

VASCULAR PLANTS
OF
LYNDON B. JOHNSON NATIONAL HISTORICAL PARK
BLANCO AND GILLESPIE COUNTIES, TEXAS

RESULTS OF A 2002 FLORISTIC INVENTORY
AND RELATED RESEARCH AND REVIEWS

FINAL REPORT
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EXECUTIVE SUMMARY 1

INTRODUCTION	2
METHODS.....	2
TRIPS TO LYJO.....	2
SAMPLING METHODS AND COLLECTING SITES.....	4
ACTIVITIES AT BRIT.	4
RESULTS.....	5
CHECKLIST DEVELOPMENT.	5
RARE AND UNUSUAL TAXA AND RANGE EXTENSIONS	7
COMMUNITY CHARACTERIZATIONS.....	7
1. NATIVE GRASSLAND ON CHALKY SLOPES WITH CLAY-LOAM AND LOAM.....	8
2. NATIVE GRASSLAND/SAVANNA ON LEVEL DEEP CLAYEY AND CLAY-LOAM SOILS.....	8
3. NATIVE GRASSLAND/SAVANNA ON UPLAND SANDY LOAM.....	8
4. PASTURES/FIELDS ON UPLAND DEEP REDLAND CLAY-LOAM OR SANDY LOAM SOILS.....	9
5. PASTURES/SAVANNA ON ALLUVIAL SANDY AND SILTY LOAM SOILS.	10
6. UPLAND SUCCESSIONAL WOODLAND.	10
7. RIPARIAN WOODLAND	11
8. PONDS, DEEP SWALES, AND STREAM MARGINS.....	11
9. URBANIZED HABITATS, INCLUDING HORTICULTURAL PLANTINGS.....	12
RECOMMENDATIONS	12
ACKNOWLEDGMENTS.....	13
REFERENCES	13
APPENDIX 1. Checklist of Vascular Plant Species collected in Lyndon B. Johnson National Historic Park and verified by Roger Sanders, with nativity, relative abundance, and park units in which species were observed.....	15
APPENDIX 2. Species observed in Lyndon B. Johnson National Historical Park by Roger Sanders, but lacking vouchers from park property, with nativity, relative abundance, and park units in which species was observed.	32
APPENDIX 3. Species vouchered from LBJ State Park or nearby areas of Gillespie or Blanco Counties and likely to occur in Lyndon B. Johnson National Historical Park.	33
APPENDIX 4. Species not known to occur in LYJO, requiring correction to the Vascular Plant Master List (Carr & Gallyoun, 2001) provided by the Texas CDC.	34
APPENDIX 5. LYJO Vouchers collected by Roger Sanders, March 2002 to January 2003.	36
APPENDIX 6. Roger Sanders' Collections from LYJO: Specimens consisting of two parts (a-b)	47
APPENDIX 7. Roger Sanders' LYJO vouchers collected in unicate, available in LYJO herbarium.	48

**Vascular Plants of Lyndon B. Johnson National Historical Park
Blanco and Gillespie Counties, Texas**

EXECUTIVE SUMMARY

The primary objective of the current project is to provide an account of all vascular plant species occurring in Lyndon B. Johnson National Historical Park (LYJO), based on a vouchered record for each species. Also included are an account of species previously reported for the park, rare taxa, and concepts of major plant communities.

LYJO consists of two units or districts. The Johnson City Unit is located in the southwest portion of Johnson City, Blanco County, Texas, and consists of the park headquarters and visitor center, the LBJ boyhood home, some adjacent homes, historic Johnson Settlement buildings and exhibits, a nature trail, seminatural creek and prairie habitats, a demonstration herd of longhorn cattle and horses and associated pastures, volunteer camping sites, and maintenance sheds. The LBJ Ranch Unit stretches along the Pedernales River in eastern Gillespie County from the bridge connecting Ranch Road 1 and Park Road 49 to the LBJ Ranch. It includes several historic sites, including the LBJ birthplace, Johnson family cemetery, grandparent's farmhouse, the Texas White House (Ranch House), as well as the private airstrip, communications tower, ranching and show barns, maintenance barns, ranch pastures, cultivated fields and orchards. Adjacent to the LBJ Ranch Unit across Ranch Road 1 is the Lyndon B. Johnson State Park, from which the National Park Service operates its bus tours.

A floristic inventory of the parkland records 432 naturally occurring species (distinct varieties separated in count) and four hybrids. In addition, 142 species (including a few hybrids and distinct cultivars counted separately) are cultivated, 19 of which also occur naturally as native or naturalized species. Thus a total of 559 species were documented by this inventory. The largest families are Poaceae (77 species + varieties) and Asteraceae (75), followed by Fabaceae (33), Lamiaceae (23) Euphorbiaceae (22), Cyperaceae (18), Rosaceae (18), and Verbenaceae (18). Occurrence records are vouchered by herbarium specimens collected by Dr. Roger Sanders in surveys done on 30 days, March 2002 through January 2003, or by other botanists at various times. Indication of abundance is provided for each vouchered species.

Definitions of the major plant associations are based on physiographic, geologic, and soil boundaries, as these generally are correlated with the sharpest discontinuities between vegetation types. Nine major types: (1) native grassland on chalky slopes with clay-loam and loam, (2) native grassland/savanna on level deep clayey and clay-loam, (3) native grassland/savanna on upland sandy loam, (4) pastures/fields on upland deep redland clay-loam or sandy loam soils, (5) pastures/savanna on alluvial sandy and silty loam soils (6) upland successional woodland, (7) riparian woodland, (8) ponds, deep swales, and stream margins, (9) and urbanized habitats, including horticultural plantings.

INTRODUCTION

This project was undertaken by the Botanical Research Institute of Texas (BRIT) in cooperation with the Texas Conservation Data Center (TxCDC), as part of a larger project with the National Park Service (NPS) to perform inventories of vascular plants and vertebrate animals. The TxCDC performed vertebrate inventories. The primary objective of the current project was to provide an account of all vascular plant species occurring at LYJO, based on a vouchered record for each species. Also among the goals were an account of species potentially occurring in the parkland and documentation of characteristics for major plant communities in the parkland. Various accounts exist of the flora of the parkland area, but because studies were not comprehensive and few of the reported records are vouchered, the primary approach of this study was to conduct intensive on-the-ground surveys, accompanied by collection of vouchers. Dr. Roger Sanders carried out the project, with assistance on one field survey provided by Mr. Robert O'Kennon.

Lyndon B. Johnson National Historical Park (LYJO) consists of two units (districts) situated on the Llano uplift, in the Pedernales River Valley of the central Texas Hill Country, in Blanco and Gillespie counties, respectively. The location of the park is displayed in Map 1. LYJO was originally established in 1969, as a national historic site. The designation was changed to a national historical park in 1980. The combined area of the two districts, which lie about 15 miles from one another, is about 270 ha (674 acres). The Johnson City District is located in the southwest portion of Johnson City (Blanco County), and consists of the park headquarters and visitor center, the LBJ boyhood home, some adjacent homes, historic Johnson Settlement buildings and exhibits, a nature trail, semi-natural creek and prairie habitats, a demonstration herd of longhorn cattle and horses and associated pastures, volunteer camping sites, and maintenance sheds. The LBJ Ranch unit stretches along the Pedernales River in eastern Gillespie County from the bridge connecting Ranch Road 1 and Park Road 49 to the LBJ Ranch. It includes several historic sites, including the LBJ birthplace, Johnson family cemetery, grandparent's farmhouse, the White House (Ranch House), as well as the private airstrip, communications tower, ranching and show barns, maintenance barns, ranch pastures, cultivated fields and orchards.

METHODS

Trips to LYJO.

Eight trips were made to LYJO (April, May, June, July, August, September, November, January).

- Trip 1 – April 1-4, 2002 – 3.5 days field work
- Trip 2 – April 29 to May 2, 2002 – 3.5 days field work
- Trip 3 – June 3-6, 2002 – 3.5 days field and herbarium work
- Trip 4 – July 15-18, 2002 – 3.5 days field and herbarium work (accompanied by Robert O'Kennon)
- Trip 5 – August 20-23, 2002 – 3.5 days field work
- Trip 6 – September 16-19, 2002 – 3.5 days field and herbarium work
- Trip 7 – November 12-15, 2002 – 3.5 days field and herbarium work
- Trip 8 – January 27-31, 2003 – 4 days of herbarium and data-entry work

Map 1: Lyndon B. Johnson National Historical Park
Location (Gillespie and Blanco Counties, Texas)



0 25 50 100 150 200
Miles

Map created by the GIS Department;
NPS_LYJO_Location.mxd (6/7/04)

A total of 28.5 days were spent in the field and in LYJO herbaria, collecting vouchers, making observations toward a classification of plant communities, and critically studying the plants. On the 3rd and 4th trips, identifications were checked and LYJO specimens annotated. On the 6th trip, Chief Curator, Virginia Kilby, taught Dr. Sanders the National Park Service database program, ANCS+, while the 7th and 8th trips were for data processing. Also on the 8th trip, all but four vouchers were delivered to LYJO; the remaining ones, including those collected in January, were shipped to LYJO in February.

Sampling methods and collecting sites.

Dr. Sanders sampled by searching for diversity of habitat, traveling and walking through as much of the parkland as possible, using topographic maps as a guide and seeking advice from park personnel regarding interesting areas. Workdays generally were about 12 hours long. The initial characterization by TNC of vegetation/sampling zones within the parks was helpful. Horticultural plantings (except temporary, seasonal bedding plants and those inside the Ranch House greenhouse) were sampled, following the TNC contractual guideline.

Where possible, each collection was made in duplicate. Additionally, a number of species are represented by more than one collection, especially in cases where there was a need to document variation or where identities were unclear in the field. The original set of specimens is housed at LYJO, the second set at BRIT.

According to the guidelines of the NPS, vouchers generally were not collected for those species presently existing in the LYJO herbarium. For cases in which a species identity was undecided in the field or when a previous voucher was inadvertently overlooked, a voucher was recollected, duplicating that in the LYJO herbarium.

Activities at BRIT.

Activities at BRIT in Fort Worth pertinent to the project have been the following: (1) drying, sorting, refining collection data, identification, and completion of collection data entry. 2) identification of the Gabbard et al. (n. d.) vouchers; (3) construction of the 'community classification;' (4) preparation of the final report, including full checklist.

To verify identifications of species reported in earlier studies, request was made for loans of report vouchers from the institutions that conducted those studies. Thus, a loan was received from the University of Texas, vouchering the reports by Gabbard et al. (n. d.). Unfortunately, the voucher specimens for the reports by Smeins (2000) and Baumann (1999) were not available in the herbaria at Texas A&M University and neither of the authors responded to requests to borrow their specimens. There are no vouchers for the planting plans (including Hermann, 1999).

Identifications were made by: 1) consulting floras pertinent for the region (Correll & Johnston, 1970; Diggs et al., 1999), and 2) by comparing with authoritatively annotated specimens in the BRIT herbarium. Nomenclature generally follows Diggs et al. (1999) and Kartesz & Meacham (1999).

RESULTS

Checklist development.

The list of species definitely occurring in the parkland is drawn primarily from observations made in this study, vouchered by 601 herbarium collections. Additionally, previous specimens from the LYJO herbarium and those studied that voucher the Gabbard et al. (n. d.) report have added 34 and 4 species, respectively, to the checklist.

Species are divided into three categories, based on their “park status” – reflecting the relative certainty of their occurrence within the parkland. For those species categorized as “Present” (including those based only on my observation), the relative abundance of each species on this list is estimated from among the four categories in **Table 1**, while diversity is summarized in **Table 2**.

Present. Known to occur within the parkland and represented by a herbarium voucher. This account is provided as Appendix 1.

Present as based on observation in this study but not vouchered. Three species recorded in field notes in this study were not collected because the directive by LYJO and TxCDC was to collect only species not previously vouchered. However, many vouchers in the LYJO collection are from the LBJ State Park, and some confusion resulted. Also, previous misidentification of LYJO specimens caused confusion. This account is provided as Appendix 2.

Potentially present. Eleven species are known to occur outside the park in nearby areas (mostly the adjacent LBJ State Park) but were not observed and hence, not vouchered within the parkland. This account is provided as **Appendix 3**.

Table 1. Abundance categories for species occurring in the parkland.

<u>Abundant:</u> Large number of individuals with wide ecological amplitude or occurring in habitats covering a large portion of the park.
<u>Common:</u> Large numbers of individuals predictably occurring in commonly encountered habitats but not those covering a large portion of the park. A wide range of abundance is covered by this category.
<u>Uncommon:</u> Few to moderate numbers of individuals; occurring either sporadically in commonly encountered habitats or in uncommon habitats.
<u>Rare:</u> Few individuals, usually restricted to small areas of rare habitat.

Furthermore, an account is made in **Appendix 4** of species previously reported for the park but not encountered in this study nor known to the author by any vouchers. These names come primarily from the Vascular Plant Master List (Carr & Gallyoun, 2001), supplied by NPS and The Nature Conservancy. It is derived in part from National Park Service documents and is based on lists that are largely unvouchered (or vouchers unavailable to the public) and include many species apparently appended on subjective bases. Appendix 4 list names in the Master List, as well as one misidentified and reported by Gabbard et al., that were excluded from the vouchered checklist (see App. 1). Twenty of the names are based on

known or probable misidentifications. Eleven lack vouchers even though the Master List identifies them as present. Several names are synonyms of the names used in the checklist resulting from this survey. Included in Appendix 4 are seven species that were considered on the Master List as likely to occur in the park. However, these are out of geographic range and would not occur naturally in the park, and should be removed from any future editions of the park's plant species list. Because access to the Smeins and Baumann vouchers was unavailable, no species reported by them is addressed unless it also appeared on the Master List.

Table 2: Diversity summary for species definitely known to occur within the parkland.

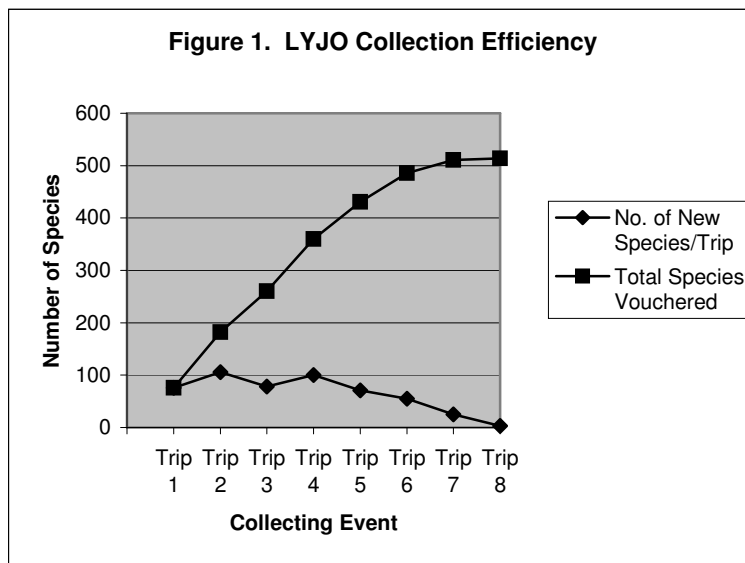
Family	No. of species (included in count are distinct varieties)
Poaceae	77
Asteraceae	75
Fabaceae	33
Lamiaceae	23
Euphorbiaceae	22
Rosaceae	18
Cyperaceae	18
Verbenaceae	17
Scrophulariaceae	12
Acanthaceae	11
Fourteen families with 6-10 species (109 total species)	
Seventy-five families with 1-5 species (144 total species)	
Total no. of species	559
No. of genera	357
No. of families	99

Collections made for this study document 517 species (included in count are distinct varieties, cultivars, and hybrids). Some species were not collected because they were already documented by specimens in the herbarium at LYJO or at the University of Texas (i.e. cited in Gabbard et al., s.d.). Collecting efficiency is shown in **Figure 1**, which indicates that a decreasing number of species were found with each visit. Thus it can be concluded that nearly all species present during 2002 were detected. Collection data (in the form of a Microsoft Excel file for transfer into the Automated National Cataloging System Plus – ANCS+) was submitted to Virginia Kilby, LYJO, and to Mark Gallyoun, TxCDC, and is not included in this report. However, the species and collection numbers that voucher them are provided in **Appendix 5**.

Vouchers that consist of two-part specimens (usually basal rosette and upper flowering portions on separate sheets) are listed in **Appendix 6**. Vouchers for which material was insufficient to make more than one specimen, which is now housed in the LYJO herbarium, are listed in **Appendix 7**.

Rare and unusual taxa and range extensions

The species of special concern, listed by Carr et al. (1998) as possibly occurring in the park, were not encountered. All or most of these occur in habitats that require much more rugged terrain than is found in the park. They are not considered likely to occur.



COMMUNITY CHARACTERIZATIONS

Definitions of the major plant associations are based on physiographic, geologic, and soil boundaries, as these generally are correlated with the sharpest discontinuities between vegetation types.

In the Johnson City Unit, the city blocks are located on soft limestone with a calcareous clay-loam soil. This area is separated from the grasslands by Town Creek and its clay alluvium, which thins and tapers in extent where the creek branches and runs through the grasslands. Johnson Settlement pastures and grasslands are underlain by marly limestone on which clay loam and redland clay soils are developed, except the west pastures where surface sandstone produced a red sandy loam. Most of the south pastures lies on soft limestone from which a deep redland clay soil has developed. Along the south boundary clay loam lies over soft limestone (Dittemore & Allison, 1979).

At the LBJ Ranch Unit, the dominant feature is the Pedernales River and the slopes undulating upward to the low, marly limestone hills above it. The terraces of the riverbed are formed largely from recently deposited silty and sandy alluvium derived from the granites and sandstones upstream. These bottomland terraces are covered with sandy and silty loams. The slopes leading upward from the bottomlands are composed of ancient alluvium of loams and limy earth with outcrops of sandstone and marly limestone here and there. These materials have weathered to sandy loams and deep clay loams. Limestone hills occur at the north end of the airstrip (soft limestone), where a redland clay-loam occurs, and in the northwest corner at the site of the communications tower (marly limestone), where a thin cobbly loam is formed (Allison et al., 1975).

1. Native grassland on chalky slopes with clay-loam and loam.

Only restricted areas of native grasslands remain at LYJO. Due to extensive pasture development and field cultivation on the LBJ Ranch Unit, native grasslands are restricted to a few acres on the two limestone hills in the northwest portion. Signs of recent grazing are not evident. The chalky, cobbly loam by the communication tower supports many Edwards Plateau limestone species, including Texas pennyroyal (*Hedeoma reverchonii*), black-foot spurge (*Chamaesyce angusta*), plateau false nightshade (*Chamaesaracha edwardsiana*), Texas sabadilla (*Schoenocaulon texanum*), rock flax (*Linum rupestre*), slender greenthread (*Thelesperma simplicifolium*), square-bud dewdrops (*Calylophus berlandieri* subsp. *pinifolius*), and Texas stork's-bill (*Erodium texanum*) and is dominated by grama grass (*Bouteloua* spp.), meadow dropseed (*Sporobolus compositus*), and three-awn (*Aristida* spp.) Scattered saplings and small trees of mountain cedar (*Juniperus ashei*), Texas red oak (*Quercus buckleyi*), sugarberry (*Celtis laevigata* var. *reticulata*), toothache-tree (*Zanthoxylum hirsutum*), and wooly buckthorn (*Sideroxylon lanuginosum*) are taking hold. Especially near the tower, heavy machinery has disturbed some areas, and there are piles of dirt and gravel. These areas are covered with pioneer species, such as crownbeard (*Verbesina encelioides*), bladderpod (*Sesbania vesicaria*), and clammyweed (*Polanisia dodecandra*).

2. Native grassland/savanna on level deep clayey and clay-loam soils.

The only area of native grassland in the Johnson City Unit is surrounding the walking paths of the Johnson Settlement between Town Creek and the barns and is undergoing restoration to native prairie-savanna. Formerly it was a pecan orchard. Many of the well-spaced pecan trees remain. If it was plowed following settlement, it probably has not been plowed since the pecans were planted, probably well over 50 years. It probably has not been grazed since the National Park Service assumed management.

