bonnie Bush and John Peart* Dave and Cindy Peterson* Sandy Phillips* in memory of my Conner, McGonigle, and Fagan Families John and Trisha Plescia Tom and Karen Pulver* Daniel and Rita Randecker* Donald and Shirley Raney in memory of Henry S. Rex Susan Raymoure in appreciation for a tour led by Bernie Buchholz and Keith Anderson Renae Rebechini*

Jane Renkes

Rochelle Chapter Daughters of the American Revolution Cassandra Rodgers* **Bob Breving and Emily** Rosenberg Bernard Ross III in honor of Erin Rowland-Schaefer Christine Rutkoske Martha and Zink Sanders* Nancy and Jim Sanford* in memory of Iola and Arthur Gambach Susan Sawicki in memory of David Leppard Michael and Jocelyn Saxton+ Kate and Ron Saxton* Richard Scheffler Tom and Karen Scheidt Kevin Scheiwiller* John and Cynthia Schmadéke* Dick and Annette Schoenberger Regina Schurman* Stephen and Marilyn Scott* Brad and Yvonne Semel* Timothy C. Sherck+ Jim and Ronda Shotsberger* Jack and Terry Shouba Dianne Siekmann* Kathy Siperly* Ron and Judy Skleney Brad and Rebecca Smith* in honor of Emmylou Studier and Charles Larry Judy Snyder* Sherrie and Bill Snyder*

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Barbara Wilkins* Diana March and Norm Wilkinson Jason Willand Steve Byers and Nancy Williamson in memory of Ralph Burnett Eric Wiltshire Lucinda Winterfield* Richard Wollenberger in honor of Trudy Hennessy's birthday Ralph Wurster* Marianne and Douglas Zapotocny Mary Zavada in memory of Henry S. Rex Robin Rothbard and Alan Ziebarth* Robert Zimmerman* Anonymous in memory of Bruce Anderson Anonymous in memory of Ralph Burnett Anonymous in honor of James and Nancy Hotchkiss Anonymous* (2) Anonymous (4)

Heritage Heroes Not Listed Above

Anna Bussian
Harriet Choice
Ira Johnson and Steve Diller
George and Mary Lou
Farnsworth
Mark and Cecilia
Hochsprung
H. Phillip LeFevre
Robert J. Miller
Penny Moser



FINANCIALS

Statement of Activities		
Support & Revenue	2023 (unaudited)	2022 (audited)
Donations	\$560,899	\$348,570
Investment Income	\$234,284	-\$338,700
Endowment Distributions	\$104,383	\$127,077
Grant Income	\$167,940	\$134,733
Other Income	\$54,403	\$51,508
Total Revenue	\$1,121,909	\$345,223
Expenses & Land Purchases		
Science Grants and Symposium	\$73,385	\$66,394
Auditing, Insurance,		
and Professional Expenses	\$9,590	\$6,655
Stewardship	\$98,479	\$89,248
Nachusa Operations	\$1,250	\$69,949
Endowment Fees	\$11,509	\$3,035
Development Expenses	\$16,641	\$15,141
Grant Spending	\$11,887	
Grants to Other Organizations	\$4,000	\$4,000
Land Purchases and Maintenance	\$79,226	
Other Expenses	\$3,313	\$7,481
Total Expenses	\$309,280	\$261,903
Change in Net Assets	\$812,629	\$86,941
Net assets, end of year (June 30)	\$4,387,589	\$3,574,960
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Endowment Distributions

	Current Year	Since Inception
CFNIL General*	\$97,378	\$322,975
CFNIL Science **	\$7,005	\$11,113
TNC ***	\$42,268	\$185,833

Total **Distributions**

Distributions	\$146,651	\$519,921
* Community Found	ation of Northern Illin	nois (CFNIL) General

endowment established May 14, 2014; distributions fund operations at Nachusa.

Statement of Financial Position

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Cash and Investments

CFNIL General Endowment * CFNIL Science Endowment ** TNC Endowment *** Protected Land	\$2,615,666 \$631,496 \$804,413 \$77,034	\$2,392,855 \$226,666 \$783,119 \$0
Total Assets	\$4,387,589	\$3,574,960
Liabilities Total Liabilities	\$0	\$0
Net Assets Total Liabilities & Net Assets	\$4,387,589 \$4,387,589	\$3,574,960 \$3,574,960

\$258,980

\$172,320

\$141,650

\$89,248

\$595,807

Fund Report

CFNIL Science Endowment **

TNC Endowment ***

Total Contributions

Fund Balances		
Land Protection Fund ****	\$48,511	\$77,559
Yellow Farmhouse Fund *****	\$48,332	\$0
Fund Contributions		
Land Protection Fund ****	\$47,986	\$77,559
Yellow Farmhouse Fund *****	\$50,000	\$0.00
CFNIL General Endowment *	\$120,000	\$287,350

\$366,842

\$96,174

\$681,002



^{**} Community Foundation of Northern Illinois (CFNIL) Science endowment established December 1, 2020; distributions fund our science grants and symposium.

^{***} The Nature Conservancy (TNC) endowment established September 1, 2009; distributions fund operations at Nachusa.

