

COMMONS FORD PRAIRIE

Big transformations often have humble beginnings— a plant starts from a seed, a journey from a step, a solution from a question. During a birding trip in 2009, Ed Fair, an avid birder and the catalyst for the restoration, casually commented on the amber grass in abundance in a 40-acre tract of land that is a part of the Commons Ford Ranch Metropolitan Park in western Travis County. Fellow birder Dr. Byron Stone noted that it was a field of invasive, non-native grasses choking out native plants, reducing food and cover for birds and other wildlife, and generally maintaining a monoculture with little environmental benefit or aesthetic appeal.

Ed, Byron, and many other committed individuals made a plan to bring back the prairie— the vivid colors of spring and summer wildflowers, the morning choruses of birdsong, the land returned to its former healthy balance. This is the story of the Commons Ford prairie restoration: the seeds, the steps, the solutions that provided the foundation for the prairie to return.

Commons Ford Ranch Metropolitan Park is located at 614 N. Commons Ford Rd. in Travis County, Texas just west of Austin. The park consists of approximately 215 acres of diverse habitat, including Lake Austin frontage and nesting grounds for the endangered Golden-cheeked Warbler. The park was acquired in 1983 by the City of Austin's Parks and Recreation Department

(PARD), which continues its administration. It had previously been a ranching and farming operation known as Resaca Ranch.

A "prairie" of approximately 40 acres encompassed the central portion of the park. The prairie was comprised primarily of King Ranch Bluestem, Bermuda grass, and Johnson grass (the "invasives") along with scattered mesquite trees.

The prairie also has two very small oak groves of two to four trees each. In the otherwise vibrant and diverse habitat of the park, this acreage, which had been dormant for nearly 30 years, sat in stark contrast to the rest of the park's scenic beauty.

In the past, shrub growth here was limited by periodic fires, which used to sweep across the state in regular patterns. With the arrival of European settlers, fires began to be suppressed because of threats to safety for humans, crops, cattle, and property.

In addition to the loss of fire, the widespread practice of planting exotic grass species has also had an impact on the native prairie ecosystems. Commons Ford, in its state prior to restoration, was the perfect example of what happens when a prairie system is disrupted by a combination of loss of fire and exotic plants. The woody plants, mainly mesquite, had taken over the prairie. Invasive



grasses dominated the plant composition. The history of the Commons Ford 40-acre tract is similar to the history of native tall-grass prairies that once covered much of the central and southern portion of the United States; less than 1% of those prairies remain today.

Forty acres of invasive plant life is a relatively tiny patch of land, but far beyond the efforts of a lone weekend gardener pulling weeds and planting seedlings. Restoring an area of 40 acres takes teams of experts and workers committed to restoration over a number of seasons.

Finding the right people with a carefully researched and planned process was a big part of getting successful results – experts and volunteers alike contributed to the prairie's restoration and protection.

TEAMS AND PLANNING

The first step was to identify partner organizations which would provide assistance: financial, equipment, knowledge, volunteers, publicity, and oversight. For the Commons Ford prairie restoration, Ed Fair reached out to PARD. Joan Singh, the park manager, met with Ed to initially discuss the site and the proposed restoration plan. This was an opportunity to create a partnership of private citizens to work with the city to restore public land. Funding was not available through PARD but they could supply personnel and equipment towards the restoration.

Further support would come from like-minded organizations. A coalition was born which officially became the Commons Ford Prairie Restoration Organization (CFPRO) — the organization which became the entity to oversee the project from its inception into its maturation. Ed Fair became the Executive Director of the organization and was able to draw on local experts for recommendations about the land – its soil, trees, wildlife, and the best ideas for reclaiming the prairie from invasives.



From the start each of the following partners contributed to the restoration.

Balcones Canyonlands Preserve (BCP): BCP biologists created the survey protocols for the plant and bird surveys and participated in those surveys.

Native Prairies Association of Texas (NPAT):

Program Director James Alderson created the resource analysis, the written restoration plan and restoration guidelines, and participated in the pre-restoration plant surveys. Alderson, then-NPAT Executive Director Dalmara Bayne, and current-NPAT President Kirsti Harms have also provided additional consultation services throughout the restoration.