Apart from the pecan trees, this grassland is characterized by a mosaic of patches each dominated by a different grass species, especially sideoats grama (*Bouteloua curtipendula*), silver bluestem (*Bothriochloa laguroides*), King Ranch bluestem (*B. ischaemum*), little bluestem (*Schizachyrium scoparium*), and Indiangrass (*Sorghastrum nutans*). *Bouteloua curtipendula* usually occurs in smaller numbers throughout patches dominated by other species. In swales parallel to Town Creek either lowland switchgrass (*Panicum virgatum*) or woody thickets of black willow (*Salix nigra*), peppervine (*Ampelopsis* spp.), mustang grape (*Vitis mustangensis*), buttonbush (*Cephalanthus occidentalis*), Maximilian sunflower (*Helianthus maximiliani*), poison ivy (*Toxicodendron radicans*), Indian dewberry (*Rubus aboriginum*), Texas rush (*Juncus texanus*), and sand spikerush (*Eleocharis montevidensis*) predominate. Important forb species included a diversity of ephemeral native wildflowers such as Texas bluebonnet (*Lupinus texensis*), common greenthread (*Thelesperma filifolium*), and flax (*Linum rigidum*), plus Texas lantana (*Lantana urticoides*) shrubs, and weedy naturalized herbs including bur-clover (*Medicago* spp.), and wild dandelion (*Pyrropappus pauciflorus*). Aggressive vines such as mustang grape, poison ivy, and Indian dewberry (*Rubus aboriginum*) invade the grassland from the edge of the thickets and in the shade of pecans. Cedar sedge (*Carex planostachys*) forms very large spreading clumps under the pecans, as well.

3. Native grassland/savanna on upland sandy loam.

This occurs only east of the communications tower on sideslopes where sandy loams are derived from ancient sandy alluvium. Grasses including little bluestem (*Schizachyrium scoparium*), meadow dropseed (*Sporobolus compositus*), King Ranch blestem (*Bothriochloa ischaemum*), and silver bluestem (*B. laguroides*) dominate and give way to a nearly closed woodland of post oak (*Quercus stellata*), plateau live oak (*Q. fusiformis*), and invading young mountain cedar (*Juniperus ashei*). On the north end, an

open swale is developed, thicketed with Roosevelt-weed (*Baccharis neglecta*), sedges (*Cyperus* spp.), and western umbrella-grass (*Fuirena simplex*).

4. Pastures/fields on upland deep redland clay-loam or sandy loam soils.

In the Johnson City Unit, there are two main areas of pastures, both of which are on upland loam. The first, the north and west ends of Johnson Settlement are heavily grazed by horses and longhorn cattle and are characterized by a short-cropped, thin grass cover and a diversity of ruderal or “barnyard” weedy species, including amaranth (*Amaranthus* spp.), purslane (*Portulaca* spp.), sneezeweed (*Helenium amarum*), crownbeard (*Verbesina encelioides*), scarlet spiderling (*Boerhavia diffusa*), and horehound (*Marrubium vulgare*). The dominant grass species are three-awn (*Aristida* spp.), meadow dropseed (*Sporobolus compositus*), Texas wintergrass (*Nassella leucotricha*), sideoats grama (*Bouteloua curtipendula*), King ranch bluestem (*Bothriochloa ischaemum*), and silver bluestem (*B. laguroides*).

The second pasture area extends south from the west end of Johnson Settlement to the south boundary (just south of maintenance sheds and volunteer camping facility); the riparian woodland running through it is not included here. It is divided into three or four pastures through which the longhorn herd is rotated, resulting in only light grazing and a moderately tall grass canopy. Although the list of dominant species is the same as for the heavily grazed pastures, large patches dominated by the native prairie species, little bluestem (*Schizachyrium scoparium*) and Indiangrass (*Sorghastrum nutans*), are developed. The northernmost pasture (adjacent to rock wall) is a dense stand of Klein grass (*Panicum coloratum*) with extensive clumps of prickly-pears (*Opuntia engelmannii* and *O. macrorhiza*) under its canopy. All these pastures harbour seasonal wildflowers, such as flax (*Linum rigidum*), dwarf dalea (*Dalea nana*), bundleflower (*Desmanthus* spp.), and prairie bindweed (*Convolvulus equitans*). Because grazing is not permitted around the maintenance buildings and disturbance is light, several miniature spring ephemerals were evident including dwarf bluets (*Houstonia pusilla*), wright’s dwarf dandelion (*Krigia wrightii*), least daisy (*Chaetopappa asteroides*), tufted flax (*Linum imbricatum*), and dwarf one-flower umbrella-sedge (*Cyperus retroflexus* var. *pumila*). The presence of a couple of trees of blackjack oak (*Quercus marilandica*) near the south boundary with increasing abundance south of the park, indicates this area was once a post oak-blackjack oak savanna. Fencerows along the park boundary are grown up in dense brush and sapling thickets of pecan (*Carya illinoensis*), mountain cedar (*Juniperus ashei*), wafer ash (*Ptelea trifoliata*), sugarberry (*Celtis laevigata*), and elbow-bush (*Forestiera pubescens*).

At the LBJ Ranch Unit, upland pastures extend along the length of the airstrip toward the two limestone hills. These pastures are grazed by a Hereford herd for beef production, and the pastures are fertilized for high productivity. They are dominated by a dense covering of Bermuda-grass (probably coastal variety), which excludes most other plants except spring ephemerals and scattered plants of silverleaf nightshade (*Solanum elaeagnifolium*) and trailing antelope-horns (*Asclepias asperula*). During this project, the only crop planted was sorghum (*Sorghum bicolor*). In fallow fields, soil was somewhat exposed but with distributed clumps of Texas grama (*Bouteloua rigidiseta*), fall witchgrass (*Digitaria cognata*), three-awn (*Aristida* spp.), purple nutgrass (*Cyperus rotundus*), and prairie Indian-blanket (*Gaillardia pulchella*). These pastures appear to be kept clean of invading shrubs. Tasajillo (*Opuntia leptocaulis*) and agarito (*Berberis trifoliolata*) were established only in the eastern boundary fenceline of these pastures. On the road between the bus maintenance barn and the communications tower, cultivated Wilmann’s lovegrass (*Eragrostis superba*) shared dominance with Bermuda-grass (*Cynodon dactylon*).

5. Pastures/savanna on alluvial sandy and silty loam soils.

Bottomland pastures are found only along the Pedernales River on the LBJ Ranch Unit. They varied from open structure to savanna, which was shaded by large, spreading plateau live oaks (*Quercus fusiformis*) and pecans (*Carya illinoensis*). Bermuda-grass (*Cynodon dactylon*) and aparejo (*Muhlenbergia utilis*) dominated open, flat terraces. Tall fescue (*Festuca arundinacea*) controlled shaded sites. Its dense but more bunched cover allowed silverleaf nightshade (*Solanum elaeagnifolium*), Southwestern foxtail (*Setaria schaeferi*), and hop-hornbeam coperleaf (*Acalypha ostryifolia*) to be abundant in patches. In similar sites that were fenced from grazing (near Junction School and on the south bank opposite the ranch house), Eastern gamagrass (*Tripsacum dactyloides*) and lowland switchgrass (*Panicum virgatum*) were abundant on the lowest terrace slopes. On the freshly exposed alluvium banks above impounded stretches of the river, Emory's sedge (*Carex emoryi*), four-angle sedge (*C. tetrastachya*), leadplant (*Amorpha fruticosa*), and saplings of white mulberry (*Morus alba*) and ash trees (*Fraxinus* cf. *Pennsylvanica*) were common.

Apparently due to the lack of grazing disturbance and greater shading, the south bank of the river had a high diversity of native herbs. These ranged from disturbance intolerant plants such as wild-petunia (*Ruellia* spp.), false mint (*Dicliptera brachiata*), and Pitcher's leatherflower (*Clematis pitcheri*) to disturbance tolerant species such as various ragweeds (*Ambrosia* spp.), wormseed (*Chenopodium* spp.), late boneset (*Eupatorium serotinum*), castor-bean (*Ricinus communis*), common four-o'clock (*Mirabilis jalapa*), and clammyweed (*Polanisia dodecandra*), all on exposed or shifting alluvium.

6. Upland successional woodland.

Upland woodlands occurred only on the LBJ Ranch Unit along the road to and the east slope below the communications tower. The east slope woodland appeared to be a remnant oak savanna that has been invaded by mountain cedar (*Juniperus ashei*). Post oak (*Quercus stellata*) is the dominant tree species, although plateau live oak (*Q. fusiformis*) and Texas red oak (*Q. buckleyi*) also occur. Where there were gaps in the canopy, little bluestem (*Schizachyrium scoparium*) and meadow dropseed (*Sporobolus compositus*) formed a nearly continuous ground layer. Upslope to the south of the road to the tower, this woodland merged with a small live oak woodland of nearly uniform age. It was contiguous with an upland pasture and was exposed to grazing. Its low-diversity ground layer consisted mostly of Bermuda-grass (*Cynodon dactylon*), Wilmann's lovegrass (*Eragrostis superba*), and horehound (*Marrubium vulgare*).

Noteworthy was the limited occurrence of two species, bird-wing passion-flower (*Passiflora tenuiloba*) and white milkwort (*Polygala alba*). *Passiflora tenuiloba* is not common in the Hill Country, being better known along the Pecos and Rio Grande Rivers. The Atlas of the Vascular Plants of Texas (Turner et al., 2003) indicates it from only eight counties of the Edwards Plateau, but not from Blanco or eastern Gillespie Counties. *Polygala alba* is a very typical and common species of limestone/chalk outcrops. The observation at LYJO is of interest in that the species was found on a side slope, and not on the limy outcrops at the top of the ridge. If the soil where it is occurring is strongly influenced by calcium, one would expect this plant to be more common there, but it was only present in small numbers. If the soil there is not as calcareous on the slope as on the ridge top, those low numbers on the slope would be understandable, but the species would be expected to be much more numerous on the ridge top, rather than absent.

7. Riparian woodland

Well-developed bottomland successional woodland occurred only along Town Creek and its branches in the Johnson City Unit. Between the park headquarters and Johnson Settlement, marked terraces and deep clay alluvium are developed. These provide habitat for larger trees of bald cypress (*Taxodium distichum*), cedar elm (*Ulmus crassifolia*), pecan (*Carya illinoensis*), black walnut (*Juglans nigra*), sugarberry (*Celtis laevigata*), and honey locust (*Gleditsia triacanthos*). There was a dense understory tangle of Chinaberry (*Melia azedarach*) and red mulberry (*Morus rubra*), saplings, shrubs of deciduous holly (*Ilex decidua*), roughleaf dogwood (*Cornus drummondii*), and several vines including grapes (*Vitis* spp.), creepers (*Parthenocissus* spp.), poison ivy (*Toxicodendron radicans*), peppervine (*Ampelopsis* spp.), saw greenbrier (*Smilax bona-nox*), and trumpet-creeper (*Campsis radicans*), plus large herbs including Drummond's rattlesnake plantain (*Sesbania drummondii*) and Virginia frostweed (*Verbesina virginica*). Of particular interest is the locally common occurrence of the Edwards Plateau endemic, sevenleaf creeper (*Parthenocissus heptaphylla*). The ground layer was also diverse with cedar sedge (*Carex planostachys*), hairy-seed paspalum (*Paspalum pubiflorum*), Indian dewberry (*Rubus aboriginum*), and Virginia wild-rye (*Elymus virginicus*).

Along the branch through the southern edge of the Johnson Settlement, terraces and alluvium were less well developed. The riparian corridor was dominated by sugarberry (*Celtis laevigata*) and pecan (*Carya illinoensis*) and an understory of roughleaf dogwood (*Cornus drummondii*) and creek plum (*Prunus rivularis*). The corridor through the south pastures had the least development of alluvium and terraces. Here the intermittent stream consisted of an erosional channel through the fairly thin clay loam and exposed limestone bedrock. The corridor had a low canopy of only seven to ten meters, dominated by plateau live oak (*Quercus fusiformis*), mountain cedar (*Juniperus ashei*), sugarberry (*Celtis laevigata*), and elbow-bush (*Forestiera pubescens*). The understory was largely bare except for litter and occasional sedges (*Carex* spp.). Where there were openings in the canopy, seep muhly (*Muhlenbergia reverchonii*) and rosettegrass (*Dichanthelium acuminatum*) covered the clay bank and damp crevices in the exposed bedrock.

8. Ponds, deep swales, and stream margins

In the Johnson City Unit, there is a single, small deep pond at the edge of the restoration area near the Exhibit Center. It may have formed naturally, is surrounded by a dense thicket, and contained two submerged species, Southern naiad (*Najas guadalupensis*) and coastal water-hyssop (*Bacopa monnieri*). The remaining ponds are all man-made stock tanks in the pastures of the LBJ Ranch Unit. These contained mostly filamentous green algae, but hornwort (*Ceratophyllum demersum*) occurred in some. Drainageways leading into ponds often form permanently wet swales containing sedges (*Cyperus* spp.), barnyard-grass (*Echinochloa crus-galli*), and broom aster (*Aster subulatus*).

The remaining aquatic plants were found in mud and damp alluvium at water's edge. Coastal water-hyssop (*Bacopa monnieri*), water speedwell (*Veronica anagallis-aquatica*), smallflower brookweed (*Samolus valerandi*), watercress (*Rorippa nasturtium-aquaticum*), and whorled pennywort (*Hydrocotyle verticillata*) tend to occupy shaded sites, either under trees as in Town Creek or under dense graminoids as along the Pedernales River. Several species tolerated open sun. Texas rush (*Juncus texanus*), sand spikerush (*Eleocharis montevidensis*), sedges (*Cyperus* spp.), Western umbrella-grass (*Fuirena simplex*) and a shrub, buttonbush (*Cephalanthus occidentalis*), were found both along the open damp silt along the Pedernales and in permanently wet swales, seeps, and old stream channels in grasslands. American bulrush (*Schoenoplectus pungens*) and common scouring-rush (*Equisetum hyemale*) occurred in such sites only on the Pedernales. White-top sedge (*Rhynchospora colorata*) was restricted to alluvium mounds in

the Pedernales, while American water-willow (*Justicia americana*) and blister buttercup (*Ranunculus sceleratus*) occupied shallow mud and silt bars in the river. Wild petunia (*Calibrachoa parviflora*), pale ammannia (*Ammannia robusta*), and cudweed (*Pseudognaphalium luteoalbum*) were found only along the river in muddy bedrock crevices that were subject to alternate flooding and dessication.

9. Urbanized habitats, including horticultural plantings.

The maintained lawns and disturbed areas associated with buildings, roads, and walkways supported a high diversity of introduced and native species. Of course, these areas were dominated by the planted and maintained native shade trees (especially plateau live oak--*Quercus fusiformis*, Texas red oak--*Q. buckleyi*, Northern red oak--*Q. rubra*, and smooth-leaf hackberry--*Celtis laevigata* var. *laevigata*). At ground level, the dominant species were the turf grasses, Bermuda-grass (*Cynodon dactylon*) and St. Augustine grass (*Stenotaphrum secundatum*). Intermingled with the turf grasses are a number of low-stature persistent natives and introduced herbs (lawnflower--*Calyptocarpus vialis*, pony-foot--*Dichondra carolinensis*, common speedwell--*Veronica arvensis*, thyme-leaf sandwort--*Arenaria serpylliifolia*, silky dwarf morning-glory--*Evolvulus sericeus*, spurwort--*Sherardia arvensis*, and frogfruit--*Lippia* spp.). Several taller herbs appeared as weeds in the beds and lawns, especially sowthistle (*Sonchus* spp.), common dandelion (*Taraxacum officinale*), wild dandelion (*Pyrrhopappus pauciflorus*), sourclover (*Oxalis* spp.), common sunflower (*Helianthus annuus*), and tropical amaranth (*Amaranthus polygonoides*). Although a diversity of native wildflowers had been seeded around both the Ranch House and park headquarters (Hermann, 1999; Planting Plans), only Texas bluebonnet (*Lupinus texensis*) persisted well enough to make a show in 2002, which was a droughty year. Many of the planted perennials and shrubs were species of Texas native plants, although not necessarily native to the Edwards Plateau, (e.g., large-tooth maple--*Acer grandidentatum*, hummingbird-bush--*Anisacanthus wrightii*, yellow columbine--*Aquilegia chrysantha*, oblong-leaf aster--*Aster oblongifolius*, Texas redbud--*Cercis canadensis* var. *texensis*, trailing dalea--*Dalea greggii*, Texas persimmon--*Diospyros texana*, purple coneflower--*Echinacea purpurea*, shrubby boneset--*Eupatorium havanense*, red yucca--*Hesperaloe parviflora*, Texas lantana--*Lantana urticoides*, cenizo--*Leucophyllum frutescens*, Turk's-cap--*Malvaviscus arboreus*, lemon beebalm--*Monarda citriodora*, Lindheimer's muhly--*Muhlenbergia lindheimeri*, Southern wax-myrtle--*Myrica cerifera*, Correll's obident-plant--*Physostegia correllii*, Mexican pistachio--*Pistacia texana*, evergreen sumac--*Rhus virens*, scarlet sage--*Salvia coccinea*, mealycup sage--*S. farinacea*, cedar sage--*S. roemeriana*, Texas mountain laurel--*Sophora secundiflora*, Texas betony--*Stachys coccinea*, Mexican buckeye--*Ungnadia speciosa*, Missouri violet--*Viola missouriensis*, hairy wedelia--*Wedelia texana*, and yuccas--*Yucca* spp.) or species native to semixerix localities of nearby Arizona, New Mexico, and Mexico (mistflower--*Conoclinium dissectum*, wild-petunias--*Ruellia brittoniana* and *R. malacosperma*, various sages--*Salvia leucantha* and *S. microphylla*, rose skullcap--*Scutellaria suffrutescens*, and shrub marigold--*Tagetes lemmonii*).

RECOMMENDATIONS

- Because LYJO was under a drought for the years preceding the study through July of the study period, certain winter annuals and spring ephemerals that might be expected were not encountered. To get a more accurate sampling, it is recommended that additional inventory studies be made in mid March to mid April during a year when the park has had good rains for one or two years.
- LYJO should continue its policy of planting native species, especially of central and south Texas, to serve as a model of using Texan plant diversity and low-maintenance horticulture. It is not clear whether the display of spring native wildflowers that had been seeded at the headquarters and Ranch House were reduced because of the drought or whether they have been gradually eliminated by competition from turf grasses (Bermuda grass and St. Augustine grass). It is recommended that the

quantity of display wildflowers be monitored. Someone experienced in raising and maintaining native wildflowers may need to be consulted to ascertain the best way to maintain the display.

- LYJO should also continue its policy of lightly grazing the south pastures of the Johnson City Unit to maintain plant diversity.
- LYJO should consider restoring the post oak-live oak savanna on the east slope of the ridge by the communications tower, and enhancing the southern boundary of the Johnson City Unit as a remnant blackjack oak savanna.

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APPENDIX 1. Checklist of Vascular Plant Species collected in Lyndon B. Johnson National Historic Park and verified by Roger Sanders, with nativity, relative abundance, and park units in which species were observed.

Nativity Codes: N = Native to the Edwards Plateau; E = Exotic within the Edwards Plateau, N? = Generally treated as native to the Edwards Plateau but some disagreement exists; E? = Generally treated as exotic within the Edwards Plateau but some disagreement exists. Some species listed may be native in general, but populations on the park are clearly non-native cultivars and are thus listed as exotic.

