

Post - Construction Monitoring Report
for
Jeorse Park
Section 506 Great Lakes Fishery & Ecosystem Restoration (GLFER)
2023



Prepared by: USACE, Chicago District



**US Army Corps
of Engineers®**

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Introduction

Jeorse Park Beach is located along the Lake Michigan shoreline in East Chicago, Indiana. The project is situated within the Grand Calumet River/Indiana Harbor Area of Concern. The project includes 14.8 acres of restored beach and dunes, introducing approximately 3 acre of native dune plantings, and constructing two submerged rock reef structures as aquatic habitat. The goal was to restore self-sustaining native plant communities on shore, and to improve degraded hydrodynamic and biological processes within the near shore areas of Jeorse Park Beach.

The fifth and final year of establishment activities under the Section 506 Great Lakes Fishery and Ecosystem Restoration (GLFER) construction contract was completed in December of 2021. A total of approximately 1,200 shrubs and trees, 16,000 herbaceous plugs, and 100 oz of seed have been planted on the project site. Additionally, two submerged cobble mounds have been constructed on Lake Michigan bottom creating fish spawning and nursery habitat for native species. Monitoring of the project during construction has shown the presence of 9 species of fishes utilizing the project area within one year of reef construction.

Section 2039 of the Water Resources Development Act (WRDA) 2007 directs the Secretary of the Army to ensure, under the USACE ecosystem restoration mission, the project include a monitoring plan to measure the success of the ecosystem restoration and to dictate the direction adaptive management should proceed, if needed. An effective monitoring program is necessary to assess the status and trends of ecological health and biota richness and abundance on a per project basis, as well as to report on regional program success within the United States. The USACE, Chicago District performed post-construction fish and vegetation monitoring in 2023. A final monitoring report in 2026 will present results from the USACE 5-year post-construction monitoring phase intended to evaluate whether measurable results have been achieved and the intent of Section 506 GLFER have been met.

Fish Monitoring

Fish monitoring in Lake Michigan at Jeorse Park was performed in June 2018 and June 2023. The sampling methods used were gill nets and electrofishing at the cobble reefs and seines on the shoreline to fully assess the multitude of depths and habitats within the location. The objective of the Jeorse Park restoration project was to restore hydrodynamic processes and increase the quality and quantity of beach and fish habitat in an overall support of Great Lakes fishes with the goal to improve native fish species richness, evenness, and diversity. Electrofishing surveys in 2018 were conducted directly over the constructed cobble reef habitat for two standardized runs of 15 minutes, without overlapping in spatial coverage and four 30 ft beach seine hauls were performed. In 2023, three beach seine hauls were performed, and two gill nets were deployed, one on the left side of the cobble reef and the other in between the cobble reef rock piles.

Table 1 below provides the list of species caught by year and sampling method used, along with total catch, taxa richness, diversity, and evenness. Fish catch from all applicable methods were combined to provide a total catch for sampling conducted. Taxa richness, species diversity, and evenness were then calculated. Across both fish sampling efforts, there was a total taxa richness of 12 species with 10 of the species being native. It is possible that the species of fish utilizing the reefs and shoreline may be limited to the collection methods used as well as the time of year the sampling occurred.

Table 1: Species of Fish Caught at Jeorse Park as part of the USACE Monitoring Effort in 2018 and 2023 via Boat Electrofishing, Seines, and Gill Nets.

