The City of ABQ Open Space Visitor Center - Common Edge Habitat Field and Field 2 Project:

Progress Report for the Year 2024

Report compiled: January, 2025

Produced by: Habitat Farms Collective, LLC

For the City of Albuquerque, Open Space Division

Contract ID: 202400438

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Contents:

Appendix:

I. History

With a history of volunteers going back to at least 2013, the area known as "Field 1" at the Open Space Visitors Center (OSVC) has brought many people together over those years who share a common interest in building complex and beautiful productive gardens that support humans and wildlife alike. In early 2018, we (Cameron Weber and Peter Callen) expressed interest in renewing activities at Field 1 to the OSVC Manager, Kent Swanson. Following a one-year period of volunteer coordination by Cameron and Peter, including installing the form for a new garden with the Ancestral Lands Youth Conservation Corps in summer 2018, the City expressed support to formalize an agreement that would rehabilitate the space as a permaculture demonstration site. After building sheet mulch beds for a year and half before planting native wildflowers, we realized this field would be better suited for wildlife habitat than a permaculture garden. Since then the COVID 19 pandemic hit and the contract renewal was delayed for approximately one year. During this time, Peter and Cameron incorporated as a new business, "Habitat Farms Collective, LLC". The work continued during 2020 on a volunteer basis, and during this time the Permaculture Lab was re-named the "Common Edge Habitat Field". Also during this time, Kent Swanson left the OSVC for a job with Bernalillo county, and Christine Vasquez became the new Director.

A new contract was formalized for 2021, and extended through 2022. Christine Vasquez left her post in early 2023, and while James Lewis served as acting Director, a new contract was finalized in October of 2023 with Dionne Epps also being hired as the new director that year.

This new contract includes the addition of 4 more acres (Field 2) and will help cover program expenses through mid-2025.

II. Background

The Common Edge Habitat Field at the Open Space Visitors Center lies north of the Visitors Center Building and east of the Perennial Wetland. It is encircled by a road/walking path that provides wide views of the OSVC agricultural fields. One-quarter of the field includes a cultural site, the Piedras Marcadas archeological site, which emanates from the field of saltbrush immediately to the north. As private land before the purchase by the City of Albuquerque, the field was farmed for hay. After the establishment of the OSVC, the field continued to be farmed for hay, but the heavy soil texture and regular compaction by equipment lead to low yield.

Volunteers expressed interest in locating a permaculture food forest on the south end of the field and, under leadership from a few volunteer coordinators, held regular workdays over several years to plant dozens of fruit, nut, and shade trees, launch seedballs of native and facultative species, and installed irrigation infrastructure. As described by volunteer coordinator Michael Reed, communication and protocols around mowing the area and about ditch irrigation combined to set the food forest back and discouraged the volunteers. Further study of the soil texture indicated that the field would not be able to support the envisioned food forest, even with improved communication about management. With some trees surviving at the field edges and some perennials and grasses established by 2017, Field One appeared resistant to the highly productive vision laid out for it.

2018:

Kent Swanson provided vital coordination to get free materials and transportation through the Forestry Division, funding to rent a ditch witch, and set us up to work for a week in July 2018 with the Ancestral Lands Urban Native Youth Conservation Corps to install a series of garden beds and irrigation ditches. The garden beds were constructed using a permaculture technique called sheet mulching, in which the existing ground is covered with layers of organic material, each layer a few inches thick. The beds we constructed required approximately 10 cubic yards of horse manure and 10 cubic yards of wood chips, as well as 50 lbs. feather meal, 400 lbs. gypsum, and cardboard. With regular watering over time, the material decomposes and composts in place, developing a diverse soil biology that helps the soil beneath to become productive. The irrigation ditches were designed to provide dual functions of 1) bringing water more directly from the ditch gate to the garden beds, and 2) drain excess water out of the garden beds once they are saturated, to avoid anoxic conditions.

July of 2018 showing sheet mulch beds and small ditches.

2024 Summary:

Metrics and indicators of improvement discussed in this report for 2024:

* This year we had 28 Volunteers contributing 578 hours of their time to Fields 1 and 2.

* This year we held 9 Public Workshops, totaling 113 people and 318 hours of participation in public education in 2024.

* Youth Education: 130 hours of youth education (Day Camps and Field Trips) for 94 kids.

* The total combined participation/contribution above = 1,109 hours.

* Soil health improvements: We analyzed soil health metrics and found that the water holding capacity has increased, and the diversity of soil biology has also increased.