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic	Abundance	Park Unit
Acanthaceae	Acanth Family			
Anisacanthus wrightii (Torr.) A. Gray (=A. quadrifidus var. wrightii)	hummingbird-bush	N	Cultivated	Both units
Dicliptera brachiata (Pursh) Spreng.	false mint	N	Uncommon	Ranch
Justicia americana (L.) Vahl	water-willow, American	N	Uncommon	Ranch
Ruellia brittoniana E. Leonard. cv. Katie's	wild-petunia, Katie's dwarf	E	Cultivated	Johnson C.
Ruellia brittoniana E. Leonard. pink-flowered cultivar	wild-petunia, pink willow-leaf	E	Cultivated	Johnson C.
Ruellia drummondiana (Nees) A. Gray	wild-petunia, Drummond's	N	Uncommon	Ranch
Ruellia malacosperma Greenman	wild-petunia, soft-seed	E	Cultivated	Ranch
Ruellia metziae Tharp.	wild-petunia, white	N	Uncommon	Ranch
Ruellia nudiflora (Engelm. & A. Gray) Urban	wild-petunia, showy	N	Uncommon	Both units
Ruellia occidentalis (A. Gray) Tharp & Barkley	wild-petunia, Western	E	Cultivated	Johnson C.
Siphonoglossa pilosella (Nees) Torr. (=Justicia pilosella)	tubetongue, hairy	N	Uncommon	Ranch
Aceraceae	Maple Family			
Acer grandidentatum Nutt.	maple, large-tooth	N	Cultivated	Ranch
Agavaceae	Agave Family			
Hesperaloe parviflora (Torr.) J.M. Coult.	yucca, red	E	Cultivated	Both units
Yucca arkansana Trel.	yucca, Arkansas	N	Cultivated	Ranch
Yucca constricta Buckley	yucca, Buckley's	N	Cultivated	Ranch
Yucca flaccida Haw.	yucca, soft-leaf	E	Cultivated	Johnson C.
Yucca rupicola Scheele	yucca, twist-leaf	N	Uncommon, Cultivated	Ranch
Yucca torreyi Shafer	yucca, Torrey's	N	Cultivated	Both units
Amaranthaceae	Amaranth Family			
Alternanthera caracasana Kunth	chaff-flower, mat	N	Uncommon	Ranch
Amaranthus albus L.	amaranth, tumbleweed	N	Uncommon	Both units
Amaranthus palmeri S. Wats.	amaranth, Palmer's	N	Uncommon	Both units
Amaranthus polygonoides L.	amaranth, tropical	N	Uncommon	Johnson C.
Amaranthus rudis J.D. Sauer	water-hemp	N	Uncommon	Johnson C.
Froelichia gracilis (Hook.) Moq.	snake-cotton, slender	N	Uncommon	Johnson C.
Amaryllidaceae	Amaryllis Family			
Cooperia drummondii Herb. (=Zephyranthes brazosensis)	rain-lily, common	N	Uncommon	Johnson C.

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic	Abundance	Park Unit
Cooperia pedunculata Herb. (=Zephyranthes drummondii)	rain-lily, giant	N	Uncommon	Ranch
Crinum scabrum Herb.	milk-and-wine-lily	E	Cultivated	Johnson C.
Hippeastrum advena (Ker.-Gawl.) Herb. (=Rhodophiala advena)	oxblood lily	E	Cultivated	Johnson C.
Anacardiaceae	Sumac Family			
Pistacia texana Swingle	pistachio, Mexican	E	Cultivated	Ranch
Rhus lanceolata (A. Gray) Britt.	sumac, lanceleaf	N	Uncommon	Johnson C.
Rhus virens A. Gray	sumac, evergreen; lentisco	N	Cultivated	Johnson C.
Apiaceae	Celery or Umbel Family			
Chaerophyllum tainturieri Hook.	chervil	N	Common	Both units
Conium maculatum L.	poison-hemlock	E	Uncommon	Ranch
Daucus pusillus Michx.	seedticks; rattlesnake-weed	N	Uncommon	Johnson C.
Hydrocotyle verticillata Thunb var. verticillata	pennywort, whorled	N	Uncommon	Both units
Polytaenia nuttallii DC. (incl. P. texana)	parsley, prairie	N	Uncommon	Both units
Spermolepis inermis (Nutt.) Math. & Const.	scaeseed, spreading	N	Uncommon	Johnson C.
Torilis arvensis (Huds.) Link.	hedge-parsley, beggarlice	E	Common	Both units
Torilis nodosa (L.) Gaertn.	hedge-parsley, knotted	E	Uncommon	Johnson C.
Apocynaceae	Dogbane Family			
Nerium oleander L.	oleander	E	Cultivated	Johnson C.
Vinca minor L.	periwinkle, common	E	Cultivated	Both units
Aquifoliaceae	Holly Family			
Ilex cornuta Lindl. var. burfordii DeFrance	holly, spineless Chinese	E	Cultivated	Ranch
Ilex decidua Walt.	holly, deciduous	N	Common	Johnson C.
Ilex vomitoria Sol. in Ait.	holly, yaupon	N	Cultivated	Both units
Araliaceae	Gingsing Family			
Hedera helix L.	ivy, English	E	Cultivated	Johnson C.
Asclepiadaceae	Milkweed Family			
Asclepias asperula (Dcne.) Woods. (incl. A. capricornu Woodson)	antelope-horns, trailing	N	Common	Both units
Asclepias oenotheroides Cham. & Schltdl.	milkweed, side-cluster	N	Uncommon	Johnson C.
Cynanchum laeve (Michx.) Pers.	bluevine	N	Uncommon	Ranch
Cynanchum unifarium (Scheele) Woodson (=C. racemosum var. unifarium)	talayote	N	Uncommon	Johnson C.
Matelea biflora (Raf.) Woods.	milkweed, two-flowered	N	Uncommon	Both units
Matelea reticulata (A. Gray) Woodson	milkvine, green	N	Uncommon	Johnson C.
Aspleniaceae	Spleenwort Family			
Cyrtomium falcatum Presl.	holly-fern, house	E	Cultivated	Ranch
Asteraceae	Sunflower or Composite Family			
Achillea millefolium L.	yarrow	N?	Cultivated	Johnson C.
Amblyolepis setigera DC.	daisy, huisache	N	Uncommon	Ranch
Ambrosia artemisiifolia L.	ragweed, common	N	Uncommon	Johnson C.
Ambrosia psilostachya DC.	ragweed, Western	N	Abundant	Both units

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic	Abundance	Park Unit
<i>Ambrosia trifida</i> L. var. <i>texana</i> Scheele	ragweed, giant	N	Uncommon	Ranch
<i>Aphanostephus riddellii</i> Torr. & A. Gray	daisy, Riddell's lazy	N	Uncommon	Ranch
<i>Aster ericoides</i> L.	aster, heath	N	Uncommon	Johnson C.
<i>Aster oblongifolius</i> Nutt.	aster, oblong-leaf	N	Cultivated	Both units
<i>Aster praealtus</i> Poir.	aster, tall	N	Rare	Johnson C.
<i>Aster subulatus</i> Michx. var. <i>ligulatus</i> Shinners	aster, broom	N	Uncommon	Both units
<i>Baccharis neglecta</i> Britt.	Roosevelt-weed	N	Uncommon	Ranch
<i>Berlandiera betonicifolia</i> (Hook.) Small (=B. <i>texana</i>)	greeneyes, Texas	N	Uncommon	Ranch
<i>Calyptocarpus vialis</i> Less.	lawnflower	N	Common	Both units
<i>Carduus nutans</i> L.	musk-thistle	E	Uncommon	Both units
<i>Carduus tenuiflorus</i> Curtis	bristle-thistle, slender	E	Uncommon	Johnson C.
<i>Centaurea melitensis</i> L.	star-thistle, short-spine	E	Uncommon	Johnson C.
<i>Chaetopappa asteroides</i> DC.	daisy, least	N	Uncommon	Johnson C.
<i>Chlorocantha spinosa</i> (Benth.) G.L. Nesom (=Aster <i>spinosa</i>)	aster, spiny	N	Rare	Ranch
<i>Chrysanthemum leucanthemum</i> L.	daisy, ox-eye	E	Cultivated	Ranch
<i>Chrysanthemum X morifolium</i> Ramat.	chrysanthemum, garden	E	Cultivated	Ranch
<i>Cirsium texanum</i> Buckl.	thistle, Texas	N	Common	Both units
<i>Cirsium undulatum</i> (Nutt.) Spreng.	thistle, wavyleaf	N	Uncommon	Johnson C.
<i>Conoclinium coelestinum</i> (L.) DC. (=Eupatorium <i>coelestinum</i>)	mistflower	N	Rare	Ranch
<i>Conoclinium dissectum</i> A. Gray (=Eupatorium <i>greggii</i> , <i>Conoclinium greggii</i>)	mistflower, cutleaf	E	Cultivated	Ranch
<i>Conyza candensis</i> (L.) Cronq.	horseweed	N	Uncommon	Johnson C.
<i>Coreopsis lanceolata</i> L.	coreopsis, lance	E	Cultivated	Ranch
<i>Coreopsis wrightii</i> (A. Gray) H. M. Parker	coreopsis, rock	N	Uncommon	Ranch
<i>Dracopis amplexicaulis</i> (Vahl) Cass.	coneflower, clasping	N	Uncommon	Ranch
<i>Echinacea purpurea</i> (L.) Moench.	coneflower, purple	E	Cultivated	Ranch
<i>Eclipta prostrata</i> (L.) L. (= E. <i>alba</i>)	yerba de tago	N	Uncommon	Ranch
<i>Engelmannia pinnatifida</i> A. Gray (=E. <i>peristenia</i>)	daisy, Engelmann	N	Uncommon	Johnson C.
<i>Erigeron modestus</i> A. Gray	fleabane, gray	N	Uncommon	Johnson C.
<i>Erigeron philadelphicus</i> L.	fleabane, clasping-leaf	N	Uncommon	Ranch
<i>Erigeron strigosus</i> Willd.	fleabane, prairie	N	Uncommon	Johnson C.
<i>Eupatorium havanense</i> Kunth.	boneset, shrubby	N	Cultivated	Ranch
<i>Eupatorium serotinum</i> Michx.	boneset, late	N	Uncommon	Ranch
<i>Evax prolifera</i> Nutt.	rabbit-tobacco, bighead; cotton-rose	N	Common	Both units
<i>Facelis retusa</i> (Lam.) Sch. Bip.	facelis	E	Common	Both units
<i>Gaillardia pulchella</i> Foug.	Indian-blanket, prairie	N	Common	Both units
<i>Grindelia nuda</i> A.W. Wood	gumweed, rayless	N	Uncommon	Johnson C.
<i>Gutierrezia texana</i> (DC.) T. & G.	broomweed, Texas	N	Common	Both units
<i>Helenium amarum</i> (Raf.) H. Rock var. <i>amarum</i>	sneezeweed or bitterweed, yellow	N	Uncommon	Johnson C.
<i>Helenium amarum</i> (Raf.) H. Rock var. <i>badium</i> (S. Watson) Waterfall	sneezeweed, basin	N	Uncommon	Both units
<i>Helenium elegans</i> DC.	sneezeweed, tall	N	Uncommon	Ranch
<i>Helianthus annuus</i> L.	sunflower, common	N	Uncommon	Johnson C.
<i>Helianthus maximiliani</i> Schrad.	sunflower, Maximilian	N	Uncommon	Johnson C.
<i>Heterotheca canescens</i> (DC.) Shinners	goldenaster, gray	N	Uncommon	Both units
<i>Heterotheca subaxillaris</i> (Lam.) Britt. & Rusby	camphorweed	N	Uncommon	Both units
<i>Hymenopappus scabiosaeus</i> L'Her. var.	old-plainsman	N	Uncommon	Ranch

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic	Abundance	Park Unit
corymbosus (T. & G.) Turner				
Iva angustifolia DC.	sumpweed, rag	N	Abundant	Both units
Krigia wrightii (A. Gray) Chambers & Kim	dandelion, Wright's dwarf	N	Uncommon	Johnson C.
Lactuca serriola L.	lettuce, prickly wild	E	Uncommon	Both units
Lindheimera texana Engelm. & Gray	Texas-star	N	Uncommon	Ranch
Lygodesmia texana (T. & G.) Greene	skeleton-plant, Texas	N	Uncommon	Both units
Melampodium leucanthum T. & G.	daisy, rock or black-foot	N	Uncommon	Ranch
Pluchea odorata (L.) Cass.	stinkweed, purple	N	Uncommon	Ranch
Pseudognaphalium luteoalbum (L.) Hilliard & Burt	cudweed	N	Rare	Ranch
Pyrrhopappus pauciflorus (D. Don) DC.	dandelion, wild	N	Common	Both units
Ratibida columnifera (Nutt.) Woot. & Standl.	coneflower, prairie	N	Common	Both units
Rudbeckia hirta L. var. pulcherrima Faras	black-eyed Susan	N	Uncommon	Johnson C.
Silphium radula Nutt. (=S. asperrimum)	rosinweed, roughstem	N	Rare	Johnson C.
Solidago canadensis L.	goldenrod, tall	N	Common	Both units
Solidago gigantea Ait.	goldenrod, giant	N	Uncommon	Ranch
Sonchus asper (L.) Hill	sowthistle, prickly	E	Common	Both units
Sonchus oleraceus L.	sowthistle, common	E	Common	Both units
Tagetes lemmoni A. Gray	marigold, shrub	E	Cultivated	Ranch
Taraxacum officinale F. H. Wigg.	dandelion, common	E	Common	Both units
Tetaneuris linearifolia (Hook.) Greene (=Hymenoxys linearifolia)	bitterweed	N	Uncommon	Ranch
Thelesperma filifolium (Hook.) A. Gray	greenthread, common	N	Common	Both units
Thelesperma simplicifolium A. Gray	greenthread, slender	N	Uncommon	Ranch
Verbesina encelioides A. Gray	crownbeard; gravelweed	N	Common	Both units
Verbesina virginica L.	frostweed, Virginia	N	Common	Both units
Vernonia baldwinii Torr.	ironweed, Western	N	Uncommon	Both units
Wedelia texana (A. Gray) B.L. Turner (=W. hispida Zexmenia hispida)	wedelia, hairy	N	Uncommon, Cultivated	Johnson C.
Xanthium strumarium L.	cocklebur	N	Common	Both units
Berberidaceae	Barberry Family			
Berberis trifoliolata Moric. (=Mahonia trifoliolata)	agarito	N	Uncommon	Both units
Nandina domestica Thunb.	heavenly-bamboo	E	Cultivated	Both units
Bignoniaceae	Trumpet Creeper Family			
Bignonia capreolata L.	crossvine	E	Cultivated	Ranch
Campsis radicans (L.) Seem.	trumpet-creeper	N	Uncommon	Johnson C.
Catalpa speciosa Warder.	catalpa, Northern; cigartree	E	Cultivated	Johnson C.
Tecoma stans HBK. (=Stenolobium stans)	yellow bells	E	Cultivated	Ranch
Boraginaceae	Borage Family			
Buglossoides arvensis (L.) I. M. Johnst.	bugloss, false	E	Uncommon	Ranch
Brassicaceae	Mustard Family			
Brassica nigra (L.) Koch	mustard, black	E	Uncommon	Ranch
Capsella bursa-pastoris (L.) Medik.	shepherd's purse	E	Common	Both units
Draba platycarpa Torr. & A. Gray	draba, broad-pod	N	Common	Both units
Lepidium austrinum Small	pepperweed, southern	N	Common	Both units
Lepidium virginicum L.	pepper-grass, common	N	Uncommon	Johnson C.
Lesquerella densiflora (A. Gray) Wats.	bladderpod, dense-flower	N	Uncommon	Ranch
Lesquerella recurvata (Engelm.) Wats.	bladderpod, drooping	N	Uncommon	Both units

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic	Abundance	Park Unit
Rorippa nasturtium-aquaticum (L.) Hayek (=Nasturtium officinale)	watercress	E	Uncommon	Ranch
Sisymbrium irio L.	mustard, rocket	E	Uncommon	Ranch
Bromeliaceae	Pineapple Family			
Tillandsia recurvata (L.) L.	ball-moss	N	Common	Both units
Buxaceae	Boxwood Family			
Buxus sempervirens L.	boxwood, common	E	Cultivated	Ranch
Cactaceae	Cactus Family			
Opuntia engelmannii Salm-Dyck var. lindheimeri (Engelm.) B. D. Parfitt & Pinkava	prickly-pear, Texas	N	Common	Both units
Opuntia leptocaulis DC. (=Cylindropuntia leptocaulis)	tasajillo; cactus, rat-tail	N	Rare	Ranch
Opuntia macrorhiza Engelm	prickly-pear, plains	N	Common	Both units
Campanulaceae	Bellflower Family			
Triodanus perfoliata (L.) Nieuwl. var. biflora (R. & P.) T. R. Bradley (=T. biflora)	Venus' looking-glass, small	N	Uncommon	Johnson C.
Cappar(id)aceae	Caper Family			
Polanisia dodecandra (L.) DC. subsp. trachysperma (T. & G.) Iltis (=P. trachysperma)	clammyweed	N	Uncommon	Both units
Caprifoliaceae	Honeysuckle Family			
Lonicera japonica Thunb.	honeysuckle, Japanese	E	Common	Johnson C.
Sambucus nigra L. var. canadensis (L.) Bolli (=S. canadensis)	elderberry	N	Uncommon	Ranch
Viburnum odoratissimum Ker.-Gawl.	viburnum, sweet	E	Cultivated	Ranch
Viburnum rufidulum Raf.	blackhaw, rusty	N	Cultivated	Ranch
Viburnum suspensum Lindl.	viburnum, Liukiu	E	Cultivated	Ranch
Caryophyllaceae	Carnation Family			
Arenaria benthamii T & G.	sandwort, hilly	N	Uncommon	Johnson C.
Arenaria serpyllifolia L.	sandwort, thyme-leaf	E	Uncommon	Both units
Cerastium glomeratum Thuill.	chickweed, bunch-flower	E	Common	Johnson C.
Dianthus chinensis L.	pink, rainbow	E	Cultivated	Ranch
Silene antirrhina L.	catchfly, sleepy	N	Uncommon	Johnson C.
Stellaria media (L.) Cyr.	chickweed, common	E	Uncommon	Johnson C.
Celastraceae	Bittersweet Family			
Euonymus japonicus L.	spindle-bush, evergreen	E	Rare	Johnson C.
Ceratophyllaceae	Coon-tail Family			
Ceratophyllum demersum L.	hornwort; coontail	N	Uncommon	Ranch
Chenopodiaceae	Spinach Family			
Chenopodium ambrosioides L.	wormseed	E	Uncommon	Ranch
Chenopodium cf. missouriense Aellan (=C. album var. missouriense)	goosefoot, Missouri	E?	Uncommon	Ranch

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<i>Chenopodium pratericola</i> Rydb.	goosefoot, thick-leaf	N	Uncommon	Ranch
Commelinaceae	Spiderwort Family			
<i>Commelina erecta</i> L. var. <i>angustifolia</i> Benth.	dayflower, narrow-leaf	N	Common	Both units
<i>Commelina erecta</i> L. var. <i>erecta</i>	dayflower, erect	N	Uncommon	Johnson C.
<i>Tinantia anomala</i> (Torr.) C.B.Clark	widow's-tears	N	Uncommon	Ranch
<i>Tradescantia gigantea</i> Rose	spiderwort, giant	N	Uncommon	Ranch
Convolvulaceae	Morning Glory Family			
<i>Convolvulus equitans</i> Benth.	bindweed, prairie	N	Uncommon	Johnson C.
<i>Dichondra carolinensis</i> Michx. (=D. <i>repens</i>)	pony-foot	N	Abundant	Both units
<i>Evolvulus sericeus</i> Sw.	morning-glory, silky dwarf	N	Common	Both units
<i>Ipomoea cordatotriloba</i> Dennst. var. <i>torreyana</i> (A. Gray) D.F. Austin	morning-glory, cotton	N	Uncommon	Johnson C.
Cornaceae	Dogwood Family			
<i>Cornus drummondii</i> Mey.	dogwood, roughleaf	N	Common	Johnson C.
Crassulaceae	Stonecrop Family			
<i>Sedum cf. tenellum</i> Bieb.	stonecrop	E	Cultivated	Johnson C.
Cucurbitaceae	Cucumber Family			
<i>Cucurbita foetidissima</i> Kunth	gourd, buffalo	N	Uncommon	Both units
<i>Melothria pendula</i> L.	melonette, drooping	N	Uncommon	Ranch
Cupressaceae	Cypress Family			
<i>Juniperus ashei</i> J. Buchholz	cedar, mountain; juniper,	N	Common	Both units
<i>Juniperus chinensis</i> L.	cedar, Chinese	E	Cultivated	Ranch
<i>Juniperus chinensis</i> L. cv. <i>Pfizer</i>	cedar, spreading Chinese	E	Cultivated	Johnson C.
<i>Juniperus virginiana</i> L. cultivar	cedar, Eastern red	E	Cultivated	Ranch
Cyperaceae	Sedge Family			
<i>Carex emoryi</i> Dewey	sedge, Emory's	N	Uncommon	Ranch
<i>Carex leavenworthii</i> Dewey	sedge, Leavenworth's	N	Rare	Ranch
<i>Carex microdonta</i> T. & H.	sedge, littletooth	N	Uncommon	Johnson C.
<i>Carex perdentata</i> S. D. Jones	sedge, saw-tooth	N	Rare	Johnson C.
<i>Carex planostachys</i> Kunze	sedge, cedar	N	Common	Both units
<i>Carex tetrastachya</i> Scheele	sedge, four-angle	N	Uncommon	Ranch
<i>Cyperus croceus</i> Vahl (=C. <i>globulosus</i>)	umbrella-sedge, Baldwin	N	Uncommon	Both units
<i>Cyperus esculentus</i> L.	nut-grass, yellow	N	Uncommon	Both units
<i>Cyperus odoratus</i> L.	umbrella-sedge, fragrant	N	Uncommon	Ranch
<i>Cyperus retroflexus</i> Buckley var. <i>pumila</i> (=C. <i>uniflorus</i> var. <i>pumila</i>)	umbrella-sedge, dwarf one-flower	N	Uncommon	Johnson C.
<i>Cyperus retroflexus</i> Buckley var. <i>retroflexus</i> (=C. <i>uniflorus</i> var. <i>retroflexus</i>)	umbrella-sedge, one-flower	N	Uncommon	Both units
<i>Cyperus rotundus</i> L.	nutgrass, purple	E	Common	Both units
<i>Cyperus strigosus</i> L.	nutgrass, false	N	Common	Both units
<i>Cyperus strigosus</i> X <i>retroflexus</i>	umbrella-sedge, hybrid	N	Uncommon	Ranch
<i>Eleocharis montevidensis</i> Kunth.	spikerush, sand	N	Common	Both units
<i>Fuirena simplex</i> Vahl. var. <i>aristulata</i> (Torrey) Kral	umbrella-grass, Western	N	Uncommon	Ranch
<i>Rhynchospora colorata</i> (L.) H. Pfeiff.	sedge, white-top	N	Uncommon	Ranch