USDA/Natural Resources Conservation Service (NRCS): Staff prepared a full ecological site inventory, which included information on plants appropriate for the soil content of the prairie.

Travis Audubon Society (TAS): TAS provided publicity, fundraising assistance, and volunteers for survey efforts, as well as help with field trip coordination. Commons Ford Prairie Restoration Organization became a part of TAS in 2016.

Austin Parks Foundation (APF): Commons Ford Prairie Restoration Organization initially operated under the charitable umbrella of the APF. APF also helps steward Commons Ford, as well as all city parklands.

Texas Parks and Wildlife (TPWD): TPWD provided assistance with survey development and data collection.

Additional consultation services were provided by James Eidson of Texas Nature Conservancy and Dr. Larry Redmon of Texas Agrilife Extension Service, Texas A&M/Soil and Crop Science Department. Ongoing support with bird surveys, fundraising, grant writing, and field trip leadership has been provided by Stu Wilson.

WHY RESTORE PRAIRIES?

National Heritage Preservation

Less than 1% of the tall-grass prairies which encompassed large sections of the central and southern United States remains today. This project represents an opportunity to restore, protect, and preserve our national heritage for future generations. This restoration is particularly significant given its close proximity to a major urban area and residential development near the park itself.

Natural Beauty

Native wildflowers and grasses are beautiful and change with the seasons, and the public can enjoy them throughout the year.

Restoration and Preservation of Wildlife Habitat

The loss of native prairies has significantly and negatively impacted grassland and other birds species, as well as other wildlife. Virtually every species that is dependent upon native grasslands is in decline. Restoration of wildlife habitats will help sustain these species by providing nest, shelter and food sources.

Environmental Impact

Native grasslands are an important and natural form of erosion control. They provide a more efficient means of capturing and storing annual precipitation within the soil. Native grass areas reduce runoff and storm water pollution, as well as recycling atmospheric CO2. Native prairies are self-sustaining, requiring minimal maintenance once established.

Research Opportunities

The Commons Ford prairie restoration project allows access to research opportunities that examine the viability of alternative restoration techniques, the impact of restoration on avian species and other wildlife, and encourage citizen science engagement.

Community Involvement

Given its proximity to residential areas, individuals from Austin and Travis County are able to both enjoy the benefits of the restored native prairie and be involved in the project. One of the unique aspects of this project is that a substantial portion of its implementation and tracking has been completed by volunteers in the community.



The single-minded goal of the Commons Ford Prairie Restoration Organization became very clear and very focused:

the removal of the invasive plant species in the 40-acre section and the planting and maintenance of native wildflowers and grasses in place of those invasives.

Every restoration decision was made in service of this goal. But as the plan developed, a wider scope emerged: this restoration project had more significance because of its close proximity to a major metropolitan area with increasing development near the park.

Commons Ford Prairie Restoration Organization and allied groups first met in February of 2010 to being planning the restoration. Actual field work on the removal of the invasive plants began in 2011. The project proceeded in three phases:

PHASE 1

APRIL TO DECEMBER 2010

- Pre-restoration breeding bird plant and grassland bird surveys
- Preparation of written restoration plan
- Budgeting/Fundraising activities

PHASE 2

JULY TO DECEMBER 2011

- Herbicide treatment for the removal of mesquite and invasives
- Seed bed preparation
- Seed planting

PHASE 3

NOVEMBER 2011 to NOVEMBER 2013

- Monitoring and Maintenance, additional seed planting if necessary
- Prescribed burn
- Post-restoration bird and plant surveys



PHASE 1 APRIL TO DECEMBER 2010: GROUNDWORK

PARD provided signage which announced the restoration project in April 2010. The first year of activity did not see any actual change to the prairie, but was a crucial time to build resources and gather data.

The major milestones of this period included the development of a written restoration plan with specific directions for herbicides, types of seed mixtures needed, and a prescribed burn, with the costs and personnel required. NRCS prepared a full ecological site inventory with plant recommendations based on soil content. Ed Fair sought out organizations to help with the restoration plan, with NPAT emerging as the logical partner.