* Respectful understanding of the Piedras Marcadas cultural site increased among volunteers and public. Also increased awareness and importance of the neighboring wetland area.
* Integrated Pest (and Weed) Management, IPM: Control of invasive weeds without herbicide, and control of insects without pesticide by increasing insect diversity and encouraging beneficial insects. Pulling or mowing weedy species, then composting, burning, and/or making biochar increases nutrient cycling, and reduces the number of inputs/expenses.
* Native Plant Community: Increase in numbers, area covered, and diversity.
*Native Animal Community: Record of Sightings, Behaviors, and Interactions

Review of 2024:

We engaged 113 people this past year in workshops and public events. We also engaged 94 kids in school field trips last fall.
We also engaged 28 volunteers over the course of the past year, who made the growth, care and maintenance of the CHEF possible. See the breakdown of workshops and volunteer hours in the Appendix.

Habitat Farms Collective was also awarded a Healthy Soils Program grant by the State of NM for FY '24/'25 in the amount of $3,300 for cover crop seeds and hedgerow plants and for the cost of planting them. The grant also paid for several days of grazing with a small goat herd to help cycle nutrients from the native grasses back into the soil.

Signs of butterfly habitat included surveys by Renee Robillard identifying 91 butterflies of 5 different species between May 18th and Oct. 1st.

Monarch butterflies were seen on several occasions nectaring on the Horsetail Milkweed blooming in the field. Also improved again this year were the number and diversity of native grasses, wildflowers, shrubs and trees, some of which are spreading on their own, as well as 300+ which we planted this year. Cottontail rabbits, Red Racer and Garter snakes, and Coyote families were regular visitors throughout the summer.

Regular sightings include large raptors such as Swainson's and Red Tail Hawks, Buzzards, and smaller accipiters like Cooper's Hawks and Kestrels. A flock of Swallows is seen working the insect cloud over the field on calm summer days, along with Roadrunners and Mourning Doves working the ground. Winter regulars like Sandhill Cranes, Canada Geese, and Crows arrive in late October and stay through mid-March.

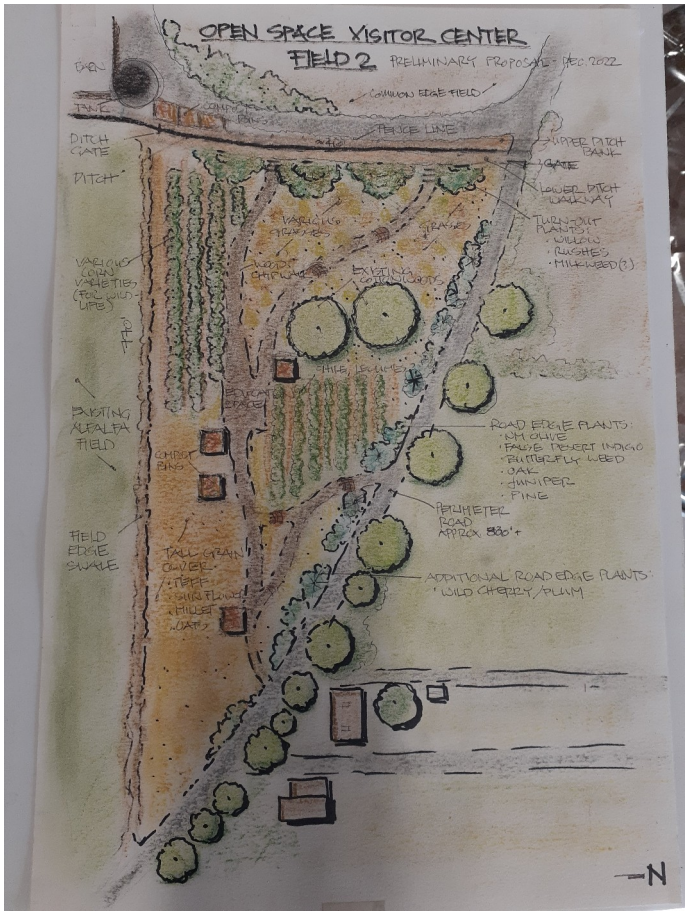
2024 Month by Month, Year in Photos

January

Biochar Workshop

February

“Envision” Workshop, planning for the 2024 season and the new field, “Field 2”.



March

Cranes and Geese feeding in Field 2. We begin working now to transition Field 2 from alfalfa to wildlife habitat and crops for wildlife.

April

Field 2, first irrigation of the season, newly planted in wheat mix and oats for wildlife forage.

Earth Day,
April 20th, planting 6 species of trees and shrubs.

May

Ladybugs eating aphids on Plum trees in the Common Edge Field.