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<i>Schoenoplectus pungens</i> (Vahl) Palla (= <i>Scirpus pungens</i> , <i>S. americanus</i>)	bulrush, American	N	Common	Ranch
Ebenaceae	Persimmon Family			
<i>Diospyros texana</i> Scheele	persimmon, Texas	N	Uncommon, Cultivated	Both units
Elaeagnaceae	Oleaster Family			
<i>Elaeagnus pungens</i> Thunb.	oleaster	E	Cultivated	Ranch
Equisetaceae	Horsetail Family			
<i>Equisetum hyemale</i> L. ssp. <i>affine</i> (Engelm.) Calder & R.L. Taylor	scouring-rush, common	N	Uncommon	Ranch
Euphorbiaceae	Spurge Family			
<i>Acalypha lindheimeri</i> Muell. Arg.	copperleaf, Lindheimer's	N	Common	Both units
<i>Acalypha monococca</i> (A. Gray) Lill. W. Mill. & Gandhi (= <i>A. gracilis</i> var. <i>monococca</i>)	copperleaf, one-seed	N	Uncommon	Ranch
<i>Acalypha ostryifolia</i> Riddell	copperleaf, hop-hornbeam	N	Common	Both units
<i>Argythamnia humilis</i> (Engelm. & A. Gray) Pax (= <i>Ditaxis humilis</i>)	mercury, low wild	N	Uncommon	Ranch
<i>Chamaesyce angusta</i> (Engelm.) Small (= <i>Euphorbia angusta</i>)	spurge, black-foot	N	Rare	Ranch
<i>Chamaesyce maculata</i> (L.) Small (= <i>E. maculata</i>)	spurge, spotted	N	Uncommon	Johnson C.
<i>Chamaesyce nutans</i> (Lag.) Small (= <i>E. nutans</i>)	spurge, eyebane	N	Uncommon	Ranch
<i>Chamaesyce prostrata</i> (Ait.) Small (<i>E. prostrata</i>)	spurge, prostrate	N	Uncommon	Ranch
<i>Chamaesyce serpens</i> (H.B.K.) Small. (<i>E. serpens</i>)	spurge, mat	N	Common	Johnson C.
<i>Cnidoscolus texanus</i> (Mull.-Arg.) Small	bull-nettle, Texas	N	Common	Both units
<i>Croton capitatus</i> Michx. var. <i>lindheimeri</i> (Engelm. & A. Gray) Muell. Arg.	croton, wooly; hogwort	N	Uncommon	Both units
<i>Croton glandulosus</i> L. var. <i>lindheimeri</i> Muell. Arg.	croton, Lindheimer's	N	Uncommon	Johnson C.
<i>Croton monanthogynus</i> Michx.	prairie-tea, one-seed	N	Common	Both units
<i>Croton texensis</i> (Klotzsch) Muell. Arg.	croton, Texas	N	Uncommon	Johnson C.
<i>Euphorbia dentata</i> Michx.	spurge, toothed	N	Common	Both units
<i>Euphorbia marginata</i> Pursh	snow-on-the-mountain	N	Common	Both units
<i>Phyllanthus polygonoides</i> Nutt.	leaf-flower, rock	N	Uncommon	Both units
<i>Ricinus communis</i> L.	castor-bean	E	Uncommon	Ranch
<i>Sapium sebiferum</i> (L.) Roxb.	tallow-tree, Chinese	E	Uncommon	Johnson C.
<i>Stillingia texana</i> I. M. Johnston	Queen's-delight, Texas	N	Uncommon	Both units
<i>Tragia brevispica</i> Engelm. & A. Gray	noseburn, short-spike	N	Common	Both units
<i>Tragia ramosa</i> Torr.	noseburn, catnip	N	Uncommon	Ranch
Fabaceae	Legume or Bean Family			
<i>Albizia julibrissin</i> Durazz.	mimosa-tree	E	Cultivated	Johnson C.
<i>Amorpha fruticosa</i> L.	leadplant	N	Uncommon	Ranch
<i>Cercis canadensis</i> L. var. <i>canadensis</i>	redbud, Eastern	E	Cultivated	Ranch
<i>Cercis canadensis</i> L. var. <i>texensis</i> (S. Watson) M. Hopkin	redbud, Texas	N	Cultivated	Johnson C.
<i>Dalea greggii</i> A. Gray	dalea, trailing	E	Cultivated	Johnson C.
<i>Dalea nana</i> A. Gray var. <i>nana</i>	dalea, dwarf	N	Uncommon	Johnson C.

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<i>Desmanthus acuminatus</i> Benth. (=D. <i>virgatus</i> var. <i>acuminatus</i>)	bundleflower, sharp-pod	N	Uncommon	Both units
<i>Desmanthus illinoensis</i> B. L. Robins. & Fern.	bundleflower, Illinois	N	Uncommon	Johnson C.
<i>Desmanthus reticulatus</i> Benth.	bundleflower, net-leaf	N	Uncommon	Both units
<i>Desmodium paniculatum</i> (L.) DC.	tick-clover, panicle	N	Uncommon	Johnson C.
<i>Gleditsia triacanthos</i> L.	locust, honey	N	Uncommon	Johnson C.
<i>Indigofera miniata</i> Ort. var. <i>leptosepala</i> (Nutt.)	pea, scarlet	N	Uncommon	Johnson C.
<i>Lathyrus hirsutus</i> L.	pea-vine, rough	E	Uncommon	Ranch
<i>Lupinus texensis</i> Hook.	bluebonnet, Texas	N	Common, Cultivated	Both units
<i>Medicago lupulina</i> L.	medic, black	E	Common	Both units
<i>Medicago minima</i> (L.) Bartal.	burclover	E	Common	Both units
<i>Medicago polymorpha</i> L.	bur-clover, California	E	Common	Both units
<i>Melilotus albus</i> Medik.	sweetclover, white	E	Uncommon	Johnson C.
<i>Mimosa aculeaticarpa</i> Ortega var. <i>biuncifera</i> (Benth.) Barneby (=M. <i>biuncifera</i>)	catclaw, white	N	Uncommon	Johnson C.
<i>Mimosa borealis</i> Gray	catclaw, pink	N	Rare	Johnson C.
<i>Mimosa roemeriana</i> Scheele (=Mimosa <i>quadrivalvis</i> , <i>Schrankia roemeriana</i>)	sensitive-briar	N	Uncommon	Both units
<i>Parkinsonia aculeata</i> L.	paloverde; retama	E?	Cultivated	Ranch
<i>Prosopis glandulosa</i> Torr.	mesquite, honey	N	Common	Both units
<i>Rhynchosia senna</i> Hook var. <i>texana</i> (Torr. & A. Gray) M.C. Johnst. (R. <i>texana</i>)	snoutbean, Texas	N	Uncommon	Johnson C.
<i>Sesbania drummondii</i> (Rydb.) Cory	rattlebush, Drummond's	N	Uncommon	Johnson C.
<i>Sesbania herbacea</i> (Mill.) McVaugh (=S. <i>exaltata</i>)	river-hemp, Colorado	N	Uncommon	Ranch
<i>Sesbania vesicaria</i> (Jacq.) Elliott (<i>Glottidium vesicarium</i>)	bladderpod	N	Uncommon	Ranch
<i>Sophora japonica</i> L.	pagoda tree, Japanese	E	Cultivated	Ranch
<i>Sophora secundiflora</i> (Ortega) DC.	mountain-laurel, Texas	N	Cultivated	Both units
<i>Vicia ludoviciana</i> Nutt. ssp. <i>leavenworthii</i> (T. & G.) Lass. & Gunn	vetch, deer	N	Common	Both units
<i>Vicia sativa</i> L. ssp. <i>nigra</i> (L.) Ehrh. (=V. <i>angustifolia</i>)	vetch, narrowleaf	E	Uncommon	Ranch
<i>Vicia villosa</i> Roth	vetch, winter	E	Uncommon	Ranch
<i>Wisteria sinensis</i> (Sims) Sweet	wisteria, Chinese	E	Cultivated	Both units
Fagaceae	Oak Family			
<i>Quercus buckleyi</i> Nixon & Dorr (=Q. <i>shumardii</i> var. <i>microcarpa</i> , Q. <i>texana</i>)	oak, Texas red	N	Uncommon	Both units
<i>Quercus fusiformis</i> Small (=Q. <i>virginiana</i> var. <i>fusiformis</i>)	oak, plateau live	N	Common, Cultivated	Both units
<i>Quercus marilandica</i> Muenchh.	oak, blackjack	N	Rare	Johnson C.
<i>Quercus rubra</i> L.	oak, Northern red	E	Cultivated	Johnson C.
<i>Quercus stellata</i> Wang.	oak, post	N	Uncommon	Both units
Fumariaceae	Fumitory Family			
<i>Corydalis curvisiliqua</i> Engelm.	scrambled-eggs	N	Uncommon	Ranch
Gentianaceae	Gentian Family			
<i>Centaurium texense</i> (Griseb.) Fernald	star-pink, Texas	N	Rare	Johnson C.
<i>Eustoma russellianum</i> (Hook.) G. Don (=E. <i>grandiflorum</i>)	bluebells, Texas	N	Uncommon	Johnson C.

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Geraniaceae	Geranium Family			
<i>Erodium cicutarium</i> (L.) L'Her.	filaree	E	Abundant	Both units
<i>Erodium texanum</i> A. Gray	stork's-bill, Texas	N	Uncommon	Both units
<i>Geranium carolinianum</i> L.	crane's-bill, Eastern	N	Common	Both units
<i>Pelargonium X hortorum</i> L. H. Bailey	geranium, garden	E	Cultivated	Ranch
Hippocastanaceae	Horse-Chestnut Family			
<i>Aesculus pavia</i> L.	buckeye, red	N	Cultivated	Ranch
Iridaceae	Iris Family			
<i>Iris chamaeiris</i> Bertol. (= <i>I. lutescens</i> Lam.)	low iris	E	Cultivated	Johnson C.
<i>Sisyrinchium langloisii</i> Greene	blue-eyed-grass, pale	N	Uncommon	Johnson C.
Juglandaceae	Walnut Family			
<i>Carya illinoensis</i> (Wang.) K. Koch.	pecan	N	Common, Cultivated	Both units
<i>Juglans nigra</i> L.	walnut, black	N	Uncommon	Johnson C.
Juncaceae	Rush Family			
<i>Juncus texanus</i> (Engelm.) Coville	rush, Texas	N	Uncommon	Both units
Lamiaceae	Mint Family			
<i>Hedeoma acinoides</i> Scheele	pennyroyal, annual	N	Uncommon	Both units
<i>Hedeoma reverchonii</i> (A. Gray). A. Gray	pennyroyal, Texas	N	Rare	Ranch
<i>Lamium amplexicaule</i> L.	henbit	E	Abundant	Both units
<i>Marrubium vulgare</i> L.	horehound	E	Common	Both units
<i>Mentha spicata</i> L.	spearmint	E	Cultivated	Ranch
<i>Monarda citriodora</i> Lag.	beebalm, lemon	N	Common, Cultivated	Both units
<i>Perilla frutescens</i> (L.) Britt.	beefsteak-plant	E	Cultivated	Johnson C.
<i>Perovskia abrotanoides</i> Karel	Russian-sage, cutleaf	E	Cultivated	Ranch
<i>Physostegia correllii</i> (Lundell) Shinnars	obedient plant, Correll's	N	Cultivated	Johnson C.
<i>Physostegia virginiana</i> (L.) Benth.	obedient plant, Eastern	E	Cultivated	Johnson C.
<i>Salvia coccinea</i> Juss.	sage, scarlet	N	Uncommon, Cultivated	Ranch
<i>Salvia</i> cv. Indigo Spires (<i>S. longispica</i> M. & G. X <i>farinacea</i> Benth.)	sage, indigo spires	E	Cultivated	Johnson C.
<i>Salvia farinacea</i> Benth.	sage, mealy cup	N	Uncommon, Cultivated	Ranch
<i>Salvia greggii</i> A. Gray	sage, autumn	E?	Cultivated	Both units
<i>Salvia leucantha</i> Cav.. purple-flowered cultivar	sage, wooly	E	Cultivated	Ranch
<i>Salvia microphylla</i> HBK.	sage, small-leaf	E	Cultivated	Ranch
<i>Salvia roemeriana</i> Scheele	sage, cedar	N	Cultivated	Johnson C.
<i>Salvia texana</i> (Scheele) Torr.	sage, Texas	N	Uncommon	Ranch
<i>Salvia uliginosa</i> Benth.	sage, Brazilian blue	E	Cultivated	Ranch
<i>Scutellaria drummondii</i> Benth.	skullcap, Texas	N	Common	Both units
<i>Scutellaria suffrutescens</i> S. Wats.	skullcap, rose	E	Cultivated	Johnson C.
<i>Stachys coccinea</i> Ortega	betony, Texas	E	Cultivated	Johnson C.
<i>Teucrium canadense</i> L.	germander, American	N	Uncommon	Both units
Liliaceae	Lily Family			
<i>Allium ampeloprasum</i> L.	garlic, elephant	E	Rare	Johnson C.
<i>Allium canadense</i> L. var. <i>canadense</i>	garlic, wild	N	Uncommon	Johnson C.

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<i>Allium drummondii</i> Regel	onion, prairie	N	Uncommon	Both units
<i>Asparagus officinalis</i> L.	asparagus, garden	E	Cultivated	Ranch
<i>Chlorophytum capense</i> Kuntze (=C. comosum (Thunb.) Jacques)	spider-plant	E	Cultivated	Ranch
<i>Hemerocallis fulva</i> L. hybrid cultivar	daylily, orange	E	Cultivated	Johnson C.
<i>Liriope muscari</i> Bailey	lily-turf; monkey-grass	E	Cultivated	Ranch
<i>Muscari neglecta</i> Ten.	grape-hyacinth	E	Cultivated	Johnson C.
<i>Nothoscordum bivalve</i> (L.) Britt.	garlic, false	N	Common	Both units
<i>Schoenocaulon texanum</i> Scheele	sabadilla, Texas	N	Rare	Ranch
Linaceae	Flax Family			
<i>Linum imbricatum</i> (Raf.) Shinnars	flax, tufted	N	Uncommon	Johnson C.
<i>Linum rigidum</i> Pursh var. <i>berlandieri</i> (Hook.) T. & G. (=L. <i>berlandieri</i>)	flax, Berlandier's	N	Common	Both units
<i>Linum rupestre</i> (Gray) Gray	flax, rock	N	Uncommon	Ranch
Loganiaceae	Strichnine Family			
<i>Gelsemium sempervirens</i> Ait. f.	jessamine, Carolina	E	Cultivated	Ranch
Loranthaceae	Mistletoe Family			
<i>Phorodendron tomentosum</i> (DC.) A. Gray	mistletoe	N	Common	Both units
Lythraceae	Loosestrife Family			
<i>Ammannia robusta</i> Heer & Regel (=A. <i>coccinea</i> ssp. <i>robusta</i>)	ammannia, pale	N	Rare	Ranch
<i>Lagerstroemia indica</i> L.	crepe-myrtle	E	Cultivated	Ranch
Magnoliaceae	Magnolia Family			
<i>Magnolia grandiflora</i> L.	magnolia, flowering	E	Cultivated	Both units
Malvaceae	Mallow Family			
<i>Callirhoe involucrata</i> (Nutt.) A. Gray	winecup	N	Uncommon	Both units
<i>Hibiscus rosa-sinensis</i> L.	hibiscus, Chinese	E	Cultivated	Ranch
<i>Hibiscus syriacus</i> L.	rose-of-Sharon	E	Cultivated	Ranch
<i>Malva parviflora</i> L.	mallow, little	E	Uncommon	Johnson C.
<i>Malvaviscus arboreus</i> Cav. var. <i>drummondii</i> Schery	Turk's-cap, Drummond's	N	Cultivated	Both units
<i>Modiola caroliniana</i> (L.) G. Don	modiola, Carolina	N	Uncommon	Johnson C.
<i>Rhynchosida physocalyx</i> (A. Gray) Fryxell (=Sida <i>physocalyx</i>)	sida, beaked	N	Uncommon	Both units
<i>Sida abutifolia</i> Mill. (=S. <i>filicaulis</i> T. & G.)	sida, spreading	N	Common	Both units
Meliaceae	Mahogany Family			
<i>Melia azedarach</i> L.	Chinaberry	E	Common	Both units
Menispermaceae	Moonseed Family			
<i>Cocculus carolinus</i> (L.) DC.	snailseed, Carolina	N	Common	Both units
Molluginaceae	Carpetweed Family			
<i>Mollugo verticillata</i> L.	carpetweed, green	E	Uncommon	Both units
Moraceae	Mulberry or Fig Family			
<i>Fatua villosa</i> (Thunb.) Nakei	crabweed, hairy	E	Uncommon	Both units