Location	Common Name	Scientific Name	Gear Used	2018	2023
Cobble Reef	Alewife	<i>Alosa pseudoharengus</i>	Gill nets		55
Cobble Reef	Rock Bass	<i>Ambloplites rupestris</i>	Electrofishing	9	
Cobble Reef	Rock Bass	<i>Ambloplites rupestris</i>	Gill nets		1
Cobble Reef	Yellow Bullhead	<i>Ameiurus natalis</i>	Electrofishing	1	
Cobble Reef	Common Carp	<i>Cyprinus carpio</i>	Gill nets		2
Cobble Reef	Gizzard Shad	<i>Dorosoma cepedianum</i>	Gill nets		1
Shoreline	Banded Killifish	<i>Fundulus diaphanus</i>	Seine	49	33
Cobble Reef	Pumpkinseed	<i>Lepomis gibbosus</i>	Electrofishing	1	
Cobble Reef	Smallmouth Bass	<i>Micropterus dolomieu</i>	Gill nets		2
Shoreline	Smallmouth Bass	<i>Micropterus dolomieu</i>	Seine		2
Cobble Reef	Smallmouth Bass	<i>Micropterus dolomieu</i>	Electrofishing	15	
Cobble Reef	Shorthead Redhorse	<i>Moxostoma macrolepidotum</i>	Electrofishing	4	
Shoreline	Round Goby	<i>Neogobius melanostomus</i>	Seine	16	17
Cobble Reef	Round Goby	<i>Neogobius melanostomus</i>	Electrofishing	3	
Shoreline	Spottail Shiner	<i>Notropis hudsonius</i>	Seine	137	
Shoreline	Sand Shiner	<i>Notropis stamineus</i>	Seine	127	
Total Catch				362	113
Taxa Richness				9	6
Shannon-Weiner Diversity				1.49	1.29
Evenness				0.678	0.72

From 2018 to 2023, 475 fish have been sampled across 12 species at the cobble reef and the shoreline of Jeorse during two sampling events. In 2018, 9 species were found at reefs and shoreline post-restoration and cobble mound construction. Since that sampling effort, 3 more species have been found utilizing the cobble reef habitat during the 2023 sampling effort: non-native Alewife, Gizzard Shad, and the invasive Common Carp. Future sampling efforts in the spring, when spawning occurs, may provide deeper insight on the fish species that frequent the area and their response to the restoration efforts at Jeorse Park.

Plant Monitoring

A quantitative stratified random sampling method was used for recording herbaceous vegetation and their relative abundances to enable the calculation of appropriate numerical indicators of floristic quality to document restoration success. Plots $\frac{1}{4}$ m² in size were placed at random distances along a transect permanently marked during the construction phase of the project and maintained during the post-construction monitoring phase. Percent cover for all plant species was estimated in each plot. Data was analyzed using the Chicago Region FQA Calculator (Herman, B., Sliwinski, R. and S. Whitaker. 2017) and transect summary data are shown in Table 2. Calculated metrics are reported in Attachment 1.

Table 2: Transect Summary Data 2023

Transect	Species Richness (Total Species)	Species Richness (Native Species)	Native FQAI	Native Mean C	Dominant Species
Transect 1	18	16	25.25	6.31	<i>Schizachyrium scoparium</i> , <i>Artemisia campestris</i> ssp. <i>caudata</i> , <i>Coreopsis lanceolata</i> , <i>Calamovilfa longifolia</i> , <i>Panicum virgatum</i>

Conclusion

Jeorse Park has developed into species-rich and functionally diverse dunal plant communities. Overall, the Native Mean C and Native FQAI values of plant communities are high and coverage of invasive species continues to remain low. Additional fish monitoring during the 5-year post-construction monitoring period is needed to evaluate whether measurable results have been achieved and the intent of Section 506 GLFER have been met to improve native fish species richness, evenness, and diversity. The site is currently providing high quality habitat for local and migratory wildlife, spawning habitat for native fishes, and flower-rich habitat for pollinators.

References

Herman, B., Sliwinski, R. and S. Whitaker. 2017. Chicago Region FQA (Floristic Quality Assessment) Calculator. U.S. Army Corps of Engineers, Chicago, IL.