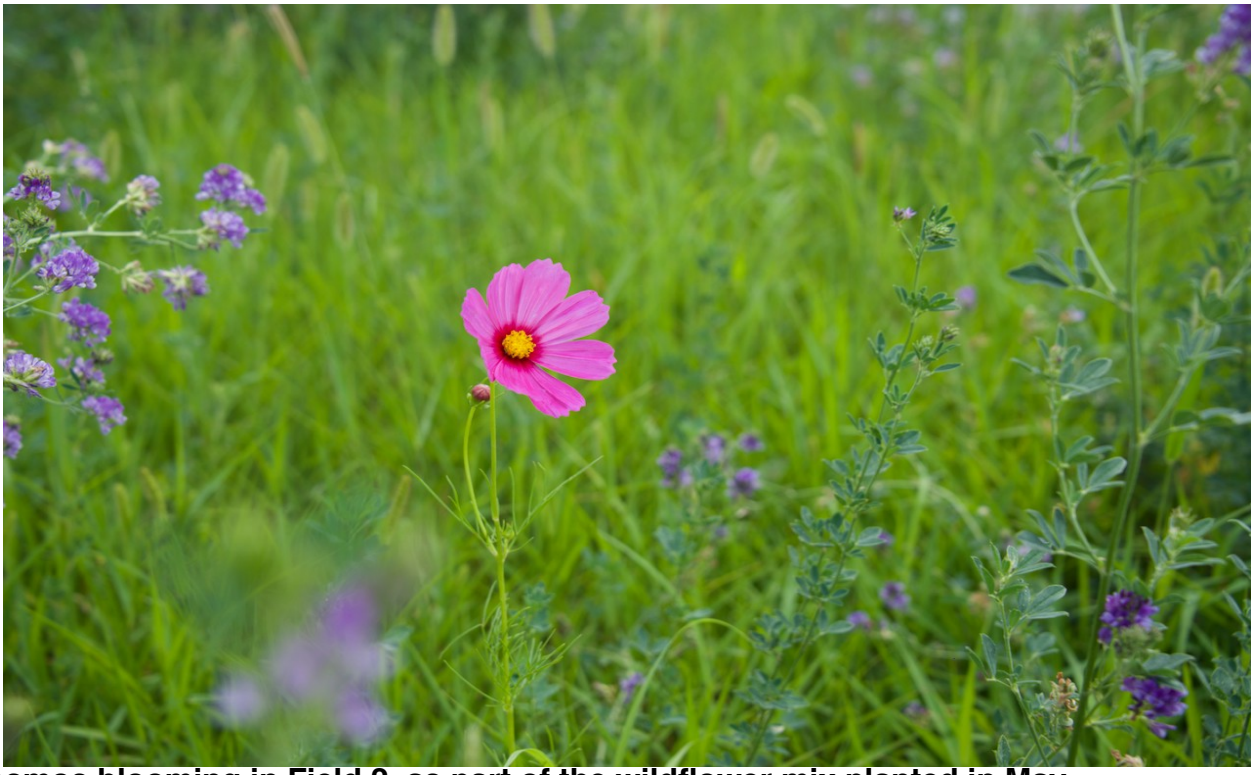
Goats grazing in the Common Edge Field, regenerating native grass growth.

June

Pollination Celebration, in Common Edge Field with Plains Coreopsis flowers in bloom.

Prairie Coneflowers blooming in the Common Edge Habitat Field.

July



Cosmos blooming in Field 2, as part of the wildflower mix planted in May.

August

Butterfly Celebration, August 24th, with 26 participants.

August, con't.

"Bordered Patch" butterfly nectaring on a Milkweed bloom.

September

Sunflowers and grasses in the Common Edge Habitat Field

September, con't.

Field Day participants walk into the wheat and oat mixture planted for wildlife forage. This field was planted with a no-till drill to minimize soil structure disturbance.

7th graders from Harrison Middle School spreading grass seed they gathered in the Common Edge Habitat Field.

October

New Hedgerow planted on the western side of the Common Edge field.

November

Newly planted hedgerow trees and shrubs on eastern edge of field (pink flags).

December

Inoculation of biochar with compost to give it a microbial community.

Native bunch grasses are starting to spread on their own across the Common Edge Habitat Field.