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<i>Ficus carica</i> L.	fig, edible	E	Cultivated	Both units
<i>Ficus pumila</i> L.	fig, creeping	E	Cultivated	Ranch
<i>Morus alba</i> L.	mulberry, white	E	Uncommon	Ranch
<i>Morus rubra</i> L.	mulberry, red	N	Uncommon	Johnson C.
Myricaceae	Wax-Myrtle Family			
<i>Myrica cerifera</i> L.	wax-myrtle, Southern	E	Cultivated	Johnson C.
Najadaceae	Water Naiad Family			
<i>Najas guadalupensis</i> (Spreng.) Magnus	naiad, Southern	N	Rare	Johnson C.
Nyctaginaceae	Four-O'clock Family			
<i>Boerhavia diffusa</i> L. (incl. <i>B. coccinea</i>)	spiderling, scarlet	N	Common	Johnson C.
<i>Mirabilis jalapa</i> L. (incl. <i>M. lindheimeri</i>)	four-o'clock, common	E?	Uncommon, Cultivated	Both units
Oleaceae	Olive Family			
<i>Forestiera pubescens</i> Nutt.	elbow-bush	N	Uncommon	Johnson C.
<i>Fraxinus</i> cf. <i>pennsylvanica</i> Marsh	ash, green or red	N	Uncommon	Ranch
<i>Jasminum mesnyi</i> Hance	jasmine, primrose	E	Cultivated	Johnson C.
<i>Ligustrum japonicum</i> Thunb.	privet, wax-leaf	E	Cultivated	Ranch
<i>Ligustrum lucidum</i> Ait.	privet, glossy	E	Cultivated	Ranch
<i>Ligustrum sinense</i> Lour.	privet, Chinese	E	Uncommon, Cultivated	Johnson C.
<i>Menodora heterophylla</i> DC.	twinpod, low	N	Rare	Ranch
Onagraceae	Evening Primrose Family			
<i>Calylophus berlandieri</i> Spach ssp. <i>pinifolius</i> (A. Gray) Towner (= <i>C. drummondianus</i> , <i>C. serrulata</i> subsp. <i>d.</i>)	dewdrops, square-bud	N	Uncommon	Ranch
<i>Gaura brachycarpa</i> Small	gaura, plains	N	Uncommon	Both units
<i>Gaura drummondii</i> (Spach) Torr. & A. Gray	gaura, sweet	N	Rare	Johnson C.
<i>Gaura parviflora</i> Dougl.	gaura, lizard-tail	N	Uncommon	Ranch
<i>Gaura suffulta</i> Engelm.	gaura, roadside	N	Uncommon	Johnson C.
<i>Ludwigia repens</i> Forst.	water-primrose, creeping	N	Uncommon	Both units
<i>Oenothera laciniata</i> Hill	evening-primrose, cutleaf	N	Uncommon	Johnson C.
<i>Oenothera speciosa</i> Nutt.	primrose, showy	N	Uncommon	Both units
<i>Oenothera triloba</i> Nutt.	primrose, stemless	N	Uncommon	Both units
Oxalidaceae	Sorrel Family			
<i>Oxalis dillenii</i> Jacq.	sourclover, yellow	N	Common	Both units
<i>Oxalis drummondii</i> A. Gray	sourclover, Drummond's	N	Uncommon	Johnson C.
<i>Oxalis rubra</i> St. Hil.	sourclover, tuberous	E	Cultivated	Ranch
Papaveraceae	Poppy Family			
<i>Argemone albiflora</i> Hornem. ssp. <i>texana</i> G.B. Ownbey	prickly-poppy, Texas white	N	Uncommon	Johnson C.
<i>Argemone aurantiaca</i> G.B. Ownbey	prickly-poppy, red-sap	N	Uncommon	Ranch
<i>Eschscholzia californica</i> Cham.	poppy, California	E	Cultivated	Ranch
<i>Papaver rhoeas</i> L.	poppy, corn	E	Cultivated	Ranch
Passifloraceae	Passionflower Family			
<i>Passiflora tenuiloba</i> Engelm	passion-flower, bird-wing	N	Rare	Ranch

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic	Abundance	Park Unit
Pedaliaceae	Sesame Family			
<i>Proboscidea louisianica</i> (Mill.) Thell. (=Martynia louisianica)	devil's-claw, common	N	Uncommon	Ranch
Phytolaccaceae	Pokeweed Family			
<i>Rivina humilis</i> L.	rougeplant; bloodberry	N	Uncommon	Ranch
Pinaceae	Pine Family			
<i>Pinus brutia</i> Ten.	pine, Turkish	E	Cultivated	Ranch
Plantaginaceae	Plantain Family			
<i>Plantago rhodosperma</i> Dcne.	plantain, redseed	N	Common	Both units
<i>Plantago virginica</i> L.	plantain, common	N	Common	Both units
<i>Plantago wrightiana</i> Dcne.	plantain, Wright's	N	Uncommon	Ranch
Platanaceae	Sycamore Family			
<i>Platanus occidentalis</i> L.	sycamore	N	Cultivated	Johnson C.
Poaceae	Grass Family			
<i>Andropogon glomeratus</i> (Walter) Britton, Sterns, & Poggenb.	bluestem, bushy; beardgrass, bushy	N	Common	Both units
<i>Aristida oligantha</i> Michx.	three-awn, oldfield	N	Uncommon	Johnson C.
<i>Aristida purpurea</i> Nutt. var. <i>longiseta</i> (Steud.) Vasey (=A. <i>longiseta</i>)	three-awn, long awned or red	N	Common	Johnson C.
<i>Aristida purpurea</i> Nutt. var. <i>purpurea</i>	three-awn, purple	N	Common	Johnson C.
<i>Aristida purpurea</i> Nutt. var. <i>wrightii</i> (Nash) Allred (=A. <i>wrightii</i>)	three-awn, Wright's purple	N	Common	Ranch
<i>Arundo donax</i> L.	reed, giant	E	Uncommon	Ranch
<i>Avena sativa</i> L.	oats, common	E	Uncommon	Ranch
<i>Bothriochloa ischaemum</i> (L.) Keng var. <i>songarica</i> (Rupr.) C. & H.	bluestem, King Ranch	E	Abundant	Both units
<i>Bothriochloa laguroides</i> (DC.) Hertr. ssp. <i>torreyana</i> (Steud.) Allred & Gould (=B. <i>saccharoides</i>)	bluestem, silver	N	Abundant	Both units
<i>Bouteloua curtipendula</i> (Michx.) Torr.	grama, sideoats	N	Abundant	Both units
<i>Bouteloua hirsuta</i> Lag.	grama, hairy	N	Uncommon	Ranch
<i>Bouteloua pectinata</i> Featherly	grama, tall	N	Uncommon	Ranch
<i>Bouteloua rigidiseta</i> (Steud.) Hitchc.	grama, Texas	N	Common	Both units
<i>Bouteloua trifida</i> Thurb.	grama, red	N	Uncommon	Ranch
<i>Bromus catharticus</i> Vahl (=B. <i>unioloides</i>)	rescue-grass	E	Common	Both units
<i>Bromus japonicus</i> Murr.	brome, Japanese	E	Common	Both units
<i>Bromus macrostachys</i> Desf.	brome, big-spike	E	Uncommon	Ranch
<i>Buchloe dactyloides</i> (Nutt.) Engelm.	buffalo-grass	N	Common	Both units
<i>Cenchrus spinifex</i> Cav. (=C. <i>incertus</i>)	sandbur, common	N	Uncommon	Both units
<i>Chloris cucullata</i> Bisch.	windmill-grass, hooded	N	Common	Both units
<i>Chloris verticillata</i> Nutt.	windmill-grass, tumble	N	Common	Both units
<i>Cortaderia selloana</i> (Schult. & Schult. f.) Asch. & Graebn.	pampas grass	E	Cultivated	Johnson C.
<i>Cynodon dactylon</i> (L.) Pers.	Bermuda-grass	E	Abundant, Cultivated	Both units
<i>Dichanthelium acuminatum</i> (Sw.) Gould & C. A. Clark. var. <i>lindheimeri</i> (Nash) Lelong (=Panicum a. l.)	rosettegrass, Lindheimer's	N	Uncommon	Johnson C.

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic	Abundance	Park Unit
<i>Dichanthelium oligosanthes</i> (Schult.) Gould var. <i>scribnerianum</i> (Nash) Gould (=Panicum o. s.)	rosettegrass, Scribner's	N	Common	Both units
<i>Dichanthium annulatum</i> (Forssk.) Stapf.	bluestem, Kleburg	E	Uncommon	Johnson C.
<i>Digitaria ciliaris</i> (Retz.) Koel.	crabgrass	E	Common	Both units
<i>Digitaria cognata</i> (J. A. Schultes) Pilger (=Leptoloma cognata)	witchgrass, fall	N	Uncommon	Ranch
<i>Echinochloa colona</i> (L.) Link	jungle-rice	E	Uncommon	Both units
<i>Echinochloa crus-galli</i> (L.) P. Beauv.	barnyard-grass	E	Uncommon	Ranch
<i>Elymus canadensis</i> L.	wild-rye, Canada	N	Common	Both units
<i>Elymus virginicus</i> L.	wild-rye, Virginia	N	Uncommon	Johnson C.
<i>Eragrostis barrelieri</i> Daveau	lovegrass, Mediterranean	E	Uncommon	Ranch
<i>Eragrostis cilianensis</i> (All.) Janch.	lovegrass, stinky	E	Uncommon	Ranch
<i>Eragrostis intermedia</i> Hitchc	lovegrass, plains	N	Common	Both units
<i>Eragrostis secundiflora</i> J. Presl. subsp. <i>oxylepis</i> (Torr.) S.D. Koch (=E. oxylepis)	lovegrass, red	N	Uncommon	Ranch
<i>Eragrostis sessilispica</i> Buckley	lovegrass, tumble	N	Uncommon	Both units
<i>Eragrostis superba</i> Peyr.	lovegrass, Wilmann's	E	Uncommon, Cultivated	Ranch
<i>Erioneuron pilosum</i> (Buckley) Nash	fluffgrass	N	Uncommon	Both units
<i>Festuca arundinacea</i> Schreb. (=F. elatior, Lolium a.)	fescue, tall	E	Common, Cultivated	Both units
<i>Hilaria belangeri</i> (Stued.) Nash	curly-mesquite	N	Uncommon	Ranch
<i>Hordeum murinum</i> L.	barley, mouse	E	Common	Both units
<i>Hordeum vulgare</i> L.	barley, common	E	Uncommon	Ranch
<i>Leptochloa mucronata</i> (Michx.) Kunth	sprangletop, red	N	Uncommon	Both units
<i>Limnodea arkansana</i> (Nutt.) L. H. Dewey	Ozark-grass	N	Uncommon	Johnson C.
<i>Lolium perenne</i> L. ssp. <i>multiflorum</i> (Lam.) Husnot	ryegrass, common	E	Common	Both units
<i>Muhlenbergia lindheimeri</i> Hitchc	muhly, Lindheimer's	N	Cultivated	Ranch
<i>Muhlenbergia reverchonii</i> Vasey & Scribn.	muhly, seep	N	Uncommon	Johnson C.
<i>Muhlenbergia utilis</i> (Torr.) Hitchc.	aparejo; muhly, aparejo	N	Uncommon	Ranch
<i>Nassella leucotricha</i> (Trin. & Rupr.) Barkworth (=Stipa leucotricha)	wintergrass, Texas;	N	Common	Both units
<i>Panicum coloratum</i> L.	Klein grass	E	Uncommon	Both units
<i>Panicum diffusum</i> Sw.	panicgrass, spreading	E?	Common	Both units
<i>Panicum obtusum</i> Kunth	vine-mesquite	N	Uncommon	Johnson C.
<i>Panicum virgatum</i> L.	switchgrass, lowland	N	Common	Both units
<i>Paspalum dilatatum</i> Poir.	Dallis-grass	E	Uncommon	Ranch
<i>Paspalum pubiflorum</i> Rupr. var. <i>pubiflorum</i>	paspalum, hairy-seed	N	Common	Both units
<i>Paspalum setaceum</i> Michx.	paspalum, thin	N	Uncommon	Johnson C.
<i>Paspalum urvillei</i> Steud	paspalum, Urville's	E	Uncommon	Ranch
<i>Poa annua</i> L.	bluegrass, annual	E	Uncommon	Ranch
<i>Polypogon monspeliensis</i> (L.) Desf.	grass, rabbit's-foot	E	Uncommon	Ranch
<i>Schedonnardus paniculatus</i> (Nutt.) Trel.	grass, tumble	N	Uncommon	Both units
<i>Schizachyrium scoparium</i> (Michx.) Nash (=Andropogon scoparium)	bluestem, little	N	Common	Both units
<i>Setaria parviflora</i> (Poir.) Kerguelen	bristlegrass, knotroot	N	Uncommon	Both units
<i>Setaria scheelei</i> (Steud.) Hitchc.	foxtail, Southwestern	N	Common	Both units
<i>Sorghastrum nutans</i> (L.) Nash	Indiangrass	N	Common	Both units
<i>Sorghum bicolor</i> (L.) Moench ssp. <i>bicolor</i>	sorghum	E	Cultivated	Ranch
<i>Sorghum halapense</i> (L.) Pers.	Johnson-grass	E	Common	Both units

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<i>Sphenopholis obtusata</i> (Michx.) Scribn.	wedgescale, prairie	N	Uncommon	Ranch
<i>Sporobolus compositus</i> (Poir.) Merr. var. <i>drummondii</i> (Tr.) K. & G. (=S. <i>asper</i> var. <i>drummondii</i>)	dropseed, meadow	N	Abundant	Both units
<i>Sporobolus cryptanthus</i> (Torr.) A. Gray	dropseed, sand	N	Uncommon	Ranch
<i>Stenotaphrum secundatum</i> (Walter) Kuntze	St. Augustine grass	E	Cultivated	Both units
<i>Tridens albescens</i> (Vasey) Woot. & Stand.	whitetop	N	Common	Both units
<i>Tridens flavus</i> (L.) Hitchc.	purpletop	N	Common	Johnson C.
<i>Tridens muticus</i> (Torr.) Nash	tridens, slim	N	Uncommon	Ranch
<i>Tripsacum dactyloides</i> L.	gamagrass, Eastern	N	Common	Ranch
<i>Urochloa ciliatissima</i> (Buckley) R.D. Webster (=Brachiaria <i>ciliatissima</i>)	signal grass, fringed	N	Uncommon	Johnson C.
<i>Urochloa texana</i> (Buckley) R.D. Webster (=Brachiaria <i>texana</i>)	signal grass, Texas	N	Uncommon	Johnson C.
Podocarpaceae	Podocarp Family			
<i>Podocarpus macrophyllus</i> (Thunb.) D. Don	podocarp	E	Cultivated	Ranch
Polemoniaceae	Phlox Family			
<i>Phlox drummondii</i> Hook.	phlox, Drummond's; pride-of-Texas	N	Cultivated	Ranch
<i>Phlox paniculata</i> L.	phlox, summer	E	Cultivated	Ranch
Polygalaceae	Milkwort Family			
<i>Polygala alba</i> Nutt.	milkwort, white	N	Rare	Ranch
Polygonaceae	Buckwheat Family			
<i>Rumex altissimus</i> Wood	dock, peach-leaf	N	Common	Both units
<i>Rumex hastatulus</i> Baldwin	dock, Engelmann's; sorrel, heart-wing	N	Uncommon	Ranch
Portulacaceae	Purslane Family			
<i>Portulaca oleracea</i> L.	purslane, common	E	Uncommon	Johnson C.
<i>Portulaca pilosa</i> L.	purslane, shaggy	N	Common	Johnson C.
<i>Portulaca umbraticola</i> L.	purslane, wing-pod	N	Uncommon	Johnson C.
<i>Talinum aurantiacum</i> Engelm.	flameflower, orange	N	Rare	Johnson C.
Primulaceae	Primrose Family			
<i>Samolus valerandi</i> L. (incl. <i>S. parviflorus</i>)	brookweed, smallflower	N	Uncommon	Both units
Punicaceae	Pomegranate Family			
<i>Punica granatum</i> L.	pomegranate	E	Cultivated	Johnson C.
<i>Punica granatum</i> L. cv. <i>Nana</i>	pomegranate, dwarf	E	Cultivated	Ranch
Ranunculaceae	Buttercup Family			
<i>Anemone berlandieri</i> Pritzel. (=A. <i>decapetala</i>)	anemone, tenpetal	N	Common	Both units
<i>Aquilegia canadensis</i> L.	columbine, American	N	Cultivated	Ranch
<i>Aquilegia chrysantha</i> A. Gray	columbine, yellow	E	Cultivated	Johnson C.
<i>Clematis drummondii</i> Torr. & A.Gray	virgin's-bower, Texas	N	Uncommon	Ranch
<i>Clematis pitcheri</i> T. & G.	leatherflower, Pitcher's	N	Uncommon	Ranch
<i>Delphinium ajacis</i> L.	larkspur, rocket	E	Cultivated	Ranch
<i>Delphinium carolinianum</i> Walt. ssp. <i>virescens</i> (Nutt.) Brooks (=D. <i>virescens</i>)	larkspur, Carolina	N	Uncommon	Ranch

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<i>Ranunculus sceleratus</i> L.	buttercup, blister	N	Uncommon	Ranch
Rhamnaceae	Buckthorn Family			
<i>Colubrina texensis</i> (T. & G.) A. Gray	snakewood, Texas	N	Uncommon	Johnson C.
Rosaceae	Rose Family			
<i>Chaenomeles lagenaria</i> (Loisel.) Koidz	quince, flowering	E	Cultivated	Ranch
<i>Eriobotrya japonica</i> Lindl.	loquat	E	Cultivated	Ranch
<i>Geum canadense</i> Jacq.	avens, white	N	Uncommon	Johnson C.
<i>Photinia serrulata</i> Lindl	photinia, red-tip	E	Uncommon, Cultivated	Johnson C.
<i>Photinia serrulata</i> Lindl cv. <i>Aculeata</i>	photinia, spiny red-tip	E	Uncommon, Cultivated	Johnson C.
<i>Prunus cf. cerasifera</i> J.F. Ehrh.	plum, cherry	E	Cultivated	Ranch
<i>Prunus cf. cerasus</i> L.	plum, sour	E	Cultivated	Ranch
<i>Prunus persica</i> Batsch double-flowered cultivar	peach, flowering	N	Cultivated	Ranch
<i>Prunus rivularis</i> Scheele	plum, creek	E	Uncommon	Johnson C.
<i>Pyracantha crenatoserrata</i> (Hance) Rehd.	firethorn	E	Cultivated	Johnson C.
<i>Pyrus communis</i> L.	pear	E	Cultivated	Ranch
<i>Rosa banksiae</i> Ait.	rose, Banks	E	Cultivated	Johnson C.
<i>Rosa chinensis</i> Jacq. hybrid cultivar (<i>Floribunda</i> group)	rose, floribunda	E	Cultivated	Both units
<i>Rosa chinensis</i> Jacq. hybrid cultivar (<i>Polyantha</i> group)	rose, polyantha	E	Cultivated	Ranch
<i>Rubus aboriginum</i> Rydb.	dewberry, Indian	N	Common	Johnson C.
<i>Rubus trivialis</i> Michx.	dewberry, bristly	N	Uncommon	Johnson C.
<i>Spiraea cantoniensis</i> Lour.	bridal wreath, Cantonese	E	Cultivated	Ranch
<i>Spiraea trilobata</i> L.	bridal wreath, three-lobed	E	Cultivated	Ranch
Rubiaceae	Coffee Family			
<i>Cephalanthus occidentalis</i> L.	buttonbush	N	Uncommon	Both units
<i>Diodia virginiana</i> L.	buttonweed, large	N	Uncommon	Ranch
<i>Galium aparine</i> L.	bedstraw, catchweed	N	Common	Both units
<i>Galium proliferum</i> A. Gray	bedstraw, rock	N	Rare	Ranch
<i>Galium virgatum</i> Nutt.	bedstraw, wand	N	Common	Both units
<i>Hedyotis nigricans</i> (Lam.) Fosb.	bluets, prairie	N	Uncommon	Both units
<i>Houstonia micrantha</i> (Shinners) Terrell (= <i>Hedyotis australis</i>)	bluets, Southern	N	Uncommon	Ranch
<i>Houstonia pusilla</i> Schoepf (= <i>Hedyotis crassifolia</i>)	bluets, dwarf	N	Uncommon	Johnson C.
<i>Richardia tricocca</i> (Torr. & A. Gray) Standl. (= <i>Diodia tricocca</i>)	buttonweed, prairie	N	Uncommon	Johnson C.
<i>Sherardia arvensis</i> L.	spurwort	E	Common	Both units
Rutaceae	Citrus Family			
<i>Ptelea trifoliata</i> L. (incl. <i>P. mollis</i> , <i>P. tomentosa</i>)	wafer-ash	N	Uncommon	Johnson C.
<i>Zanthoxylum hirsutum</i> Buckley	toothache-tree, Western; prickly-ash	N	Rare	Ranch
Salicaceae	Willow Family			
<i>Salix nigra</i> Marsh	willow, black	N	Uncommon	Johnson C.
Sapindaceae	Soapberry Family			