Attachment 1 – Floristic Quality Assessment (FQA) Report

Jeorse Park
2023

metrics	values
Total Species Richness	18
Native Species Richness	16
Introduced Species Richness	2
% of Species with no C Value	0
% of Species with 0 C Value	11.11
% of Species with 1-3 C Value	11.11
% of Species with 4-6 C Value	33.33
% of Species with 7-10 C Value	44.44
Mean C	5.61
Native Mean C	6.31
Cover-Weighted Mean C	6.12
Cover-Weighted Native Mean C	6.65
Total FQI	23.81
Native FQI	25.25
Cover-Weighted FQI	25.96
Cover-Weighted Native FQI	26.62
Adjusted FQI	59.51
Mean Wetness	1.78
Native Mean Wetness	1.75
% Hydrophytes	0

Duration Frequency		
duration	number	percent
biennial	19	26.39
perennial	53	73.61
annual	0	0

Plot Summary Metrics

plot_id	species_ richness	native_species_r ichness	mean_wetness	mean_c	native_mean_c	cover_mean_c	FQI	native_FQI	cover_FQI	native_cover_FQI	adjusted_FQI
1	3	3	1.67	4.67	4.67	4.83	8.08	8.08	8.37	8.37	46.67
10	3	3	2	4.67	4.67	4.38	8.08	8.08	7.58	7.58	46.67
11	3	3	2	7.67	7.67	7.67	13.28	13.28	13.28	13.28	76.67
12	2	2	1.5	5	5	5	7.07	7.07	7.07	7.07	50
13	3	3	1.33	6	6	5.68	10.39	10.39	9.84	9.84	60
14	4	4	1.5	7	7	7.33	14	14	14.67	14.67	70
15	2	2	2	6.5	6.5	5.5	9.19	9.19	7.78	7.78	65
16	5	5	1.8	5.6	5.6	5.56	12.52	12.52	12.42	12.42	56
17	5	5	1.8	6.6	6.6	7.1	14.76	14.76	15.87	15.87	66
18	3	3	1.67	4.67	4.67	4.86	8.08	8.08	8.42	8.42	46.67
19	3	2	1.33	4.33	6.5	4.71	7.51	9.19	8.15	8.7	53.07
2	3	3	1	4	4	4	6.93	6.93	6.93	6.93	40
20	3	3	1.33	4	4	3.5	6.93	6.93	6.06	6.06	40
21	4	3	1.5	5.25	7	5.56	10.5	12.12	11.11	12.37	60.62
22	3	3	1.67	6	6	5.9	10.39	10.39	10.22	10.22	60
23	3	3	1.67	5.67	5.67	7.05	9.81	9.81	12.21	12.21	56.67
24	1	1	2	8	8	8	8	8	8	8	80
3	4	4	1.5	5	5	5.27	10	10	10.53	10.53	50
4	3	3	1.67	4	4	4.47	6.93	6.93	7.74	7.74	40
5	3	3	1.67	5.67	5.67	6.83	9.81	9.81	11.84	11.84	56.67
6	3	3	1.33	6	6	6.07	10.39	10.39	10.52	10.52	60
7	2	2	1.5	6.5	6.5	7.62	9.19	9.19	10.78	10.78	65
8	2	2	2	7	7	8.64	9.9	9.9	12.21	12.21	70
9	1	1	2	8	8	8	8	8	8	8	80

Species Summary Metrics

name	acronym	nativity	c	w	frequency	coverage	relative_ frequency	relative_ cover	relative_ importance
ANDROPOGON SCOPARIUS	SCHSCO	native	5	1	12	590	16.9	28.85	22.88
ANTENNARIA PLANTAGINIFOLIA	ANTPLA	native	4	2	1	25	1.41	1.22	1.32
ARTEMISIA CAMPESTRIS SSP. CAUDATA	ARTCAMC	native	5	2	18	280	25.35	13.69	19.52
ARTEMISIA VULGARIS	ARTVUL	introduced	0	2	1	20	1.41	0.98	1.19
CALAMOVILFA LONGIFOLIA	CALLON	native	8	2	3	230	4.23	11.25	7.74
CENTAUREA MACULOSA	CENSTO	introduced	0	2	1	20	1.41	0.98	1.19
COREOPSIS LANCEOLATA	CORLAN	native	8	1	9	325	12.68	15.89	14.28
DIERVILLA LONICERA	DIELON	native	10	2	1	30	1.41	1.47	1.44
EUPHORBIA COROLLATA	EUPCOR	native	4	2	4	60	5.63	2.93	4.28
HELIANTHUS MOLLIS	HELMOL	native	9	2	2	90	2.82	4.4	3.61
JUNIPERUS COMMUNIS	JUNCOM	native	8	2	1	30	1.41	1.47	1.44
KOELERIA MACRANTHA	KOECRI	native	8	2	3	50	4.23	2.44	3.34
LIATRIS ASPERA	LIAASP	native	8	2	1	20	1.41	0.98	1.19
MONARDA PUNCTATA	MONPUN	native	4	2	6	90	8.45	4.4	6.43
OPUNTIA CESPITOSA	OPUHUM	native	5	2	2	20	2.82	0.98	1.9
PANICUM VIRGATUM	PANVIR	native	3	0	3	115	4.23	5.62	4.92
PRUNUS PUMILA	PRUPUM	native	9	2	2	30	2.82	1.47	2.14
SOLIDAGO NEMORALIS	SOLNEM	native	3	2	1	20	1.41	0.98	1.19