Appendix:

Includes:

aa. Butterfly Monitoring

A. Chart of volunteer hours

B. Chart of workshop/field trip/public event hours

C. Soil conditions/testing

D. Integrated Pest Management (IPM), including Weed Management

E. Irrigation plan (site map)

F. Planting map

G. Plant inventory list: 100 species, increase from 25 species in 2018

H. Tentative schedule of workshops and events for 2025

aa. Butterfly Monioring in Common Edge Habitat Field for 2024:

The programs of the North American Butterfly Monitoring Network (NABMN) use trained volunteers (“citizen scientists”) who walk set routes several times each butterfly season for years, identifying and counting species of butterflies observed and entering that data into a dedicated online database (“PollardBase”). Each regional NABNM program has a coordinator who collects and summarizes the data with the goal of tracking butterfly distributions, timing, yearly changes, and unusual events locally and throughout North America. The findings are made available to researchers, land managers, and conservationists to inform efforts to protect and preserve butterflies. The NABMN originated with a grant from the National Science Foundation and is now supported by Georgetown University.

The NABMN program in New Mexico was started by the NM BioPark Society in 2020. The NM Butterfly Monitoring Network (NMBMN) is coordinated by Anna Walker, the BioPark’s Species Survival Officer for Invertebrate Pollinators. In 2024, NMBMN volunteers walked about 35 routes (each about 1 to 2 miles long) throughout the state. One route consists of the property around the Albuquerque Open Space Visitor Center (OSVC) and adjacent bosque ditch trails. Routes are divided into segments according to habitat type, and the Common Edge Habitat Field (designated “Habitat B: Permaculture Field” by the NMBMN) is one of the segments of the OSVC route. The entire route was walked by a volunteer 11 times in 2024 between the beginning of April and the beginning of October. The volunteer’s observations during the approximately 15 to 20 minutes spent in Habitat B are shown below, 93 individuals of 5 different species:

Monitoring Date	**Butterfly Species Observed**	**No. of Individuals**
April 12	None	
May 3	None	
May 18	Marine Blue Orange Sulphur	1 1
May 24	None	
June 6	Marine Blue Cabbage White	1 1
July 10	Cabbage White Orange Sulphur	2 3

July 19	Bordered Patch Two-tailed Swallowtail Orange Sulphur	7 1 4
August 9	Orange Sulphur	1
August 30	Bordered Patch Orange Sulphur	42 2
September 11	Orange Sulphur	21
October 1	Unknown Sulphur Orange Sulphur	1 3

As occurred in 2023 in Habitat B, during 2024, numerous groups of Bordered Patch larvae were observed on sunflowers throughout that area, with some of the plants sustaining considerable damage from consumption of their leaves by the caterpillars. High numbers of Bordered Patch adult butterflies were also observed in both years. The Bordered Patch species (*Chlosyne lacinia*) has three broods a year (it is "multivoltine"), so it is not surprising that many *C. lacinia* larvae and adults have been seen in the past two years in a location with abundant sunflowers, which are the larval host plants. In late summer of 2024, Joe Schelling, one of New Mexico's foremost observers and photographers of butterflies, visited Habitat B, photographed numerous Bordered Patch larvae on sunflower leaves, and posted his photo on his widely read blog, "Natural Moments" (https://joeschelling.wordpress.com/ see entry for August).

An adult Bordered Patch seen in Habitat B on July 19 is shown below:

A Marine Blue observed on May 19:

A. Summary of Volunteer work hours in 2024:

Months	**Description of Volunteer workdays**	**# of volunteers**	**Hours**
Jan. - June	Planning, Field work, Documentation/monitoring, Prepare for and help with workshops	20	239
July – Dec.	Planning, Field work, Documentation/monitoring, Prepare for and help with workshops, Making biochar and compost	8	339
Totals ‘24	Total #’s of volunteers and hours contributed for 2024	28	578

B. Summary of Public Workshops and School Field Trips in 2024:

Volunteer Activity	Date	Duration	Title	Participants	Volunteer/Education hours
Workshop	Jan.	2.5 hrs.	“Biochar”	20	50
Workshop	Feb.	3 hrs.	“Envision”	6	18
Workshop	Mar.	2 hrs.	“Soil Testing”	20	40
“Earth Day” Event	Apr.	4 hr.	Planting trees	8	32
Workshop	Apr.	2 hrs.	“Planting for Pollinators”	10	20
Goat Grazing	May	6 hrs.	Nutrient cycling	2	12
Workshop	May	2 hrs.	“Soil Microscopy”	9	18
Workshop	June	2 hrs.	“Native Bees” concurrent with Pollinator Celebration at OSVC	14	28
Public Event	Aug.	2 hrs.	“Butterfly Celebration”	26	52
Workshop	Sept.	3 hrs.	“Field Day”	20	60
School Field Trip	Oct.	3 hrs.	7th Grade, Harrison Middle School	25	75
School Field Trip	Oct.	2 hrs.	Jewish Community Center	9	18
School Field Trip	Dec.	2 hrs.	1st Grade, Rio Rancho Elementary	60	120
				Total hours =	531 hrs.