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<i>Cardiospermum halicacabum</i> L.	balloonvine	N	Rare	Ranch
<i>Sapindus saponaria</i> L. var. <i>drummondii</i> (H. & A.) L. Benson	soapberry, Western	N	Uncommon	Both units
<i>Ungnadia speciosa</i> Endl.	buckeye, Mexican	N	Cultivated	Ranch
Sapotaceae	Chicle or Sapote Family			
<i>Sideroxylon lanuginosum</i> Michx. (=Bumelia lanuginosa)	buckthorn, wooly; gum-elastic	N	Uncommon	Ranch
Scrophulariaceae	Snapdragon Family			
<i>Agalinus heterophylla</i> (Nutt.) Britt.	foxglove, prairie false	N	Uncommon	Johnson C.
<i>Bacopa monnieri</i> (L.) Pennell	water-hyssop, coastal	N	Uncommon	Both units
<i>Castilleja indivisa</i> Engelm.	paintbrush, Indian	N	Uncommon	Ranch
<i>Leucophyllum frutescens</i> Berl.) I.M. Johnston	cenizo; Texas-sage	N	Cultivated	Both units
<i>Leucospora multifida</i> (Michx.) Nutt.	water-hyssop, cutleaf	N	Uncommon	Ranch
<i>Lindernia dubia</i> (L.) Pennell var. <i>anagallidea</i> (Michx.) Cooperr.	false pimpernel, clasping	N	Rare	Ranch
<i>Mecardonia procumbens</i>	water-hyssop, prostrate	N	Uncommon	Ranch
<i>Nuttallanthus texanus</i> (Sheele) D.A. Sutton (=Linaria texana)	toadflax, Texas	N	Uncommon	Ranch
<i>Penstemon cobaea</i> Nutt.	foxglove, wild	N	Uncommon	Ranch
<i>Verbascum thapsus</i> L.	mullein, common	E	Uncommon	Johnson C.
<i>Veronica anagallis-aquatica</i> L.	speedwell, water	E	Uncommon	Both units
<i>Veronica arvensis</i> L.	speedwell, common	E	Common	Both units
Smilacaceae	Greenbriar Family			
<i>Smilax bona-nox</i> L.	greenbriar, saw	N	Common	Both units
Solanaceae	Nightshade Family			
<i>Calibrachoa parviflora</i> (Juss.) D'Arcy (=Petunia parviflora)	petunia, wild	N	Rare	Ranch
<i>Capsicum annuum</i> L. var. <i>glabriusculum</i> (Dunal) Heiser & Pickersgill (=C. a. var. <i>aviculare</i>)	pepper, bird	N	Cultivated	Ranch
<i>Chamaesaracha edwardsiana</i> Averett	nightshade, plateau false	N	Rare	Ranch
<i>Datura inoxia</i> Mill.	Indian-apple	N?	Rare	Ranch
<i>Physalis cinerascens</i> (Dunal) Hitch.	groundcherry, wooly	N	Uncommon	Both units
<i>Solanum dimidiatum</i> Raf.	horse-nettle	N	Uncommon	Both units
<i>Solanum elaeagnifolium</i> Cav.	nightshade, silverleaf	N	Common	Both units
<i>Solanum ptychanthum</i> Dunal (=S. americanum, S. nigrum)	nightshade, American	N	Uncommon	Both units
<i>Solanum rostratum</i> Dun.	buffalo-bur	N	Uncommon	Johnson C.
<i>Solanum triquetrum</i> Cav.	nightshade, Texas	N	Uncommon	Ranch
Taxodiaceae	Bald Cypress Family			
<i>Taxodium distichum</i> (L.) Rich.	cypress, bald	N	Uncommon	Both units
Ulmaceae	Elm Family			
<i>Celtis laevigata</i> Willd. var. <i>laevigata</i>	sugarberry or hackberry, smooth-leaf	N	Common, Cultivated	Both units
<i>Celtis laevigata</i> Willd. var. <i>reticulata</i> Torr. (=C. <i>reticulata</i>)	sugarberry or hackberry, rough-leaf	N	Common	Both units
<i>Ulmus americana</i> L.	elm, American	N	Cultivated	Ranch

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<i>Ulmus crassifolia</i> Nutt.	elm, cedar	N	Common	Both units
Urticaceae	Nettle Family			
<i>Parietaria pensylvanica</i> Willd.	pellitory	N	Uncommon	Ranch
Valerianaceae	Valerian Family			
<i>Valerianella radiata</i> (L.) Dufr.	cornsalad, beaked	N	Uncommon	Ranch
Verbenaceae	Verbena Family			
<i>Callicarpa americana</i> L.	beautyberry	N	Cultivated	Johnson C.
<i>Glandularia bipinnatifida</i> (Nutt.) Nutt. (=Verbena bipinnatifida)	verbena, Dakota	N	Common	Both units
<i>Glandularia pumila</i> (Rydb.) Umber (=Verbena pumila)	vervain, pink	N	Uncommon	Johnson C.
<i>Lantana 'Callowiana Hybrids'</i> cultivar (L. depressa X camara)	lantana, hybrid cultivar	E	Cultivated	Johnson C.
<i>Lantana camara</i> L.	lantana, West Indies	E	Uncommon, Cultivated	Johnson C.
<i>Lantana camara</i> X <i>urticoides</i>	lantana, hybrid	E	Uncommon, Cultivated	Johnson C.
<i>Lantana depressa</i> Small hybrid cultivar	lantana, rockland	E	Cultivated	Johnson C.
<i>Lantana montevidensis</i> Briq	lantana, trailing	E	Cultivated	Ranch
<i>Lantana urticoides</i> Hayek (=L. horrida)	lantana, Texas	N	Uncommon, Cultivated	Both units
<i>Lippia lanceolata</i> Michx. hybrid with L. nodiflora? (=Phyla lanceolata)	frogfruit, Northern	N	Common	Both units
<i>Lippia nodiflora</i> (L.) Michx. "incisa" morph (=Phyla nodiflora, P. incisa)	frogfruit, common	N?	Uncommon	Johnson C.
<i>Lippia nodiflora</i> (L.) Michx. (=Phyla nodiflora)	frogfruit, common	N?	Common	Both units
<i>Lippia nodiflora</i> (L.) Michx. may have L. lanceolata genes (=Phyla nodiflora)	frogfruit, common	N?	Common	Both units
<i>Verbena brasiliensis</i> Vell.	vervain, Brazilian	E	Uncommon	Ranch
<i>Verbena canescens</i> Kunth	vervain, gray	N	Uncommon	Both units
<i>Verbena halei</i> Small	vervain, slender	N	Common	Both units
<i>Vitex agnus-castus</i> L.	chaste tree	E	Cultivated	Both units
Violaceae	Violet Family			
<i>Viola missouriensis</i> Greene	violet, Missouri	N	Cultivated	Johnson C.
Vitaceae	Grape Family			
<i>Ampelopsis arborea</i> (L.) Koehne	peppervine	N	Common	Johnson C.
<i>Ampelopsis cordata</i> Michx.	grape, possum	N	Common	Johnson C.
<i>Cissus incisa</i> Des Moul	ivy-treebine	N	Uncommon	Both units
<i>Parthenocissus heptaphylla</i> (Buckley) Small	creeper, sevenleaf	N	Rare	Johnson C.
<i>Parthenocissus quinquefolia</i> (L.) Planch.	creeper, Virginia	N	Uncommon	Johnson C.
<i>Vitis aestivalis</i> Michx.	grape, summer or pigeon	N	Uncommon	Johnson C.
<i>Vitis mustangensis</i> Buckley	grape, mustang	N	Common	Johnson C.
Zygophyllaceae	Lignum Vitae Family	N		
<i>Kallstroemia parviflora</i> Norton	caltrop, warty	N	Uncommon	Johnson C.

APPENDIX 2. Species observed in Lyndon B. Johnson National Historical Park by Roger Sanders, but lacking vouchers from park property, with nativity, relative abundance, and park units in which species was observed.

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic	Abundance	Park Unit
Anacardiaceae	Sumac Family			
¹ <i>Toxicodendron radicans</i> (L.) Kuntze (=Rhus radicans)	ivy, poison	N	Common	Both units
Asteraceae	Sunflower or Composite Family			
² <i>Tetrameuris scaposa</i> (DC.) Parker (=Hymenoxys s.)	bitterweed, rock	N	Uncommon	Ranch
Poaceae	Grass Family			
³ <i>Hordeum pusillum</i> Nutt.	barley, little	N	Common	Both units

¹ There is a specimen in the LYJO herbarium that documents its occurrence in the LBJ State Park, adjacent to the LYJO, LBJ Ranch District. No voucher was collected because the specimen was incorrectly noted as a LYJO voucher instead of an State Park voucher. (Protocol called for collecting only those species that were not already vouchered in the LYJO herbarium.)

² This species was observed during the first trip to LYJO, before identifications of the existing specimens in the LYJO herbarium were reviewed. This species was listed on the TNC master list as already vouchered. However, when studied, the specimen was discovered actually to be *Tetrameuris linearifolia*, not *T. scaposa*. Therefore, when this species was encountered in the field, it was assumed already vouchered and no collection was made.

³ There is a specimen in the LYJO herbarium that documents its occurrence in the LBJ State Park, adjacent to the LYJO, LBJ Ranch District. No voucher was collected because the specimen was incorrectly noted as a LYJO voucher instead of an State Park voucher. (Protocol called for collecting only those species that were not already vouchered in the LYJO herbarium.)

APPENDIX 3. Species vouchered from LBJ State Park or nearby areas of Gillespie or Blanco Counties and likely to occur in Lyndon B. Johnson National Historical Park.

Scientific Name of Species (Synonyms)	Common Name	Native or Exotic
Apiaceae	Celery or Umbel Family	
<i>Bifora americana</i> (DC.) S. Wats.	bishop, prairie	N
<i>Daucus carota</i> L.	Queen Anne's lace	E
Asteraceae	Sunflower or Composite Family	
<i>Aphanostephus ramosissimus</i> DC.	daisy, plains lazy	N
Campanulaceae	Bellflower Family	
<i>Triodanus holzingeri</i> McVaugh	Venus' looking-glass, clasping	N
Fabaceae	Legume or Bean Family	
<i>Dalea emarginata</i> (T. & G.) Shinnery	dalea, notch-leaf	N
Hydrophyllaceae	Waterleaf Family	
<i>Phacelia congesta</i> Hook.	phacelia, spike	N
Krameriaceae	Ratany Family	
<i>Krameria lanceolata</i> Torr. (=K. secundiflora)	ratany, trailing	N
Poaceae	Grass Family	
<i>Andropogon gerardii</i> Vitman	bluestem, big	N
<i>Bromus texensis</i> (Shear) Hitchc.	brome, Texas	N
<i>Dichanthelium sphaerocarpon</i> (Ell.) Gould (=Panicum s.)	rosettegrass, globe-seed	N
<i>Panicum hallii</i> Vasey	panicgrass, Hall's	N
<i>Panicum hallii</i> Vasey var. <i>hallii</i>	panicgrass, Hall's	N
<i>Vulpia octoflora</i> (Walt.) Rydb.	six-weeks-grass, common	N

APPENDIX 4. Species not known to occur in LYJO, requiring correction to the Vascular Plant Master List (Carr & Gallyoun, 2001) provided by the Texas CDC.

Wrong Name	Reason	Correct Name
<i>Acacia roemeriana</i> Scheele	Misidentified	<i>Mimosa aculeaticarpa</i> Ortega var. <i>biuncifera</i> (Benth.) Barneby (=M. <i>biuncifera</i>)
<i>Aphanostephus ramosissimus</i> DC.	Based on misidentification of LYJO herbarium specimen. Likely, but not yet vouchered, nor definitely seen by Dr. Sanders	
<i>Argemone polyanthemus</i> (Fedde) G. B. Ownbey	Misidentified	<i>Argemone aurantiaca</i> G.B. Ownbey
<i>Asclepias viridiflora</i> Raf.	Misidentified	<i>Asclepias asperula</i> (Dcne.) Woods. (incl. <i>A. capricornu</i> Woodson)
<i>Asclepias viridis</i> Walt.	Not seen, may have failed to grow or reproduce	
<i>Bifora americana</i> (DC.) S. Wats.	Not seen by Dr. Sanders but reported by others; likely, but only voucher is from state park	
<i>Bouthriochloa saccharoides</i>	Synonym	<i>Bothriochloa laguroides</i> ssp. <i>torreyana</i>
<i>Brachiaria texana</i>	Synonym	<i>Urochloa texana</i>
<i>Bromus texensis</i>	Not seen by Dr. Sanders but reported by others; likely, but only voucher is from state park	
<i>Buxus microphylla</i>	Misidentified or supplier substitution	<i>Buxus sempervirens</i>
<i>Calylophus serrulatus</i>	Synonym	<i>Calylophus berlandieri</i>
<i>Cenchrus incertus</i>	Synonym	<i>Cenchrus spinifex</i>
<i>Centaurea cineraria</i>	Not seen, may have failed to grow or reproduce	
<i>Centrosema virginiana</i>	Misidentified (in Gabbard et al., but not in TNC list)	<i>Rhynchosia senna</i> var. <i>texana</i>
<i>Chilopsis linearis</i>	Not seen, may have failed to grow or reproduce	
<i>Cirsium horridulum</i>	Not seen by Dr. Sanders but reported by others; no voucher known to Dr. Sanders.	
<i>Commelina diffusa</i>	Not seen by Dr. Sanders but reported by others; no voucher known to Dr. Sanders.	
<i>Dalea purpurea</i>	In prairies from near the Red River northward	<i>Dalea tenuis</i>
<i>Daucus carota</i>	Not seen by Dr. Sanders but reported by others; likely, but only voucher is from state park	
<i>Dichondra recurvata</i>	Voucher in LYJO herbarium is sterile and therefore not identifiable to species. Probably same species as collected by Dr. Sanders.	Probably <i>Dichondra carolinensis</i>
<i>Draba cuneifolia</i>	Misidentified	<i>Draba platycarpa</i>
<i>Elymus canadensis</i> var. <i>canadensis</i>	Synonym (var. not included when <i>E. virginica</i> is recognized as distinct from <i>E. canadensis</i>)	<i>Elymus canadensis</i>
<i>Euphorbia bicolor</i>	Not seen by Dr. Sanders but reported by others; no voucher known to Dr. Sanders.	Probably <i>Euphorbia marginata</i>
<i>Gaura calcicola</i>	Misidentified	<i>Gaura drummondii</i>
<i>Gaura coccinea</i>	Misidentified	<i>Gaura suffulta</i>
<i>Hexalectris nitida</i>	Likely habitat not available in park	
<i>Hieracium venosum</i>	Does not occur west of Mississippi and Missouri	
<i>Hymenopappus artemisiifolius</i>	Misidentified	<i>Hymenopappus scabiosaeus</i> var. <i>corymbosus</i>

Wrong Name	Reason	Correct Name
<i>Krameria lanceolata</i>	Not seen by Dr. Sanders but reported by others; likely, but only voucher is from state park	
<i>Lepidium oblongum</i>	Misidentified	<i>Lepidium austrinum</i>
<i>Lespedeza stuevei</i>	Misidentified	<i>Desmodium paniculatum</i>
<i>Linum hudsonioides</i>	Misidentified	<i>Linum rigidum</i> var. <i>berlandieri</i>
<i>Panicum hallii</i>	Not seen by Dr. Sanders but reported by others; likely, but only voucher is from state park	
<i>Phyla nodiflora</i>	Synonym	<i>Lippia nodiflora</i>
<i>Physalis virginiana</i>	Misidentified	<i>Chamaesaracha edwardsiana</i>
<i>Polytaenia texana</i>	Synonym	<i>Polytaenia nuttallii</i>
<i>Primula</i>	Nearest species are from the Rocky Mts. and the Great Lakes regions	
<i>Quercus virginiana</i>	Misidentified or supplier used species name of synonym of plateau live oak	<i>Quercus fusiformis</i> (a synonym is <i>Q. virginiana</i> var. <i>fusiformis</i>)
<i>Rumex hymenosepalus</i>	Misidentified	<i>Rumex altissimus</i>
<i>Rumex obtusifolius</i>	Plants in Texas going under this name are usually misidentified.	<i>Rumex pulcher</i>
<i>Sapindus saponaria</i>	All material in Texas is of var. <i>drummondii</i>	<i>Sapindus saponaria</i> var. <i>dummondii</i>
<i>Setaria leucopila</i>	Misidentified	<i>Setaria scheelei</i>
<i>Setaria viridis</i>	Not seen by Dr. Sanders but reported by others; no voucher known to Dr. Sanders.	
<i>Smilax rotundifolia</i>	Misidentified	<i>Smilax bona-nox</i>
<i>Stachydeoma graveolens</i>	Endemic to Florida	Probably intended <i>Hedeoma reverchonii</i>
<i>Symphoricarpos orbiculatus</i>	Not seen by Dr. Sanders but reported by others; no voucher known to Dr. Sanders.	
<i>Thelesperma megapotamicum</i>	Misidentified	<i>Thelesperma filifolium</i>
<i>Trachypogon secundus</i>	Misidentified	<i>Elymus canadensis</i>
<i>Tragia urticifolia</i>	Probably field misidentification. Unlikely, as it is restricted to eastern Texas.	Probably <i>Tragia ramosa</i>
<i>Yucca pallida</i>	Southern limit of distribution is a few kilometers south of Lampasas	<i>Yucca rupicola</i>
<i>Zanthoxylum fagara</i>	Limited to Rio Grande and Gulf coast	<i>Zanthoxylum hirsutum</i>

APPENDIX 5. LYJO Vouchers collected by Roger Sanders, March 2002 to January 2003.

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
<i>Acalypha lindheimeri</i> Muell. Arg.	5299	<i>Amorpha fruticosa</i> L.	5106
<i>Acalypha lindheimeri</i> Muell. Arg.	5309	<i>Ampelopsis arborea</i> (L.) Koehne	5363
<i>Acalypha lindheimeri</i> Muell. Arg.	5310	<i>Ampelopsis cordata</i> Michx.	5364
<i>Acalypha monococca</i> (A. Gray) Lill. W. Mill. & Gandhi (=A. <i>gracilis</i> var. <i>monococca</i>)	5578	<i>Andropogon glomeratus</i> (Walter) Britton, Sterns, & Poggenb.	5566
<i>Acalypha ostryifolia</i> Riddell	5264	<i>Anemone berlandieri</i> Pritzl. (=A. <i>decapetala</i>)	5029
<i>Acalypha ostryifolia</i> Riddell	5495	<i>Anisacanthus wrightii</i> (Torr.) A. Gray (=A. <i>quadrifidus</i> var. <i>wrightii</i>)	5267
<i>Acer grandidentatum</i> Nutt.	5530	<i>Aphanostephus riddellii</i> Torr. & A. Gray	5058
<i>Achillea millefolium</i> L.	5084	<i>Aquilegia canadensis</i> L.	5074
<i>Aesculus pavia</i> L.	5073	<i>Aquilegia chrysantha</i> A. Gray	5003
<i>Agalinus heterophylla</i> (Nutt.) Britt.	5484	<i>Arenaria benthamii</i> T & G.	5145
<i>Albizia julibrissin</i> Durazz.	5194	<i>Arenaria serpyllifolia</i> L.	5030
<i>Allium ampeloprasum</i> L.	5371	<i>Argemone albiflora</i> Hornem. ssp. <i>texana</i> G.B. Ownbey	5208
<i>Allium canadense</i> L. var. <i>canadense</i>	5018	<i>Argemone aurantiaca</i> G.B. Ownbey	5173
<i>Allium drummondii</i> Regel	5012	<i>Argythamnia humilis</i> (Engelm. & A. Gray) (=Ditaxis h.)	5360
<i>Alternanthera caracasana</i> Kunth	5240	<i>Aristida oligantha</i> Michx.	5491
<i>Amaranthus albus</i> L.	5449	<i>Aristida purpurea</i> Nutt. var. <i>longiseta</i> (Steud.) Vasey (=A. <i>longiseta</i>)	5137
<i>Amaranthus palmeri</i> S. Wats. (pistillate plant)	5493	<i>Aristida purpurea</i> Nutt. var. <i>purpurea</i>	5199
<i>Amaranthus palmeri</i> S. Wats. (staminate plant)	5458	<i>Aristida purpurea</i> Nutt. var. <i>wrightii</i> (Nash) Allred	5226
<i>Amaranthus polygonoides</i> L.	5296	<i>Arundo donax</i> L.	5509
<i>Amaranthus rudis</i> J.D. Sauer	5492	<i>Asclepias asperula</i> (Dcne.) Woods. (incl. A. <i>capricornu</i>)	5126
<i>Amaranthus rudis</i> J.D. Sauer	5494	<i>Asclepias asperula</i> (Dcne.) Woods. (incl. A. <i>capricornu</i>)	5518
<i>Amblyolepis setigera</i> DC.	5172	<i>Asclepias oenotheroides</i> Cham. & Schltdl.	5284
<i>Ambrosia artemisiifolia</i> L.	5571	<i>Asparagus officinalis</i> L.	5070
<i>Ambrosia psilostachya</i> DC.	5413	<i>Aster ericoides</i> L.	5561
<i>Ambrosia psilostachya</i> DC.	5538	<i>Aster oblongifolius</i> Nutt.	5562
<i>Ambrosia trifida</i> L. var. <i>texana</i> Scheele	5535		
<i>Ammannia robusta</i> Heer & Regel. (=A. <i>coccinea</i> ssp. <i>robusta</i>)	5503		