Physiognomy Summary Metrics

physiognomy	frequency	coverage	relative_frequency	relative_cover	relative_importance
forb	44	950	61.97	46.45	54.21
grass	21	985	29.58	48.17	38.87
shrub	6	110	8.45	5.38	6.91

Species Entered

plot_id	cover	name	name_orig	accepted_scientific_name	family	nativity	c	w	wetland_indicator	physiognomy	duration	common_name
24	100	CALAMOVILFA LONGIFOLIA	accepted_	Calamovilfa longifolia	POACEAE	native	8	2	UPL	grass	perennial	Sand Reed
23	5	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
23	20	MONARDA PUNCTATA	accepted_	Monarda punctata	LAMIACEAE	native	4	2	UPL	forb	perennial	Spotted Beebalm
23	75	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
22	10	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
22	60	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
22	30	JUNIPERUS COMMUNIS	accepted_	Juniperus communis	CUPRESSACEAE	native	8	2	UPL	shrub	perennial	Common Juniper
21	10	KOELERIA MACRANTHA	accepted_	Koeleria macrantha	POACEAE	native	8	2	UPL	grass	perennial	June Grass
21	40	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
21	20	CENTAUREA MACULOSA	synonym	Centaurea stoebe ssp. micran	ASTERACEAE	introduced	0	2	UPL	forb	biennial	Spotted Knapweed
21	20	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
20	10	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
20	20	MONARDA PUNCTATA	accepted_	Monarda punctata	LAMIACEAE	native	4	2	UPL	forb	perennial	Spotted Beebalm
20	50	PANICUM VIRGATUM	accepted_	Panicum virgatum	POACEAE	native	3	0	FAC	grass	perennial	Wand Panic Grass
19	25	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
19	40	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
19	20	ARTEMISIA VULGARIS	accepted_	Artemisia vulgaris	ASTERACEAE	introduced	0	2	UPL	forb	perennial	Common Mugwort
18	20	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
18	75	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
18	15	EUPHORBIA COROLLATA	accepted_	Euphorbia corollata	EUPHORBIACEAE	native	4	2	UPL	forb	perennial	Flowering Spurge
17	25	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
17	5	MONARDA PUNCTATA	accepted_	Monarda punctata	LAMIACEAE	native	4	2	UPL	forb	perennial	Spotted Beebalm
17	25	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
17	20	LIATRIS ASPERA	accepted_	Liatis aspera	ASTERACEAE	native	8	2	UPL	forb	perennial	Rough Gayfeather
17	30	CALAMOVILFA LONGIFOLIA	accepted_	Calamovilfa longifolia	POACEAE	native	8	2	UPL	grass	perennial	Sand Reed
16	10	OPUNTIA CESPITOSA	synonym	Opuntia humifusa	CACTACEAE	native	5	2	UPL	shrub	perennial	Common Prickly-Pear
16	20	PRUNUS PUMILA	accepted_	Prunus pumila	ROSACEAE	native	9	2	UPL	shrub	perennial	Great Lakes Sand Cherry
16	10	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
16	20	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
16	30	EUPHORBIA COROLLATA	accepted_	Euphorbia corollata	EUPHORBIACEAE	native	4	2	UPL	forb	perennial	Flowering Spurge
15	15	KOELERIA MACRANTHA	accepted_	Koeleria macrantha	POACEAE	native	8	2	UPL	grass	perennial	June Grass
15	75	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
14	15	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
14	20	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
14	25	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