So in 2024 we had a total of 578 volunteer hours + 531 public and youth education hours, for a total of 1,109 hours of public engagement.

C. Soil Conditions/Testing:

This year we again demonstrated simple, low to no-cost methods of soil testing in our "Soil Testing to Soil Listening" workshop. We showed participants how to do soil texture tests to determine their sand/ silt/clay ratios, then did drainage/percolation tests to see how quickly water is absorbed into the ground. We also demonstrated how to do a soil structure test, a bulk density test and a field capacity test. Again, this field is of "clayey silt" texture and is still mostly compacted. There has been improvement in soil structure, with more crumb and resistance to collapse than in previous years. Also, soil organic matter has improved, with a Solvita CO2 test showing good levels of biological activity in the soil.

Earthworm census continues to improve as well, with more earthworms regularly being found. Also, pocket gopher activity has increased, which aerates the soil and increases biodiversity.

Healthy Soils: 6 Principles:

#1. Context

- what is happening here, culturally; what has happened here, who owns the land, who are the neighbors, legacy traditions, future institutions, minerals extracted, invasives/weed seeds, what is the vulnerability index, what are the irrigation water types, history of herbicides, pesticides. Context informs many management decisions.

#2 Keep roots in the ground

re-seed disturbed ground immediately, use cover crops

- mow when possible instead of pull, pull roots carefully when you do,

Armor the soil - keep residues on the ground, mulch with weeds, manure, wood chips, cover crops, this protects the surface from UV radiation and wind, and feeds the life in the soil below.

#3 Armor the soil

- keep residues on the ground, mulch with weeds, manure, wood chips, cover crops, this protects the surface from UV radiation and wind, and feeds the life in the soil below.

#4 Minimize soil disturbance

- less tractor use, less flood irrigation, less walking, less digging. This reduces compaction as well as protecting the layers of living soil.

#5 Plant diversity

- use multiple cover crops and rotate their timing through the years. Select plants to increase overall diversity in the beds and field. This increases the diversity of life below ground as well, adding resilience to various impacts.

#6 Animal activity

- Introduce and encourage birds, worms, rabbits, coyotes, toads, insects. Animals bring fertilizer, encourage root growth through herbivory, pollinate flowers, and balance pests and disease.

D. Weeds and Invasive Plant management: IPM (Integrated Pest Management)

The management of invasive, non-native, *and native* plants is a primary concern and takes consistent observation and timely response over the course of the year to "get ahead and stay ahead" of invasive weed pressure. This gives the desired native plants a chance to get established; and allows natural succession to take place.

Elms: Pull by the root when ground is soft, then immediately seed (ie. grasses/clovers) and cover (mulch) disturbed ground.

Bindweed:

Pull/rake off the green above ground parts of the plant, leaving the roots in the ground. Digging up bindweed roots is too disruptive and also futile. Reducing photosynthesis by removing the green parts of the plant gives neighboring plants and grasses an advantage to grow bigger and outcompete the bindweed.

Johnsongrass:

Pull/dig up by the roots when it is young, deny photosynthesis and seed formation. Roots must be dug up. As with Elms above, immediately seed (ie. grasses/clovers) and cover (mulch) disturbed ground. Also can control by denying water.

Kochia:

Keep mowed during summer, encourage competition of grasses and other plants. Compost or burn cut plants.

Goatheads:

Pull immediately when seen by the central taproot. Throw plants/seeds in trash. Green seed can be sold in the TCM (Traditional Chinese Medicine) market.

Silver-leaf Nightshade:

Mow with scythe or sling blade after flowering to deny seed production. Deep tap roots can't be pulled. Provides pollen/nectar to bees/bumblebees.

Cocklebur:

Pull out by the root or mow to deny seed production/maturation.

Improvement of Elm control in the field this year has led to very few Elms left to pull. However, the wetland nearby has a lot of Elm saplings which proved too big to pull by hand for the YCC crew. We're trying to prevent them from spreading into the Common Edge field. There is also a large Siberian Elm just over the fence on MRGCD property next to the main irrigation canal. It produces 1,000's of seeds every year which blow into the OSVC property. The MRGCD should remove it.

Bindweed control also continued to improve in 2024, with the spaces between the beds having little to no bindweed and more grasses (Bristlegrass) and forbs. Control in the beds still takes a lot of hand pulling labor, but the field north of the beds continues to improve with less bindweed and more grasses, sedges and forbs.

Johnsongrass

is still a major concern, but from the progress made this year, looks like it can

be held in check. This is going to take vigilance every year however, as the seeds come in on

irrigation water and new plants can arise and spread quickly.