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
<i>Aster oblongifolius</i> Nutt.	5586	<i>Calyptocarpus vialis</i> Less.	5042
<i>Aster praealtus</i> Poir.	5564	<i>Campsis radicans</i> (L.) Seem.	5270
<i>Aster subulatus</i> Michx. var. <i>ligulatus</i> Shinnery	5424	<i>Capsella bursa-pastoris</i> (L.) Medik.	5028
<i>Baccharis neglecta</i> Britt. (pistillate)	5576	<i>Capsicum annuum</i> L. var. <i>glabriusculum</i> (Dunal) Heiser & Pickersgill (=C. a. var. <i>aviculare</i>)	5559
<i>Baccharis neglecta</i> Britt. (staminate)	5511		
<i>Bacopa monnieri</i> (L.) Pennell	5397	<i>Cardiospermum halicacabum</i> L.	5508
<i>Berberis trifoliolata</i> Moric. (=Mahonia t.)	5051	<i>Carduus tenuiflorus</i> Curtis	5135
<i>Berlandiera betonicifolia</i> (Hook.) Small (=B. texana)	5460	<i>Carex emoryi</i> Dewey	5108
<i>Bignonia capreolata</i> L.	5425	<i>Carex microdonta</i> T. & H.	5053
<i>Boerhavia diffusa</i> L. (incl. B. <i>coccinea</i>)	5204	<i>Carex perdentata</i> S.D. Jones	5222
<i>Bothriochloa laguroides</i> (DC.) Hertr. ssp. <i>torreyana</i> (Steud.) Allred & Gould	5200	<i>Carex planostachys</i> Kunze	5041
<i>Bothriochloa laguroides</i> (DC.) Hertr. ssp. <i>torreyana</i> (Steud.) Allred & Gould	5291	<i>Carex tetrastachya</i> Scheele	5109
<i>Bouteloua curtipendula</i> (Michx.) Torr.	5198	<i>Carya illinoensis</i> (Wang.) K. Koch.	5368
<i>Bouteloua hirsuta</i> Lag.	5345	<i>Castilleja indivisa</i> Engelm.	5055
<i>Bouteloua pectinata</i> Featherly	5580	<i>Catalpa speciosa</i> Warder.	5374
<i>Bouteloua trifida</i> Thurb.	5516	<i>Celtis laevigata</i> Willd. var. <i>laevigata</i>	5539
<i>Brassica nigra</i> (L.) Koch	5071	<i>Celtis laevigata</i> Willd. var. <i>reticulata</i> Torr.	5423
		<i>Cenchrus spinifex</i> Cav. (=C. <i>incertus</i>)	5217
<i>Bromus catharticus</i> Vahl (=B. <i>unioides</i>)	5001	<i>Centaurea melitensis</i> L.	5207
<i>Bromus japonicus</i> Murr.	5201	<i>Cephalanthus occidentalis</i> L.	5398
<i>Bromus macrostachys</i> Desf.	5256	<i>Cerastium glomeratum</i> Thuill.	5039
<i>Buchloe dactyloides</i> (Nutt.) Engelm.	5136	<i>Ceratophyllum demersum</i> L.	5519
<i>Buglossoides arvensis</i> (L.) I. M. Johnston.	5062	<i>Cercis canadensis</i> L. var. <i>canadensis</i>	5434
<i>Buxus sempervirens</i> L.	5431	<i>Cercis canadensis</i> L. var. <i>texensis</i> (S. Watson) M. Hopkins	5193
<i>Calibrachoa parviflora</i> (Juss.) D'Arcy (=Petunia <i>parviflora</i>)	5233	<i>Chaenomeles lagenaria</i> (Loisel.) Koidz	5330
<i>Callicarpa americana</i> L. white-fruited cultivar	5263	<i>Chaerophyllum tainturieri</i> Hook.	5146
<i>Callirhoe involucrata</i> (Nutt.) A. Gray	5466	<i>Chaetopappa asteroides</i> DC.	5219
<i>Calylophus berlandieri</i> Spach ssp. <i>pinifolius</i> (=C. <i>drummondianus</i> , C. <i>serrulata</i> subsp. d.)	5454	<i>Chamaesaracha edwardsiana</i> Averett	5186
<i>Calylophus berlandieri</i> Spach ssp. <i>pinifolius</i> (A. Gray) Towner (=C. <i>drummondianus</i> , C. <i>serrulata</i> subsp. d.)	5455	<i>Chamaesyce angusta</i> (Engelm.) Small (=Euphorbia <i>angusta</i>)	5185

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
<i>Chamaesyce maculata</i> (L.) Small	5289	<i>Convolvulus equitans</i> Benth.	5139
<i>Chamaesyce maculata</i> (L.) Small	5295	<i>Conyza candensis</i> (L.) Cronq.	5390
<i>Chamaesyce nutans</i> (Lag.) Small	5353	<i>Cooperia drummondii</i> Herb.	5297
<i>Chamaesyce nutans</i> (Lag.) Small	5461	<i>Coreopsis lanceolata</i> L.	5092
<i>Chamaesyce prostrata</i> (Ait.) Small	5354	<i>Coreopsis wrightii</i> (A. Gray) H. M. Parker (=C. basalis var. wrightii)	5319
<i>Chamaesyce serpens</i> (H.B.K.) Small.	5279	<i>Cornus drummondii</i> Mey.	5155
<i>Chenopodium ambrosioides</i> L.	5464	<i>Cortideria selloana</i> (Schult. & Schult. f.) Asch. & Graebn	5560
<i>Chenopodium</i> cf. <i>missouriense</i> Aellen (=C. album var. <i>missouriense</i>)	5457	<i>Corydalis curvisiliqua</i> Engelm.	5079
<i>Chenopodium pratericola</i> Rydb.	5316	<i>Crinum scabrum</i> Herb.	5195
<i>Chloris cucullata</i> Bisch.	5177	<i>Croton capitatus</i> Michx. var. <i>lindheimeri</i> (Engelm. & A. Gray) Muell. Arg.	5531
<i>Chloris verticillata</i> Nutt.	5285	<i>Croton glandulosus</i> L. var. <i>lindheimeri</i> Muell.Arg.	5381
<i>Chlorocantha spinosa</i> (Benth.) G.L. Nesom (=Aster <i>spinosa</i>)	5533	<i>Croton monanthogynus</i> Michx.	5280
<i>Chlorophytum capense</i> Kuntze (=C. comosum)	5436	<i>Croton texensis</i> (Klotzsch) Muell. Arg.	5375
<i>Chrysanthemum leucanthemum</i> L.	5251	<i>Cynanchum laeve</i> (Michx.) Pers.	5448
<i>Chrysanthemum morifolium</i> Ramat.	5591	<i>Cynanchum unifarium</i> (Scheele) Woodson (=C. racemosum. var. <i>unifarium</i>)	5283
<i>Cirsium texanum</i> Buckl.	5134	<i>Cynodon dactylon</i> (L.) Pers. fine-leaved dwarf cultivar	5572
<i>Cirsium undulatum</i> (Nutt.) Spreng.	5203	<i>Cyperus croceus</i> Vahl (=C. globulosus)	5213
<i>Cissus incisa</i> Des Moul	5282	<i>Cyperus croceus</i> Vahl (=C. globulosus)	5287
<i>Clematis drummondii</i> Torr. & A. Gray	5320	<i>Cyperus croceus</i> Vahl (=C. globulosus)	5346
<i>Clematis pitcheri</i> T. & G.	5313	<i>Cyperus croceus</i> Vahl (=C. globulosus)	5347
<i>Cocculus carolinus</i> (L.) DC.	5318	<i>Cyperus esculentus</i> L.	5489
<i>Colubrina texensis</i> (T. & G.) A. Gray	5409	<i>Cyperus esculentus</i> L.	5506
<i>Commelina erecta</i> L. var. <i>angustifolia</i>	5247	<i>Cyperus odoratus</i> L.	5355
<i>Commelina erecta</i> L. var. <i>angustifolia</i> Benth.	5474	<i>Cyperus odoratus</i> L.	5505
<i>Commelina erecta</i> L. var. <i>erecta</i>	5476	<i>Cyperus odoratus</i> L.	5512
<i>Conium maculatum</i> L.	5076	<i>Cyperus retroflexus</i> Buckley var. <i>pumila</i> (=C. uniflorus)	5218
<i>Conoclinium coelestinum</i> (L.) DC. (=Eupatorium <i>coelestinum</i> L.)	5594		
<i>Conoclinium dissectum</i> A. Gray (=Eupatorium greggii, <i>Conoclinium</i> g.)	5327		

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
<i>Cyperus retroflexus</i> Buckley var. <i>retroflexus</i> (=C. <i>uniflorus</i>)	5260	<i>Digitaria ciliaris</i> (Retz.) Koel.	5382
<i>Cyperus retroflexus</i> Buckley var. <i>retroflexus</i> (=C. <i>uniflorus</i>)	5322	<i>Digitaria ciliaris</i> (Retz.) Koel.	5383
<i>Cyperus rotundus</i> L.	5450	<i>Digitaria cognata</i> (J. A. Schultes) Pilger (=Leptoloma <i>cognata</i>)	5417
<i>Cyperus strigosus</i> L.	5419	<i>Digitaria cognata</i> (J. A. Schultes) Pilger (=Leptoloma <i>cognata</i>)	5573
<i>Cyperus strigosus</i> L.	5453	<i>Diodia virginiana</i> L.	5467
<i>Cyperus strigosus</i> L.	5498	<i>Diospyros texana</i> Scheele	5293
<i>Cyperus strigosus</i> X <i>retroflexus</i>	5348	<i>Draba platycarpa</i> Torr. & A. Gray	5153
<i>Cyrtomium falcatum</i> Presl.	5336	<i>Draba platycarpa</i> Torr. & A. Gray	5188
<i>Dalea greggii</i> A. Gray	5010	<i>Dracopis amplexicaulis</i> (Vahl) Cass.	5101
<i>Dalea nana</i> A. Gray var. <i>nana</i>	5141	<i>Echinacea purpurea</i> (L.) Moench.	5245
<i>Datura innoxia</i> Mill.	5534	<i>Echinochloa colona</i> (L.) Link	5350
<i>Daucus pusillus</i> Michx.	5273	<i>Echinochloa colona</i> (L.) Link	5405
<i>Delphinium ajacis</i> L.	5098	<i>Echinochloa crus-galli</i> (L.) P. Beauv.	5352
<i>Desmanthus acuminatus</i> Benth. (=D. <i>virgatus</i> var. <i>acuminatus</i>)	5277	<i>Eclipta prostrata</i> (L.) L. (= <i>E. alba</i>)	5340
<i>Desmanthus acuminatus</i> Benth. (=D. <i>virgatus</i> var. <i>acuminatus</i>)	5473	<i>Elaeagnus pungens</i> Thunb.	5429
<i>Desmanthus illinoensis</i> B. L. Robins. & Fern.	5552	<i>Eleocharis montevidensis</i> Kunth.	5148
<i>Desmanthus reticulatus</i> Benth.	5275	<i>Eleocharis montevidensis</i> Kunth.	5166
<i>Desmodium paniculatum</i> (L.) DC.	5468	<i>Eleocharis montevidensis</i> Kunth.	5234
<i>Desmodium paniculatum</i> (L.) DC.	5550	<i>Elymus canadensis</i> L.	5302
<i>Dianthus chinensis</i> L.	5075	<i>Elymus virginicus</i> L.	5372
<i>Dichanthelium acuminatum</i> (Sw.) Gould & C. A. Clark. var. <i>lindheimeri</i> (Nash) Lelong (=Panicum a. l.)	5399	<i>Engelmannia pinnatifida</i> A. Gray (=E. <i>peristenia</i>)	5121
<i>Dichanthelium oligosanthes</i> (Schult.) Gould var. <i>scribnerianum</i> (Nash) Gould (=Panicum o. s.)	5128	<i>Equisetum hyemale</i> L. ssp.. <i>affine</i> (Engelm.) Calder & R.L. Taylor	5444
<i>Dichanthelium oligosanthes</i> (Schult.) Gould var. <i>scribnerianum</i> (Nash) Gould (=Panicum o. s.)	5440	<i>Eragrostis barrelieri</i> Daveau	5359
<i>Dichanthium annulatum</i> (Forssk.) Stapf.	5549	<i>Eragrostis barrelieri</i> Daveau	5597
<i>Dichondra carolinensis</i> Michx. (=D. <i>repens</i>)	5086	<i>Eragrostis cilianensis</i> (All.) Janch.	5581
<i>Dicliptera brachiata</i> (Pursh) Spreng.	5311	<i>Eragrostis intermedia</i> Hitchc.	5344
		<i>Eragrostis intermedia</i> Hitchc.	5415
		<i>Eragrostis intermedia</i> Hitchc.	5551

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
Eragrostis secundiflora J. Presl. subsp. oxylepis (Torr.) S.D. Koch (=E. oxylepis)	5215	Fuirena simplex Vahl. var. aristulata (Torrey) Kral	5513
Eragrostis sessilispica Buckley	5216	Galium aparine L.	5009
Eragrostis superba Peyr.	5255	Galium proliferum A. Gray	5262
Erigeron modestus A. Gray	5303	Galium virgatum Nutt. bristly-fruited (typical) form	5150
Erigeron philadelphicus L.	5164	Gaura brachycarpa Small	5049
Eriobotrya japonica Lindl.	5333	Gaura brachycarpa Small	5481
Erioneuron pilosum (Buckley) Nash	5176	Gelsemium sempervirens Ait. f.	5072
Erioneuron pilosum (Buckley) Nash	5189	Geranium carolinianum L.	5000
Erodium texanum A. Gray	5225	Geum canadense Jacq.	5147
Eschscholzia californica Cham.	5068	Glandularia bipinnatifida (Nutt.) Nutt. (=Verbena bipinnatifida)	5043
Euonymus japonicus L.	5412	Glandularia pumila (Rydb.) Umber	5044
Eupatorium havanense Kunth	5337	Gleditsia triacanthos L.	5373
Eupatorium serotinum Michx.	5537	Grindelia nuda A.W. Wood	5488
Euphorbia dentata Michx.	5250	Gutierrezia texana (DC.) T. & G.	5483
Euphorbia dentata Michx.	5487	Hedeoma acinoides Scheele	5125
Euphorbia marginata Pursh	5342	Hedeoma reverchonii (A. Gray) A. Gray	5183
Eustoma russellianum (Hook.) G. Don (=E. grandiflorum)	5300	Hedera helix L.	5411
Evolvulus sericeus Sw.	5089	Hedyotis nigricans (Lam.) Fosb.	5202
Facelis retusa (Lam.) Sch. Bip.	5123	Helenium amarum (Raf.) H. Rock var. amarum	5546
Fatua villosa (Thunb.) Nakei	5339	Helenium elegans DC.	5167
Fatua villosa (Thunb.) Nakei	5563	Helianthus annuus L.	5410
Festuca arundinacea Schreb. (=F. elatior, Lolium a.)	5105	Helianthus maximiliani Schrad.	5555
Ficus carica L.	5095	Hemerocallis fulva L. hybrid cultivar	5117
Ficus pumila L.	5426	Hesperaloe parviflora (Torr.) J.M. Coult.	5104
Forestiera pubescens Nutt.	5047	Heterotheca canescens (DC.) Shiners	5500
Fraxinus pennsylvanica Marsh	5463	Heterotheca canescens (DC.) Shiners	5554
Froelichia gracilis (Hook.) Moq.	5406	Heterotheca subaxillaris (Lam.) Britt. & Rusby	5343
Fuirena simplex Vahl. var. aristulata (Torrey) Kral	5502	Hibiscus rosa-sinensis L.	5588
		Hibiscus syriacus L.	5332

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
Hippeastrum advena (Ker.-Gawl.) Herb. (=Rhodophiala advena)	5497	Lantana 'Callowiana Hybrids' cultivar (L. depressa X camara)	5470
Hordeum murinum L.	5031	Lantana camara L.	5211
Houstonia pusilla Schoepf (=Hedyotis crassifolia)	5050	Lantana camara X urticoides	5143
Hydrocotyle verticillata Thunb. var. verticillata	5261	Lantana depressa Small hybrid cultivar	5190
Hymenopappus scabiosaeus L'Her. var. corymbosus (T. & G.) B.L. Turner	5184	Lantana montevidensis Briq.	5243
Ilex cornuta Lindl. var. burfordii DeFrance	5428	Lantana urticoides Hayek	5142
Ilex decidua Walt.	5040	Lathyrus hirsutus L.	5097
Ilex vomitoria Sol. in Ait.	5325	Lathyrus hirsutus L.	5577
Indigofera miniata Ort. var. leptosepala (Nutt.) Turner	5276	Lepidium virginicum L.	5032
Ipomoea cordatotriloba Dennst. var. torreyana (A. Gray) D.F. Austin	5196	Leptochloa mucronata (Michx.) Kunth	5427
Ipomoea cordatotriloba Dennst. var. torreyana (A. Gray) D.F. Austin	5268	Leptochloa mucronata (Michx.) Kunth	5570
Iris chamaeiris Bertol. (=I. lutescens Lam.)	5002	Lesquerella recurvata (Engelm.) Wats.	5052
Iva angustifolia DC.	5486	Leucophyllum frutescens (Berl.) I.M. Johnston	5253
Jasminum mesnyi Hance	5389	Leucospora multifida (Michx.) Nutt.	5435
Juglans nigra L.	5365	Ligustrum japonicum Thunb.	5090
Juncus texanus (Engelm.) Coville	5149	Ligustrum lucidum Ait.	5248
Juncus texanus (Engelm.) Coville	5237	Ligustrum sinense Lour.	5083
Juniperus ashei J. Buchholz	5441	Limnodea arkansana (Nutt.) L. H. Dewey	5151
Juniperus chinensis L.	5433	Lindernia dubia (L.) Pennell var. anagallidea (Michx.) Cooperr.	5504
Juniperus chinensis L. cv. Pfizer	5472	Lindheimera texana Engelm. & A. Gray	5060
Juniperus virginiana L. cultivar	5521	Linum imbricatum (Raf.) Shinnars	5380
Justicia americana (L.) Vahl	5111	Linum rigidum Pursh var. berlandieri (Hook.) T. & G. (=L. berlandieri)	5124
Kallstroemia parviflora Norton	5482	Linum rupestre (A. Gray) A. Gray	5182
Kallstroemia parviflora Norton	5548	Lippia lanceolata Michx. hybrid with L. nodiflora? (=Phyla lanceolata)	5223
Krigia wrightii (A. Gray) Chambers & Kim	5048	Lippia nodiflora (L.) Michx. "incisa" morph (=Phyla nodiflora, P. incisa)	5408
Lactuca serriola L.	5314	Lippia nodiflora (L.) Michx. (=Phyla nodiflora, P. incisa)	5438
Lagerstroemia indica L.	5334	Lippia nodiflora (L.) Michx. may have L. lanceolata genes (=Phyla nodiflora, P. incisa)	5205
Lagerstroemia indica L. small-statured cultivar	5252		