14	30	DIERVILLA LONICERA	accepted_	Diervilla lonicera	CAPRIFOLIACEAE	native	10	2	UPL	shrub	perennial	Dwarf Honeysuckle
13	5	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
13	25	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
13	80	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
12	15	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
12	70	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
11	10	PRUNUS PUMILA	accepted_	Prunus pumila	ROSACEAE	native	9	2	UPL	shrub	perennial	Great Lakes Sand Cherry
11	25	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
11	40	HELIANTHUS MOLLIS	accepted_	Helianthus mollis	ASTERACEAE	native	9	2	UPL	forb	perennial	Downy Sunflower
10	5	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
10	25	ANTENNARIA PLANTAGINIFOLIA	accepted_	Antennaria plantaginifolia	ASTERACEAE	native	4	2	UPL	forb	perennial	Pussy-Toes
10	10	OPUNTIA CESPITOSA	synonym	Opuntia humifusa	CACTACEAE	native	5	2	UPL	shrub	perennial	Common Prickly-Pear
9	100	CALAMOVILFA LONGIFOLIA	accepted_	Calamovilfa longifolia	POACEAE	native	8	2	UPL	grass	perennial	Sand Reed
8	5	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
8	50	HELIANTHUS MOLLIS	accepted_	Helianthus mollis	ASTERACEAE	native	9	2	UPL	forb	perennial	Downy Sunflower
7	10	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
7	70	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
6	5	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
6	25	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
6	40	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
5	5	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
5	5	MONARDA PUNCTATA	accepted_	Monarda punctata	LAMIACEAE	native	4	2	UPL	forb	perennial	Spotted Beebalm
5	20	COREOPSIS LANCEOLATA	accepted_	Coreopsis lanceolata	ASTERACEAE	native	8	1	FACU	forb	perennial	Lance-Leaf Tickseed
5	30	TRIDENS FLAVUS	accepted_	Tridens flavus	POACEAE	introduced	0	2	UPL	grass	perennial	Purple-Top
4	5	EUPHORBIA COROLLATA	accepted_	Euphorbia corollata	EUPHORBIACEAE	native	4	2	UPL	forb	perennial	Flowering Spurge
4	20	SOLIDAGO NEMORALIS	accepted_	Solidago nemoralis	ASTERACEAE	native	3	2	UPL	forb	perennial	Gray Goldenrod
4	60	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
3	15	PANICUM VIRGATUM	accepted_	Panicum virgatum	POACEAE	native	3	0	FAC	grass	perennial	Wand Panic Grass
3	10	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
3	25	MONARDA PUNCTATA	accepted_	Monarda punctata	LAMIACEAE	native	4	2	UPL	forb	perennial	Spotted Beebalm
3	25	KOELERIA MACRANTHA	accepted_	Koeleria macrantha	POACEAE	native	8	2	UPL	grass	perennial	June Grass
2	10	EUPHORBIA COROLLATA	accepted_	Euphorbia corollata	EUPHORBIACEAE	native	4	2	UPL	forb	perennial	Flowering Spurge
2	50	PANICUM VIRGATUM	accepted_	Panicum virgatum	POACEAE	native	3	0	FAC	grass	perennial	Wand Panic Grass
2	50	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem
1	15	MONARDA PUNCTATA	accepted_	Monarda punctata	LAMIACEAE	native	4	2	UPL	forb	perennial	Spotted Beebalm
1	25	ARTEMISIA CAMPESTRIS SSP. CAUDATA	accepted_	Artemisia campestris ssp. cau	ASTERACEAE	native	5	2	UPL	forb	biennial	Beach Wormwood
1	50	ANDROPOGON SCOPARIUS	synonym	Schizachyrium scoparium	POACEAE	native	5	1	FACU	grass	perennial	Little False Bluestem