

**THE FLORA AND PLANT COMMUNITIES OF USDA-ARS RIESEL PRAIRIE  
FALLS/McLENNAN COUNTY, TEXAS**

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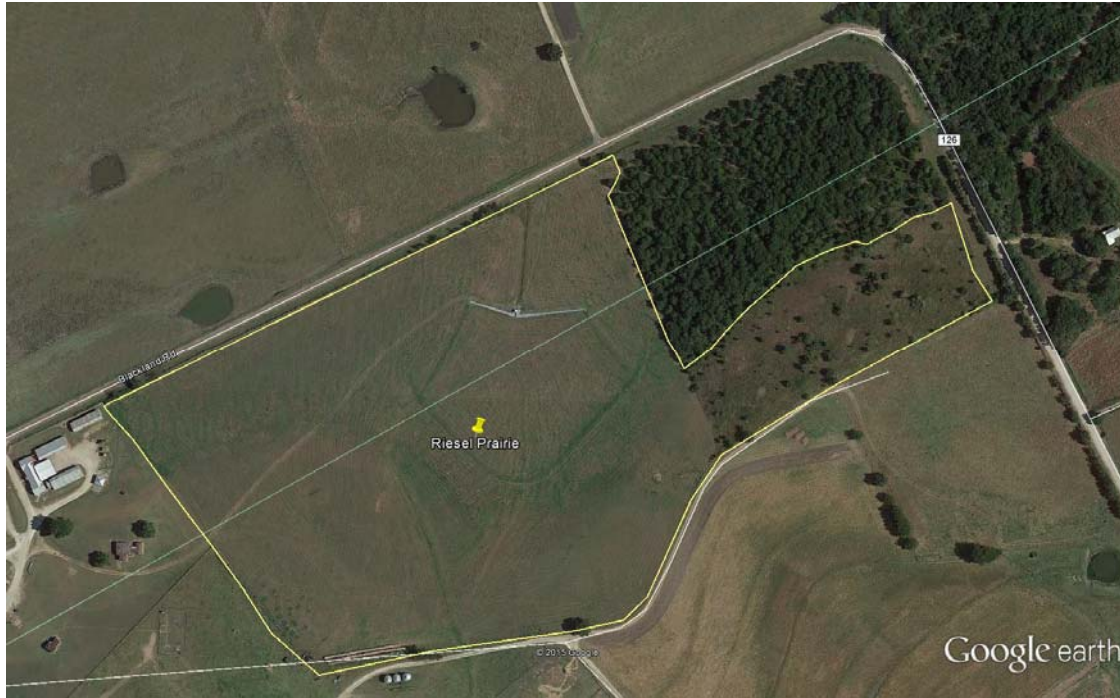
and

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**USDA-ARS RIESEL BLACKLAND PRAIRIE**

This report covers activities carried out on the flora and plant community survey trip of 10 December 2015 to Riesel Prairie in Falls/McLennan County, Texas (Map 1). It provides descriptions of the unique plant community and list of flora.



Map 1. USDA-ARS Riesel Prairie (~27 acres) in Falls and McLennan County, Texas

### **Purpose of Survey**

Texas Parks and Wildlife Departments Wildlife Diversity Program collects biological information on rare and declining plants, animals, and plant community association's state wide. An **association** is defined as “a plant community of definite floristic composition, uniform habitat conditions, and uniform physiognomy”. By identifying different plant community associations during a field survey and the plants that are restricted to them, the data inform land stewards to recognize different habitat types that occur on their lands. Documenting plant communities also supports an inventory of the overall plant diversity (number of plant species) that occurs on a parcel of land. The focus of this biological assessment was to document the prairie plant community and diversity of the flora on the USDA-ARS Riesel Prairie.

## Survey Results

One plant community was documented, the Mollisol Blackland Prairie Association. This plant community association needs further investigation on the USDA-ARS Riesel Prairie as this site is in moderately good quality and natural condition with very few invasive plants present.

### PLANT COMMUNITY ASSOCIATIONS

**Common Name:** Mollisol Blackland Prairie

**Translated Name:** Little Bluestem - Indiangrass - Big Bluestem - Prairie Bishop Mollisol Herbaceous Vegetation

*Schizachyrium scoparium* - *Sorghastrum nutans* - *Andropogon gerardii* - *Bifora americana* Mollisol Herbaceous Vegetation