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
Lippia nodiflora (L.) Michx. may have L. lanceolata genes (=Phyla nodiflora)	5475	Mollugo verticillata L.	5520
Liriope muscari Bailey	5331	Monarda citriodora Lag.	5197
Lolium perenne L. ssp. multiflorum (Lam.) Husnot	5100	Monarda citriodora Lag.	5246
Lonicera japonica Thunb.	5154	Morus alba L.	5507
Ludwigia repens J.R. Forst.	5396	Morus rubra L.	5361
Lupinus texensis Hook.	5016	Muhlenbergia lindheimeri Hitchc.	5585
Lygodesmia texana (T. & G.) Greene	5171	Muhlenbergia reverchonii Vasey & Scribn.	5439
Magnolia grandiflora L.	5118	Muhlenbergia utilis (Torr.) Hitchc.	5236
Malva parviflora L.	5567	Muscari neglecta Ten.	5023
Malvaviscus arboreus Cav. var. drummondii Schery	5254	Myrica cerifera L.	5014
Matelea biflora (Raf.) Woods.	5304	Myrica cerifera L.	5087
Matelea reticulata (A. Gray) Woodson	5140	Najas guadalupensis (Spreng.) Magnus	5469
Mecardonia procumbens (Mill.) Small	5230	Nandina domestica Thunb.	5021
Medicago lupulina L.	5013	Nassella leucotricha (Trin. & Rupr.) Barkworth (=Stipa leucotricha)	5127
Medicago lupulina L.	5063	Nerium oleander L.	5088
Medicago minima (L.) Bartal.	5045	Oenothera laciniata Hill	5600
Medicago polymorpha L.	5046	Oenothera speciosa Nutt.	5036
Melampodium leucanthum T. & G.	5056	Oenothera speciosa Nutt.	5061
Melia azedarach L.	5156	Oenothera triloba Nutt.	5114
Melothria pendula L.	5317	Opuntia engelmannii Salm-Dyck var. lindheimeri (Engelm.) B. D. Parfitt & Pinkava	5138
Menodora heterophylla DC.	5574	Opuntia leptocaulis DC. (=Cylindropuntia l.)	5452
Mentha spicata L.	5335	Opuntia macrorhiza Engelm.	5131
Mimosa aculeaticarpa Ortega var. biuncifera (Benth.) Barneby (=M. biuncifera)	5569	Oxalis dillenii Jacq.	5008
Mimosa borealis Gray	5480	Oxalis drummondii A. Gray	5478
Mimosa roemeriana Scheele (=Mimosa quadrivalvis L.; Schrankia r.)	5161	Oxalis rubra St. Hil.	5589
Mirabilis jalapa L. (incl. M. lindheimeri)	5224	Panicum coloratum L.	5393
Mirabilis jalapa L. (incl. M. lindheimeri)	5536	Panicum coloratum L.	5414
Modiola caroliniana (L.) G. Don	5479	Panicum diffusum Sw.	5214
		Panicum obtusum Kunth	5274

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
<i>Panicum virgatum</i> L.	5394	<i>Platanus occidentalis</i> L.	5541
<i>Panicum virgatum</i> L.	5596	<i>Pluchea odorata</i> (L.) Cass.	5532
<i>Papaver rhoeas</i> L.	5099	<i>Podocarpus macrophyllus</i> (Thunb.) D. Don	5430
<i>Parietaria pensylvanica</i> Willd.	5179	<i>Polanisia dodecandra</i> (L.) DC. subsp. <i>trachysperma</i> (T. & G.) Iltis (=P. <i>trachy.</i>)	5229
<i>Parkinsonia aculeata</i> L.	5259	<i>Polygala alba</i> Nutt.	5187
<i>Parthenocissus heptaphylla</i> (Buckley) Small	5378	<i>Polypogon monspeliensis</i> (L.) Desf.	5113
<i>Parthenocissus quinquefolia</i> (L.) Planch.	5269	<i>Polytaenia nuttallii</i> DC. (incl. <i>P. texana</i>)	5210
<i>Paspalum dilatatum</i> Poir.	5235	<i>Portulaca oleracea</i> L.	5547
<i>Paspalum pubiflorum</i> Rupr. var. <i>pubiflorum</i>	5356	<i>Portulaca pilosa</i> L.	5477
<i>Paspalum pubiflorum</i> Rupr. var. <i>pubiflorum</i>	5395	<i>Portulaca umbraticola</i> L.	5496
<i>Paspalum setaceum</i> Michx.	5292	<i>Proboscidea louisianica</i> (Mill.) Thell. (=Martynia louisianica)	5418
<i>Paspalum urvillei</i> Steud.	5257	<i>Proboscidea louisianica</i> (Mill.) Thell. (=Martynia louisianica)	5447
<i>Passiflora tenuiloba</i> Engelm.	5416	<i>Prosopis glandulosa</i> Torr.	5442
<i>Pelargonium X hortorum</i> L. H. Bailey	5529	<i>Prunus cf. cerasifera</i> J.F. Ehrh.	5523
<i>Perilla frutescens</i> (L.) Britt.	5558	<i>Prunus cf. cerasus</i> L.	5522
<i>Perovskia abrotanoides</i> Karel	5242	<i>Prunus rivularis</i> Scheele	5598
<i>Phlox drummondii</i> Hook.	5069	<i>Prunus persica</i> Batsch double-flowered cultivar	5078
<i>Phlox paniculata</i> L.	5241	<i>Pseudognaphalium luteoalbum</i> (L.) Hilliard & Burt	5231
<i>Phorodendron tomentosum</i> (DC.) A. Gray	5540	<i>Ptelea trifoliata</i> L. (incl. <i>P. mollis</i> , <i>P. tomentosa</i>)	5294
<i>Photinia serrulata</i> Lindl.	5592	<i>Punica granatum</i> L.	5160
<i>Photinia serrulata</i> Lindl. cv. <i>Aculeata</i>	5301	<i>Punica granatum</i> L. cv. <i>Nana</i>	5590
<i>Phyllanthus polygonoides</i> Nutt. ex Spreng.	5227	<i>Pyracantha crenatoserrata</i> (Hance) Rehd.	5471
<i>Physalis cinerascens</i> (Dunal) Hitch.	5157	<i>Pyrrhopappus pauciflorus</i> (D. Don) DC. (=P. <i>multicaulis</i>)	5122
<i>Physalis cinerascens</i> (Dunal) Hitch.	5392	<i>Pyrus communis</i> L.	5584
<i>Physostegia correllii</i> (Lundell) Shinnars	5388	<i>Quercus buckleyi</i> Nixon & Dorr (=Q. <i>shumardii</i> var. <i>microcarpa</i> , Q. <i>texana</i>)	5422
<i>Physostegia virginiana</i> (L.) Benth.	5407	<i>Quercus buckleyi</i> Nixon & Dorr (=Q. <i>shumardii</i> var. <i>microcarpa</i> , Q. <i>texana</i>)	5525
<i>Pinus brutia</i> Ten.	5583	<i>Quercus buckleyi</i> Nixon & Dorr (=Q. <i>shumardii</i> var. <i>microcarpa</i> , Q. <i>texana</i>)	5544
<i>Pistacia texana</i> Swingle	5432		
<i>Plantago rhodosperma</i> Dcne.	5024		
<i>Plantago virginica</i> L.	5026		

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<i>Quercus fusiformis</i> Small (=Q. virginiana var. fusiformis)	5004	<i>Ruellia brittoniana</i> E. Leonard cv. Katie's	5266
<i>Quercus fusiformis</i> Small (=Q. virginiana var. fusiformis)	5005	<i>Ruellia brittoniana</i> E. Leonard pink-flowered cultivar	5192
<i>Quercus fusiformis</i> Small (=Q. virginiana var. fusiformis)	5490	<i>Ruellia drummondiana</i> (Nees) A.Gray	5465
<i>Quercus fusiformis</i> Small (=Q. virginiana var. fusiformis)	5545	<i>Ruellia malacosperma</i> Greenman	5244
<i>Quercus marilandica</i> Muenchh.	5443	<i>Ruellia metziae</i> Tharp	5315
<i>Quercus rubra</i> L.	5542	<i>Ruellia nudiflora</i> (Engelm. & A. Gray) Urban	5281
<i>Quercus rubra</i> L.	5543	<i>Ruellia occidentalis</i> (A. Gray) Tharp & Barkley	5265
<i>Quercus stellata</i> Wang.	5057	<i>Salix nigra</i> Marsh	5527
<i>Ranunculus sceleratus</i> L.	5112	<i>Salvia coccinea</i> Juss.	5094
<i>Ratibida columnifera</i> (Nutt.) Woot. & Standl.	5130	<i>Salvia coccinea</i> Juss.	5321
<i>Rhus lanceolata</i> (A. Gray) Britt.	5599	<i>Salvia</i> cv. Indigo Spires (S. longispica M.&G. X farinacea Benth.)	5082
<i>Rhus virens</i> A. Gray	5386	<i>Salvia farinacea</i> Benth..	5093
<i>Rhynchosia senna</i> Hook. var. texana (Torr. & A. Gray) M.C. Johnst.	5272	<i>Salvia farinacea</i> Benth.	5517
<i>Rhynchosida physocalyx</i> (A. Gray) Fryxell (=Sida physocalyx)	5307	<i>Salvia greggii</i> A. Gray	5033
<i>Rhynchospora colorata</i> (L.) H. Pfeiff.	5170	<i>Salvia leucantha</i> Cav. purple-flowered cultivar	5526
<i>Richardia tricocca</i> (Torr. & A. Gray) Standl. (=Diodia tricocca)	5286	<i>Salvia microphylla</i> HBK.	5077
<i>Ricinus communis</i> L.	5462	<i>Salvia roemeriana</i> Scheele	5081
<i>Rivina humilis</i> L.	5524	<i>Salvia uliginosa</i> Benth.	5326
<i>Rorippa nastursium-aquaticum</i> (L.) Hayek (=Nastursium officinale)	5238	<i>Sambucus nigra</i> L. var. canadensis (L.) Bolli (=S. canadensis)	5239
<i>Rosa banksiae</i> Ait.	5015	<i>Samolus valerandi</i> L. (incl. S. parviflorus)	5163
<i>Rosa chinensis</i> Jacq. hybrid cultivar (Floribunda group)	5116	<i>Sapindus saponaria</i> L. var. drummondii (H. & A.) L. Benson	5366
<i>Rosa chinensis</i> Jacq. hybrid cultivar (Polyantha group)	5096	<i>Sapium sebiferum</i> (L.) Roxb.	5369
<i>Rubus aboriginum</i> Rydb.	5054	<i>Schedonnardus paniculatus</i> (Nutt.) Trel.	5290
<i>Rubus aboriginum</i> Rydb.	5370	<i>Schizachyrium scoparium</i> (Michx.) Nash (=Andropogon scoparium)	5565
<i>Rubus aboriginum</i> Rydb.	5391	<i>Schizachyrium scoparium</i> (Michx.) Nash (=Andropogon scoparium)	5579
<i>Rubus trivialis</i> Michx.	5020	<i>Schoenocaulon texanum</i> Scheele	5180
<i>Rudbeckia hirta</i> L.	5220	<i>Schoenoplectus pungens</i> (Vahl) Palla (=Scirpus pungens, S. americanus)	5165

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Schoenoplectus pungens (Vahl) Palla (=Scirpus pungens, S. americanus)	5446	Solidago canadensis L.	5553
Scutellaria drummondii Benth.	5059	Solidago gigantea Ait.	5459
Scutellaria drummondii Benth.	5306	Sonchus oleraceus L.	5384
Scutellaria suffrutescens S. Wats.	5212	Sophora japonica L.	5323
Sedum tenellum Bieb.	5017	Sophora secundiflora (Ortega) DC.	5324
Sesbania drummondii (Rydb.) Cory	5362	Sorghastrum nutans (L.) Nash	5485
Sesbania herbacea (Mill.) McVaugh (=S. exaltata)	5501	Sorghum bicolor (L.) Moench ssp. bicolor	5510
Sesbania vesicaria (Jacq.) Elliott	5421	Spermolepis inermis (Nutt.) Math. & Const.	5305
Setaria parviflora (Poir.) Kerguelen (=S. geniculata)	5351	Sphenopholis obtusata (Michx.) Scribn.	5232
Setaria parviflora (Poir.) Kerguelen (=S. geniculata)	5402	Spiraea cantoniensis Lour.	5064
Setaria scheelei (Steud.) Hitchc.	5298	Spiraea cantoniensis Lour.	5328
Setaria scheelei (Steud.) Hitchc.	5338	Spiraea trilobata L.	5329
Sherardia arvensis L.	5006	Sporobolus compositus (Poir.) Merr. var. drummondii (Tr.) K. & G. (=S. asper var. dr.)	5514
Sherardia arvensis L.	5385	Sporobolus compositus (Poir.) Merr. var. drummondii (Tr.) K. & G. (=S. asper var. dr.)	5595
Sida abutifolia Mill. (=S. filicaulis)	5178	Sporobolus cryptanthus (Torr.) A. Gray	5349
Sideroxylon lanuginosum Michx. (=Bumelia lanuginosa)	5420	Stachys coccinea Ortega	5080
Silene antirrhina L.	5152	Stellaria media (L.) Cyr.	5011
Silphium radula Nutt. (=S. asperrimum)	5376	Stenotaphrum secundatum (Walter) Kuntze	5387
Siphonoglossa pilosella (Nees) Torr. (=Justicia pilosella)	5308	Stillingia texana I. M. Johnston	5144
Sisymbrium irio L.	5174	Tagetes lemmoni A. Gray	5582
Sisyrinchium langloisii Greene	5038	Talinum aurantiacum Engelm.	5499
Solanum dimidiatum Raf.	5132	Taraxacum officinale Wiggers	5022
Solanum elaeagnifolium Cav.	5133	Taxodium distichum (L.) Rich.	5367
Solanum ptychanthum Dunal (=S. americanum, S. nigrum)	5119	Tecoma stans HBK. (=Stenolobium stans)	5528
Solanum ptychanthum Dunal (=S. americanum, S. nigrum)	5575	Tetraneuris linearifolia (Hook.) Greene (=Hymenoxys linearifolia)	5107
Solanum rostratum Dunal	5221	Teucrium canadense L.	5209
Solanum triquetrum Cav.	5103	Teucrium canadense L.	5437
		Thelesperma simplicifolium A. Gray	5181
		Tinantia anomala (Torr.) C.B.Clark	5066

<i>Sci Name</i>	<i>Collection #</i>	<i>Sci Name</i>	<i>Collection #</i>
Torilis arvensis (Huds.) Link.	5158	Viburnum odoratissimum Ker.-Gawl.	5249
Torilis nodosa (L.) Gaertn.	5159	Viburnum rufidulum Raf.	5091
Tradescantia gigantea Rose	5067	Viburnum suspensum Lindl.	5587
Tragia brevispica Engelm. & A. Gray	5206	Vicia ludoviciana Nutt. ssp. leavenworthii (T. & G.) Lass. & Gunn	5034
Tragia brevispica Engelm. & A. Gray	5451	Vicia villosa Roth	5102
Tragia ramosa Torr.	5228	Vinca minor L.	5035
Tragia ramosa Torr.	5341	Viola missouriensis Greene	5120
Tridens albescens (Vasey) Woot. & Stand.	5278	Vitex agnus-castus L.	5191
Tridens flavus (L.) Hitchc.	5379	Vitis aestivalis Michx.	5403
Tridens muticus (Torr.) Nash	5515	Vitis mustangensis Buckley	5377
Triodanus perfoliata (L.) Nieuwl. var. biflora (R. & P.) T. R. Bradley (=T. biflora)	5027	Wedelia texana (A. Gray) B.L. Turner (=W. hispida, Zexmenia hispida)	5085
Tripsacum dactyloides L.	5169	Wedelia texana (A. Gray) B.L. Turner (=W. hispida, Zexmenia hispida)	5557
Ulmus americana L.	5593	Wisteria sinensis (Sims) Sweet	5019
Ulmus crassifolia Nutt.	5400	Xanthium strumarium L.	5445
Ungnadia speciosa Endl.	5065	Yucca arkansana Trel.	5162
Urochloa ciliatissima (Buckley) R.D. Webster (=Brachiaria ciliatissima)	5129	Yucca constricta Buckley	5258
Urochloa texana (Buckley) R.D. Webster (=Brachiaria texana)	5568	Yucca flaccida Haw.	5404
Valerianella radiata (L.) Dufr.	5168	Yucca rupicola Scheele	5357
Verbascum thapsus L.	5288	Yucca torreyi Shafer	5025
Verbena brasiliensis Vell.	5115	Zanthoxylum hirsutum Buckley	5358
Verbena canescens Kunth	5037		
Verbesina encelioides A. Gray	5175		
Verbesina virginica L.	5401		
Vernonia baldwinii Torr.	5312		
Vernonia baldwinii Torr.	5456		
Vernonia baldwinii Torr.	5556		
Veronica anagallis-aquatica L.	5110		
Veronica anagallis-aquatica L.	5271		
Veronica arvensis L.	5007		

APPENDIX 6. Roger Sanders' Collections from LYJO: Specimens consisting of two parts (a-b)

<i>Collection #</i>	<i>Catalog #</i>	<i>Sci Name</i>
5076	LYJO 12076 a-b	Conium maculatum L.
5134	LYJO 12134 a-b	Cirsium texanum Buckl.
5394	LYJO 12394 a-b	Panicum virgatum L.
5401	LYJO 12401 a-b	Verbesina virginica L.
5421	LYJO 12421 a-b	Sesbania vesicaria (Jacq.) Elliott
5510	LYJO 12510 a-b	Sorghum bicolor (L.) Moench ssp. bicolor
5534	LYJO 12534 a-b	Datura inoxia Mill.
5535	LYJO 12535 a-b	Ambrosia trifida L. var. texana Scheele
5555	LYJO 12555 a-b	Helianthus maximiliani Schrad.

APPENDIX 7. Roger Sanders' LYJO vouchers collected in unicate,
available in LYJO herbarium.

<i>Collection #</i>	<i>Catalog #</i>	<i>Sci Name</i>
5036	LYJO 12036	Oenothera speciosa Nutt.
5129	LYJO 12129	Urochloa ciliatissima (Buckley) R.D. Webster (=Brachiaria ciliatissima)
5183	LYJO 12183	Hedeoma reverchonii (A. Gray). A. Gray
5196	LYJO 12196	Ipomoea cordatotriloba Dennst. var. torreyana (A. Gray) D.F. Austin
5208	LYJO 12208	Argemone albiflora Hornem. ssp. texana G.B. Ownbey
5210	LYJO 12210	Polytaenia nuttallii DC. (incl. P. texana)
5220	LYJO 12220	Rudbeckia hirta L.
5227	LYJO 12227	Phyllanthus polygonoides Nutt. ex Spreng.
5262	LYJO 12262	Galium proliferum A. Gray
5299	LYJO 12299	Acalypha lindheimeri Muell. Arg.
5304	LYJO 12304	Matelea biflora (Raf.) Woods.
5306	LYJO 12306	Scutellaria drummondii Benth.
5327	LYJO 12327	Conoclinium dissectum A. Gray (=Eupatorium greggii, Conoclinium g.)
5341	LYJO 12341	Tragia ramosa Torr.
5381	LYJO 12381	Croton glandulosus L. var. lindheimeri Muell.Arg.
5390	LYJO 12390	Conyza candensis (L.) Cronq.
5405	LYJO 12405	Echinochloa colona (L.) Link
5418	LYJO 12418	Proboscidea louisianica (Mill.) Thell. (=Martynia louisianica)
5419	LYJO 12419	Cyperus strigosus L.
5449	LYJO 12449	Amaranthus albus L.
5466	LYJO 12466	Callirhoe involucrata (Nutt.) A. Gray
5476	LYJO 12476	Commelina erecta L. var. erecta
5481	LYJO 12481	Gaura brachycarpa Small
5487	LYJO 12487	Euphorbia dentata Michx.
5499	LYJO 12499	Talinum aurantiacum Engelm.
5503	LYJO 12503	Ammannia robusta Heer & Regel. (=A. coccinea ssp. robusta)

Collection # Catalog #

5504	LYJO 12504
5508	LYJO 12508
5518	LYJO 12518
5531	LYJO 12531
5532	LYJO 12532
5534	LYJO 12534 a-b
5546	LYJO 12546
5547	LYJO 12547
5556	LYJO 12556
5571	LYJO 12571
5575	LYJO 12575
5578	LYJO 12578
5600	LYJO 12600

Sci Name

Lindernia dubia (L.) Pennell var. anagallidea
(Michx.) Cooperr.
Cardiospermum halicacabum L.

Asclepias asperula (Dcne.) Woods. (incl. A.
capricornu)
Croton capitatus Michx. var. lindheimeri
(Engelm. & A. Gray) Muell. Arg.
Pluchea odorata (L.) Cass.

Datura inoxia Mill.

Helenium amarum (Raf.) H. Rock var. amarum

Portulaca oleracea L.

Vernonia baldwinii Torr.

Ambrosia artemisiifolia L.

Solanum ptychanthum Dunal (=S. americanum,
S. nigrum)
Acalypha monococca (A. Gray) Lill. W. Mill. &
Gandhi (=A. gracilis var. monococca)
Oenothera laciniata Hill