Kochia

is still an issue around the road edge and in the north half of the field. It needs to be

mowed regularly during the growing season to allow grasses and other plants a chance to

compete with its smothering growth, and deny it (the Kochia) seed reproduction.

Goatheads

are still an issue every year and must be pulled by the root, before seed maturity,

and the whole plant thrown in the trash. The dirt road surface around the field is the primary

goathead habitat, which contracted this year, due to the crushing summer drought.

Silver-leaf Nightshade

is another roadside plant that has deep roots, like Bindweed, and

cannot be pulled or dug up. It can be mowed after flowering to deny seed production. Bumble

bees and other insects gather its nectar and pollen.

Cocklebur

is noticeably reduced this year. Hand pulling or weed wacking is probably the best

control before the seed heads ripen.

Dodder

was not seen in the field this year. Cutting and removing the infested plants is the best control.

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To make a meadow takes a clover and a bee

One clover and one bee,

and tranquility

the clover will do, if bees are few.

Emily Dickinson

E. Irrigation, 2024:

This year began with a low snowpack and minimal spring flow in the Rio Grande, and it looked like it was going to a poor year for irrigation water. As the summer progressed, the dryness and heat intensified. This coupled with a failed monsoon season in July and August combined to limit the irrigation to just 5 times, ending with the last one in mid June. The neighboring wetland was filled from mid-April to mid-June, when it then started to dry out from lack of rain and irrigation water, until early September when we got a surprise irrigation to fill the wetland, irrigate Field 1 and half of Field 2. The wetland started to dry out again after that and was reduced to just a damp puddle by the end of November.

A regular flood irrigation is equal to about two inches of rainfall on the field. The only effective rainfall for the summer (June 1st – October 1st) of 2024 was one storm at the end of June with 1 ½" in one day.

Jacobo Sanchez is the new contract "Ag Lease" farmer on the OSVC property. We must follow his (ditch) irrigation schedule because the gate (turn out) would leak water into his fields if we irrigated (called for water) without him. Therefore we all usually irrigate on the same schedule, which was every two weeks in the April through June season. Peter and/or Cameron will come to open the check dams to "Field One" on the day/time that Jacobo specifies.

If there is over an inch of rain during that two-week period, we may not get water until the following two week period. With no rainfall and dry, hot weather, the soil moisture from an irrigation lasts about 2 weeks, so then we may have to supplement with rainwater or hose water from the VC. Volunteers are invited to join us to help irrigate with the ditch water. Ditch irrigation days/times are not known to us (Peter and Cameron) until a day or two before it happens, but we let the volunteers know as soon as we know.

The goal with irrigation is to keep the soil from drying out completely at a depth of 4 to 6 inches in the beds, and 6 inches + in the field. If there are newly planted transplants, or if we're trying to germinate seed, we will keep the top 2 inches moist until plants are established.

Also, we keep a record of what has been watered and when in a log book and white board in the maintenance building so volunteers can post to it and see what has been watered and what still needs to be watered.

See irrigation map, next page:

Irrigation Map:

Visitor Center

Lime Green = Rainwater and Hose water can reach the 10 raised beds and East edge trees/shrubs.

Dark Green = Ditch (flood) irrigation water. This can also cover the "blank" area in the center of the field, depending on irrigation time/water availability.
Purple = Sub-surface water from wetland that seeps under road. Deep rooted plants tap into this sub-surface water supply. This is where we have extended the West hedgerow.

Orange = Dryland, usually does not get any irrigation water.

F. Planting map for 2024:

Common Edge Habitat Field: Plant map of Beds 1 - 5 and A - E

Bed E:

Planted 16 Alkali Sacaton grass plugs in the fall. Also winter peas. Sunflowers on the N. edge.

Bed D:

Planted 7 Verbena flowers in the fall, with Austrian winter peas on the S. edge. Sunflowers on the N. edge. Planted 2 Sumac shrubs last winter.

Bed C:

6 Cut-leaf Coneflowers with summer Buckwheat planted between them. Transplanted 2 Cut-leaf Coneflowers to Bed 3 last fall. Planted 6 Goldenrod this fall.

Bed B:

4 Sulfur Buckwheat and 2 Penstemon plants with Sunflowers on the N. edge and Austrian winter peas on the S. edge. Planted 2 Red root Buckwheat this spring.

Bed A:

Artemisia ludoviciana, Monarda, Lemon Balm, and Ratibida. Added Peppermint this spring.

Bed 5:

Planted Sonoran White Wheat in spring, then let Sunflowers grow in middle of bed. Peas and Winter greens this fall.