^{****} Land Protection Fund Established June 30, 2021; funds for strategic land acquisitions.

^{*****} Yellow Farmhouse Fund Established June 28, 2022; funds repairs that will extend the house's useful life.

OUR MISSION

ENCOURAGE STEWARDSHIP

Volunteers are the heart and soul of Nachusa. Our volunteers harvest seed, manage invasive species, clear brush, plant new prairie, and conduct prescribed burns. They monitor streams, dragonflies, and frogs. Some volunteers lead hikes or share their photography or drawings. E-mail us for a volunteer opportunity that will have an immediate impact.

BUILD ENDOWED FUNDS

Our goal for our operations endowments is a total of five million dollars, which will help defray the costs of stewardship over the long-term. We can't do it without you! In recognition of your support, we will send you our Annual Report detailing the progress you make possible.

LEARN MORE

SAVE THE DATES

Science Symposium: April 20, 2024 Friends Prairie Potluck: June 8, 2024 Friends Annual Meeting: July 27, 2024 Autumn on the Prairie: September 21, 2024

CONTACT US

Friends of Nachusa Grasslands 8772 South Lowden Road Franklin Grove, IL 61031 708-406-9894 nachusagrasslands@gmail.com

With grateful thanks to our writers, editors, photographers, and illustrator who contributed to this annual report.

PHOTOGRAPHERS

Each copyrighted photo is marked with a symbol indicating the photographer's name.

- ⊕ Greg Baker
- Harriet Choice
- ◆ Cindy Crosby
- **≭** Judy Dennis
- ✓ Chad Hallowell
- Dee Hudson
- * Holly Jones
- ▲ Charles Larry
- ♦ William McBride
- ★ Daniel Thompson

SUPPORT SCIENTIFIC RESEARCH

We support critical scientific research that expands our understanding and improves our restoration practices. We recently established the Friends Endowment for Nachusa Science with a goal of one million dollars, which will be a durable source for a portion of our annual grants. We will award \$75,000 in 2024.

PROTECT LAND

We've created a fund to support land acquisitions for the continued expansion of Nachusa. Our goal is \$50,000 annually.



ANNUAL REPORT TEAM

Editor-in-Chief: Bernie Buchholz Managing Editor: Dee Hudson General Editor: James Higby Graphic Designer: Cindy Kiple

Printing: Georgene Meyers and RGM Graphics

Illustrator: Betty Higby

DIRECTORS

Mike Carr (2022-2024) Heather Herakovich (2022-2024) Betty Higby (2023-2025)

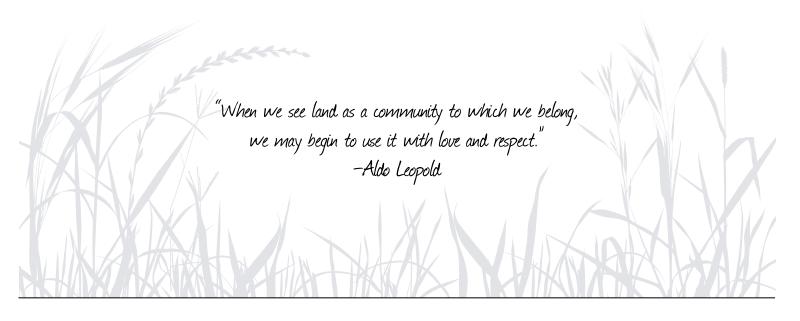
OFFICERS (2023-2024)

Bernie Buchholz, president Mike Saxton, vice president Eric Kingery, treasurer Mary Meier, secretary









Thank you for supporting Friends of Nachusa Grasslands

Giving levels listed in our Annual Report are

 Restoration Benefactor — \$5,000 or more

How should Friends apply my donation? ☐ Where most needed Stewardship/Science Endowments* ☐ Friends Endowment for Nachusa Grasslands (CFNIL) ☐ Nachusa Grasslands Stewardship Endowment (TNC) ☐ Friends Endowment for Nachusa Science (CFNIL)	Send me information about: ☐ Including Friends in my estate to become a Heritage Hero ☐ Donating stocks, bonds, mutual funds, or other assets ☐ Donating from my IRA	FRIENDS OF NACHUSA	
Funds** ☐ Friends Fund for Science ☐ Friends Land Protection Fund ☐ In Honor/Memory of: For an honor/memorial acknowledgment or employer match, please include information on a separate note.	Visit nachusagrasslands.org/donations for endowment details, giving options and more information. * Endowments permanently secure funding for the future. ** Funds support current science or land purchases.		
PLEASE PRINT CLEARLY NAME(S) (as you wish it printed in the Friends Annual Report)	☐ MAKE MY GIFT ANONYMOUS	PHONE	
ADDRESS	CITY	STATE & ZIP CODE	
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Enclosed is my check to <i>Friends of Nachusa Grasslands</i> for: \$	Name on Card: Expiration Date: Donation Amount \$	CVV	
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Thank you for your support!

Please send your gift to: Friends of Nachusa Grasslands 8772 S. Lowden Road Franklin Grove, IL 61031