Before any work could begin, Fair assessed costs for each phase and began fundraising. Since Commons Ford Prairie Restoration Organization was operating as a non-profit under the Austin Parks Foundation, it was able to apply for a grants with their help. Financial support from the Wilson Conservation Trust, Patagonia, and Together Green, a joint venture between Toyota Corporation and the National Audubon Society, were crucially important to the early work of restoration.

Volunteers helped with many smaller but necessary tasks. Intern Savannah Ritter helped with upgrading and expanding the project's Facebook page and media outreach. A Boy Scout troop in need of a project in the park brought volunteers to hang bird and bee houses. All the data collection for bird and plant surveys was done by volunteers, organized primarily by Andrea Julian and Diane Sherrill. This data would be used to gauge the restoration results – would prairie restoration actually increase individual and species bird counts?

The bird and plant survey methodologies were prepared in the spring of 2010 and the prerestoration surveys were completed by July 2010. The breeding bird surveys included three separate visits to the park to count species along designated transects. The plant survey was especially labor-intensive due to the specific and meticulous counting it required. Seven 20-meter lines were set east to west, and all the plants one meter out from the line at every two meters were catalogues. John Chenoweth and Bill Reiner from BCP ran the surveys with help from James Alderson and Joan Singh. Early 2011 wrapped up the pre-restoration surveys with additional data gathered on grassland species.

PHASE 2 2011: BREAKING GROUND

With funding secured, the tasks of restoration began in 2011.

The first herbicide treatment using glyphosate on the invasive grasses and mesquite trees was applied in July. Before planting commenced, the 40-acre tract was tilled in order to break up the sod and destroy any remaining invasive roots just prior to planting in early 2012.

A 70-species native seed mix was developed for the sandy loam soil in the tract, with the hope of growing plants that would attract more prairie bird species. Native American Seed, with additional input from BCP staff and other plant

and birding experts, developed the mix. The initial planting of native wildflower and grass species occurred in February 2012.

A prescribed burn was also scheduled for late 2011, but drought conditions prohibited that treatment. It would ultimately take place during a less dry season in the summer of 2013.

Through the relentless efforts of the organization, its volunteers and partners, approximately \$60,000 had been raised, hundreds of hours had been contributed, and the seeds were planted. The restoration had begun.





2012: GROUNDBREAKING, THE FIRST RESTORATION SEEDS EMERGE

The resulting spring and early summer rain in 2012 kick-started significant growth and the nascent prairie was full of beauty. By the end of 2012, the plants had turned to seed, attracting many seed-eating birds and wildlife. The first post-restoration prairie bird survey indicated a 90:1 increase in the number of individual birds found in the prairie compared to the pre-restoration survey, as well as an 8:1 increase in the variety of bird species. Greater plant diversity led to more birds, exactly the outcome we'd hoped for.

The prairie restoration project was still in its infancy, with potential re-infestation of invasive plants and further encouragement of native seed plantings emerging as top priorities.

AMERICAN BASKETFLOWER



DRUMMOND PHLOX



GOLDENWAVE COREOPSIS



PHASE 3 2013: WELL-GROUNDED

Our success in 2012 in bringing back native plants and birds to the prairie motivated everyone to continue their hard work. The prairie burst into bloom with wildflowers, showing indications of its returning health and beauty. April 2013 hosted a major onsite fundraiser with APF – a birding "Big Day," which attracted 200 people and raised thousands towards restoration funds. (A Big Day is when birding volunteers begin at midnight and catalogue all species seen or heard within 24 hours. It becomes a fundraiser when pledges are sought per bird or for total numbers.) Other activities included nature walks, children's activities, and an information tables. The event was also a chance to introduce the restoration to the larger community.

Data-collection and surveys continued. In August, the first prescribed burn was completed. For two years, the team had tried to schedule a burn, but severe drought conditions during the summers of 2011 and 2012 prevented that step. However, the weather turned cooler and wetter (relatively) in August of 2013, which became the ideal time to conduct a burn.

Fire has always played an important role in the health of prairie ecology. Prairie grasses have evolved in the presence of fire, which is an essential part of their life cycle. Fire also keeps woody and deciduous species at bay. Most of the biomass of grass lies underground, so they can survive burns and flourish in fire's aftermath, outcompeting mesquite and juniper.

A summer burn was planned to allow natives to regenerate quickly, giving them the opportunity to out-compete exotic species.