Bed 4:

8 “3-leaf” Sumac, 4 large and 4 small, with Sunflowers on the N. edge, Austrian winter peas in fall. Also transplanted 2 Sulfur Buckwheat plants this spring.

Bed 3:

3 Cut-leaf Coneflowers (with 8 Hoary Asters and 4 Alkali Sacaton planted this summer). Peas on S. edge and Sunflowers on the N. edge. Added 2 white E. jamesii plants this spring.

Bed 2:

4 Blue Salvia, 2 Tall Blue Salvia, 4 Bee Balm plants, with lots of Plains Coreopsis. Planted Austrian winter peas this fall.

Bed 1:

4 Hoary Aster, 4 Verbena, and Sunflowers on N. edge. Planted Peas on S. edge, and N. edge. Added 7 Goldenrod and 7 Golden Currant this summer.

Hedgerows on the East, South, and West sides of the field were greatly expanded this year; we planted ~ 300 grasses, shrubs, trees, cacti and agaves in these wide hedgerows. See updated Plant Inventory below:

G. Plant Inventory, Beds & Field, Winter of 2024:

100 Species Total, increase from 78 species in 2021.

Plant Inventory continuum, Common Edge Habitat Field

Plant Name	Number of plants or patch size	Year first planted or seen	Species totals
Invasives			10
Johnsongrass	small patches	2019	
Siberian Elm	scattered, small	Pre-'18	
Cockelbur (Xanthium sp.)	small patches	Pre-'18	
Field Bindweed	40% of field	Pre-'18	
Kochia	Field edges	Pre-'18	
Silver-leaf Nightshade	Field edges	Pre-'18	
Goatheads	Field edges	Pre-'18	
Salt Cedar	one plant	Pre-'18	
Baccharis, Seep Willow	starting to spread	2020	
Honey Locust	3 trees	2023	
Trees and Shrubs			22
Coyote Willow	spreading	Pre-'18	
Baccharis, Seep Willow	starting to spread	2020	
Black Locust	Died in '23	Pre-'18	
Hackberry	Planted 15+ in '24	2 in 2020	
AZ Ash	Planted 3 in '24	4 in 2020	
AZ Sycamore	Planted 6 in '24	2024	
Osage Orange	Planted 16 in '24	2024	
Shumard Oak	Planted 10 in '24	2024	
NM Olive	Planted 38+ in '24	8 in 2020	
Burr Oak	Planted 6 in '23	2023	
Apricot, Placitas heirloom	one tree	2020	

Plum variety, Corrales	one tree	2020
Wild Plum	3 planted in ‘22	3 are Pre-’18
Nanking Cherry	2 on SE hedge	Pre-’18
Buffalo Berry	3 died by 2021	2019
Wild Cherry	4 died in 2022	2021
False Desert Indigo	Planted 30 in ‘24	13 in 2020
Golden Currant	Planted 22+ in ‘24	1 Pre-’18
3-leaf Sumac	Planted 24 in ‘24	8 in ‘22
Woods Rose	14 plants on W. Hedge	2024
Honeysuckle	one plant	2020
Honey Locust	3 trees, keep?	2023
Wild Grape	2 vines, W. gate	2022
Virginia Creeper	2 plants, one died	2022
Wild Clematis	one plant, ‘22	died? In ‘24

Forbs 40

Plantain (P. lanceolata)	many plants	Pre-’18
Yellow Dock (Rumex sp.)	few, scattered	Pre-’18
Goldenrod (Solidago sp.)	Planted 14 in ‘24	2 in 2020
Common Sunflower	25% of field	2020
Mexican Hat (R. columnifera)	sq. ft. 140 +	Pre-’18
Plains Coreopsis	sq. ft. 96+	Pre-’18
Maximillian Daisy	< 5 clumps, spreading	2020
McDougal Verbena	14 plants	2024
Horseweed (Conyza sp.)	7 plants in one spot	2022
Purple Aster (Machaeranthera sp.)	few, scattered	2022
Chickory	few,	Pre-’18

	scattered	
	few,	
Dandelion	scattered	2019
Joe Pye Weed	two plants	2019
	sq. ft. 360	
	+ scattered	
Horsetail Milkweed	patches	2019
	14 plants	
	on W.	
Showy Milkweed	Hedge	2024
Spiny Aster (C. spinosa)	small patch	2019
	Died off, 1	
	in W.	
Swamp Milkweed	Wetland	2023
	patches	
Dogbane, 1 of 3 possible spp.	spreading	2020
	one clump,	
Lemon Balm (Melissa sp.)	Bed A	2021
	clumps in	
Bee Balm (Monarda sp.)	Beds A & 2	2021
	clump in	
	Bed A and	
Peppermint	inlet	2021
Yerba Mansa	Few plants	2021
Med. Red Clover	spreading	2020
	few,	
Sweet Clover	scattered	2020
	Many on	
	central	
Prairie Clover (Dalea leporina)	ditch	2019
Broom Dalea	2 plants	2022
	few,	
Alfalfa	scattered	Pre-'18
Gummyweed	small patch	2019
	few,	
Horseweed, (Erigeron canadensis?)	scattered	2019
	Road	
Globe Mallow	edges	Pre-'18
	2 plants in	
	far north	
Heliotrope (H. curassavicum)	end	Pre-'18
Penstemon, 3 spp.	Died off	2019
	5 in Bed B,	
Sulfur Buckwheat (E. umbellatum)	3 in Bed 4	2019
James Buckwheat (E. jamseii)	2 in Bed 3	2024
Redroot Buckwheat (E. racemosum)	2 in Bed B	2024
	widespread	
Artemisia sp. ID needed	in NW field	2021
Cut-leaf Coneflower	5 in Bed C,	2019

	3 in Bed 3		
Purple Coneflower	Died off	2021	
Salvia, Tall Blue	stable in Bed 2	2021	
Salvia, Red, and Violet	Died off	2021	
Butterfly Weed (A. tuberosa)	Died off	2021	
Yarrow	Died off	2021	
Lavender	Died off	2021	
Rosemary	Died off	2021	
Agastache	Died off	2021	
Marigold	Died off	2021	
Parsely	Middle of Beds	2020	
Cilantro	Middle of Beds	2020	
Dill, didn't come up in '24	Middle of Beds	2020	
Amaranth	Died off	2020	
Austrian Winter Peas	Cover crop for Beds	2020	
Water Cress, ID needed	few, scattered	2019	
Sand Cherry	Died off	2022	
RM Bee Plant	Died off	2021	
Prickly Pear Cacti	~ 12 plants, north end	2024	
Grasses			23
Rushes/Sedges			3
Agaves			2
Nolina			1
Tall Fescue (S. phoenix)	sq. ft. 1,116	Pre-'18	
Indiangrass	spreading, planted 8 in '24	2020	
Bristlegrass (Elymus sp.)	spreading in field and beds	2021	
Canada Wildrye	spreading	Pre-'18	
SW Cupgrass	spreading	2021	
Windmill grass (Chloris verticilatta)	scattered patches	2020	
Finger grass (Chloris virgata)	few clumps	2020	
Muhlenbergia sp.	sq. ft. 32	2021	
Wild Oat (Avena fatua)	seen once	2023	
Big Bluestem	spreading	2021	

Little Bluestem	spreading	2022
Galleta grass (P. jamesii)	few, scattered	2021
Buffalo grass	sq. ft. 42	2020
Side-Oats Grama	sq. ft. 2,300 + scattered	2020
Blue Grama	spreading	2021
Sand Dropseed	spreading	2022
Foxtail Barley (H. jubatum)	diminishing	Pre-'18
Alkali Sacaton	14 plants in Bed E, Bed 3	2020
Giant Sacaton	24 new plants in '24	2022
Switchgrass	2 plants	2020
Barnyard grass	1 small patch	2024
Saltgrass	sq. ft. 32	2024
Bullrush, tall	one clump	Pre-'18
Nut Sedge (Cyperus sp.)	diminishing	2019
Sedge sp. Needs ID	one clump	2024
Agaves/Nolina		3
Agave parryi	8 plants, north end of field	2024
Agave harvardiana	4 plants, north end of field	2024
Nolina microcarpa	16 plants	2024

100 species total

H. Tentative Schedule of Workshops/Events for 2025:

January 27th – "Biochar" workshop, limit 20 participants

February 10th - "Envision" workshop, no limit on participants

March 23rd – "Soil Testing to Soil Listening" workshop, limit 20 participants

April 27th – "Planting for Pollinators" workshop, limit 20 participants

May 25th – "Microscopic Life in the Soil" workshop, limit 20 participants

June 22nd – "Pollination Celebration" OSVC, Native Bee/Flower Celebration -concurrent

August 24th -"Butterfly Celebration" Public Event

September open – TBD

September 28th - "Ethical Seed Harvesting" workshop, limit 20 participants

October 12th - Kids poetry/art in the field

November 16th - Return of Cranes Celebration

December 3rd, 10th, or 17th - TBD

This concludes this report for 2024 -

We at Habitat Farms Collective would like to thank the volunteers and the staff of the OSVC who make this such a beautiful and enjoyable place!

THANK YOU!