On Friday, August 9, 2013, a group of fire fighters from various local precincts and state-wide organizations gathered to conduct the prescribed burn on the restored prairie. The day was hot with a slight breeze, perfect weather for a controlled burn. Once the burn was started, it spread quickly and was over in just after two hours.

Just hours after the burn, native bird species were already flocking back to the prairie to look for food (which they apparently found in abundance!) One week after the burn, native grasses were already shooting up. Over the next year, volunteer biologists continued to monitor the prairie's growth. Future burns will continue to be scheduled to maintain the health and diversity of the prairie.



2014 - 2015: FROM THE GROUND UP

The prairie continued to rebound in 2014 with further expansion of native flowers into bigger displays of color and vitality. Volunteer surveys continued to document increasing biodiversity. This has allowed an understanding of how drastically the ecosystem has improved and helped identify problem areas where invasive species continue to vex restoration efforts.

However, the prairie is now in full recovery, presenting a striking array of color as well as attracting a broad diversity of wildlife.

The restoration was also featured on a popular regional gardening show, Central Texas Gardener, on KLRU.

The main portion of the prairie was in excellent shape. The 2014 work focused on expanding the "good portion" of the prairie to the north and east. This buffer zone includes roughly 8-10 acres that runs east-west and then north-south on its eastern edge. Mowing, shredding, plant assessments and limited herbicide treatment in the buffer zone helped prepare it to be planted with a modified native seed mix, again provided by project partner George Cates with Native American Seed Company.







2015 — ONWARD

IMPORTANCE OF THE PRAIRIE

About one percent of the North American tallgrass prairie still exists. Commons Ford now has 40 acres of tallgrass prairie, thanks to our restoration efforts. Commons Ford is one of the few high-quality, restored native prairies in Travis County. There are very few good examples of this kind of prairie on public lands in Travis County, much less on City of Austin properties.

At Commons Ford, visitors can spend as much time as they like exploring this vibrant ecosystem. In addition to being beautiful, the prairie provides food for pollinators and birds and provides shelter and nesting places for a variety of wildlife.

According to the Native Prairies Association of Texas, "those untidy-looking prairies with their grasses, wildflowers, seed heads, dead plant material and exposed soil provide wildlife with the many resources they need to survive."

MERGING WITH TRAVIS AUDUBON

In mid-2015, leaders of the Commons Ford Prairie Restoration Organization began talking with leaders of Travis Audubon about absorbing the organization, since Travis Audubon members had been instrumental throughout the project. In 2016, the Travis Audubon Commons Ford Prairie Committee was formed. From a small group of committed volunteers to a committee of a large conservation organization, the merge made many things possible. It provides sustainability for the restoration effort with access to a larger volunteer group and more resources. It expands our reach to tell the story of the prairie restoration and its importance to birds and other wildlife, our capacity to maintain the prairie, and our capacity to inspire and engage others in nature.

The first committee meeting as a part of Travis Audubon occurred in August 2016. The committee meets every two months and facilitates a variety of events at the park, in addition to overseeing the prairie and continuing to improve the habitat and the experience for visitors. The Prairie restoration project is included in Travis Audubon's annual budget and is supported by its members and friends.

MAINTENANCE AND ENHANCEMENTS

Now that the restoration is complete, the focus turns to maintenance. It is not a matter of stepping back and letting it happen; it takes work to maintain good habitat. Prairies are highly dependent on fire to both keep woody vegetation from encroaching and to restore nutrients to the soil which leads to more desirable plant growth in the future. With that in mind, the second prescribed burn occurred on the prairie in February 2017. The burn required a lot of planning and preparation by many people and organizations. In addition to benefiting the prairie, the controlled burn was an excellent opportunity for our wildland firefighters to train so that they are better prepared when wildfires threaten people and property in Central Texas. During the burn, birds were hawking insects from the charred land, and within days, new, green growth was sprouting from the ashes. It was a phoenix moment - destruction, rebirth, and renewal.

In 2017, the prairie was designated as a Monarch Waystation by Monarch Watch. This designation came after committee members planted 500 antelope horns milkweed plugs in and around the prairie to provide more host plants for the Monarchs.

In 2019, additions to the prairie included a new fence to keep vehicles out of the prairie. City of Austin Parks and Recreation Department personnel installed a wooden fence that is simple and elegant, a perfect fit with the prairie it protects. A bird blind and water feature were added to provide a safe and quiet place for birds using the prairie and surrounding habitats to drink and bathe. For people, it provides another way to observe nature – sitting and waiting for the wildlife to come to you – and provides a perfect opportunity to sit back, relax, and rejuvenate.





ENGAGEMENT & EDUCATION

Engagement and educational activities have been a part of the prairie restoration project from the beginning. They continue in the form of monthly bird walks, field trips for Travis Audubon's Introduction to Birds and Birding class and Master Birder class, among others, participation in the nation-wide Big Sit! event each fall, and the Kids at Commons Ford event in 2017. The prairie and its enhancement of the birding experience in the park has led to Commons Ford being the second highest birding "hotspot" in Travis County.

Birders come from all over to see the amazing Commons Ford birds.

RESEARCH

Research and citizen science activities have long been a part of the restoration project. Long-standing activities such as vegetation surveys continue. The plant surveys are conducted annually by St. Edward's University professor Dr. Amy Concilio and her students. Her research will be published and further our understanding of prairies. The majority of birders who visit the park enter their bird sightings into eBird, a world-wide database of bird sightings. This database allows researchers and others to study the impacts of a changing world and climate on our birds. To supplement those projects, quarterly bird surveys of the whole park have been added.





ALIGNMENT WITH CITY OF AUSTIN GOALS

The work Travis Audubon does at the Commons Ford Prairie further several goals set forth by the City of Austin. Planting of the antelope horns milkweed supported the City of Austin's own initiatives aimed at helping Monarchs; in 2015, Austin signed the Monarch Mayoral Pledge through the National Wildlife Federation and is in the "Leadership Circle." Additionally, the City Council passed a resolution in May 2015 to implement plans to increase milkweed on city property.

Austin Strategic Direction 2023, the City of Austin's roadmap for the next five years, describes the actions the City will take to address identified challenges and "move the needle" on indicators and metrics for those outcomes. One of the strategic outcomes is Health and Environment. Strategies that the restored prairie contribute to include integrating nature into the city by developing and implementing a green infrastructure plan that creates a network of natural lands and

other open spaces, expanding acquisition and designation of permanently protected natural and environmentally sensitive areas across the region, providing community access to these areas for educational and recreational programs where feasible, and investing in a variety of energy, water and air quality programs and initiatives that emphasize conservation and environmental protection.

One of the major themes voiced by citizens and stakeholders was a desire for parks that feel more natural.

Austin's Parks and Recreation Department is developing a long-range plan to focus and guide their actions from 2018-2028. There is a strong interest in providing more opportunities for natural experiences. A few of the goals that the restored prairie fulfills include protecting and increasing natural areas that support immersive nature experiences, protecting and managing natural areas to intentionally balance recreational use with environmental protection, and providing more nature-based programs.

COMMONS FORD PRAIRIE HAS BEEN THE SITE FOR:



80+ ADULT FIELD TRIPS



1,000+
FIELD TRIP ATTENDEES



400+
PROGRAM-RELATED VOLUNTEER HOURS



75 LOCAL ELEMENTARY STUDENT VISITED



MONTHLY
BIRD AND MONARCH SURVEYS



COUNTLESS
VISITORS WHO ACCESS & ENJOY THE PRAIRIE

COMMONS FORD PRAIRIE BY THE NUMBERS



40+ ACRES OF RESTORED PRAIRIE



70 TYPES OF SEED PLANTED



9 YEARS OF RESTORATION



268
SPECIES OF BIRDS
DOCUMENTED



\$60,000+
RAISED TO SUPPORT
RESTORATION AND EDUCATION

ONGOING EFFORTS ARE RESTORING A PRAIRIE TO VIBRANT HEALTH AND BALANCE.

AND THE BIRDS CAME BACK.

WITH CONTRIBUTIONS FROM ED FAIR, ELLEN FILTNESS, SHELIA HARGIS, NICOLE NETHERTON, TESS SHERMAN, AND CALEY ZUZULA. DESIGN BY NORA CHOVANEC.



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