**Environmental Description:** This tallgrass prairie community (Figure 1) occurs on Mollisols in the Texas Blackland Prairie region and the Fort Worth Prairie region (Diamond and Smeins 1990). The dominant species include Little Bluestem (*Schizachyrium scoparium*), Indiangrass (*Sorghastrum nutans*), Big Bluestem (*Andropogon gerardii*), and Prairie Bishop (*Bifora americana*). Within the Blackland Prairie region, this type occurs primarily on the north-to-south-oriented Whiterock Cuesta, a limestone outcrop of late Cretaceous age, while it is situated on limestone of early Cretaceous age in the Fort Worth Prairie region. In both regions mid grasses including sideoats grama (*Bouteloua curtipendula*), hairy grama (*Bouteloua hirsuta*), and Texas wintergrass (*Nassella leucotricha*) are important. In the Fort Worth Prairie hairy grama (*Bouteloua hirsuta* var. *pectinata* (= *Bouteloua pectinata*)) can be dominant along with threeawns (*Aristida* spp.) on rocky outcrops with a variety of xeric forbs, including species such as Reverchon's false pennyroyal (*Hedeoma reverchonii*), polkadots (*Dyschoriste linearis*), Soft-hair marbleseed (*Onosmodium bejariense* var. *bejariense*), purple prairie clover (*Dalea purpurea*), golden prairie clover (*Dalea aurea*), nineanther prairie clover (*Dalea enneandra*), and twistleaf yucca (*Yucca pallida*). On similar sites in the Blackland Prairie region, Arkansas yucca (*Yucca arkansana*) replaces twistleaf yucca.

### ANNOTATED CHECKLIST OF THE FLORA

The annotated checklist is divided into pteridophytes, gymnosperms, and angiosperms, which are subdivided into monocots and dicots. Family, genus, and species are arranged alphabetically beneath each major heading. Common names are included to facilitate ease of use by persons unfamiliar with botanical names. Plants with an asterisk (\*) next to their name are non-native.

CUPRESSACEAE	<i>Juniperus virginiana</i> L.	eastern red cedar
CYPERACEAE	<i>Carex microdonta</i> Torr. & Hook.	littletooth sedge
CYPERACEAE	<i>Eleocharis obtusa</i> (Willd.) Schult.	blunt spikerush
CYPERACEAE	<i>Fimbristylis puberula</i> (Michx.) Vahl	hairy fimbry
JUNCACEAE	<i>Juncus marginatus</i> Rostk.	grassleaf rush
POACEAE	<i>Andropogon gerardii</i> Vitman	big bluestem
POACEAE	<i>Andropogon glomeratus</i> (Walter) Britton, Sterns & Poggenb.	bushy bluestem
POACEAE	<i>Aristida purpurea</i> Nutt. var. <i>nealleyi</i> (Vasey) Allred	blue threeawn
POACEAE	<i>Bothriochloa ischaemum</i> (L.) Keng	K.R. bluestem (*)
POACEAE	<i>Bothriochloa laguroides</i> (DC.) Herter	silver bluestem
POACEAE	<i>Bouteloua curtipendula</i> (Michx.) Torr.	sideoast grama
POACEAE	<i>Bouteloua dactyloides</i> (Nutt.) J.T. Columbus	buffalograss
POACEAE	<i>Bromus arvensis</i> L.	Japanese brome (*)
POACEAE	<i>Bromus pubescens</i> Muhl. ex Willd.	hairy woodland brome
POACEAE	<i>Coelorachis cylindrica</i> (Michx.) Nash	cylinder jointtail grass
POACEAE	<i>Cynodon dactylon</i> (L.) Pers.	Bermudagrass (*)
POACEAE	<i>Dichanthelium</i> sp.	rosettegrass
POACEAE	<i>Elymus virginicus</i> L.	Virginia wildrye
POACEAE	<i>Panicum virgatum</i> L.	switchgrass
POACEAE	<i>Paspalum floridanum</i> Michx.	Florida paspalum
POACEAE	<i>Schizachyrium scoparium</i> (Michx.) Nash	little bluestem
POACEAE	<i>Setaria parviflora</i> (Poir.) Kerguelen	marsh bristlegrass
POACEAE	<i>Sorghastrum nutans</i> (L.) Nash	Indiangrass
POACEAE	<i>Sorghum halepense</i> (L.) Pers.	Johnsongrass (*)
POACEAE	<i>Sporobolus clandestinus</i> (Biehler) Hitchc.	rough dropseed
POACEAE	<i>Tridens albescens</i> (Vasey) Woot. & Standl.	white tridens
SMILACACEAE	<i>Smilax bona-nox</i> L.	saw greenbrier
ANACARDIACEAE	<i>Toxicodendron radicans</i> (L.) Kuntze	poison ivy
APIACEAE	<i>Chaerophyllum tainturieri</i> Hook.	hairyfruit chervil
APIACEAE	<i>Polytaenia nuttallii</i> DC.	Nuttall's prairie parsley
ASCLPIADACEAE	<i>Asclepias viridis</i> Walter	green antelopehorn
ASTERACEAE	<i>Ambrosia artemisiifolia</i> L.	annual ragweed
ASTERACEAE	<i>Brickellia eupatorioides</i> (L.) Shinnery var. <i>texana</i> (Shinnery) Shinnery	false boneset
ASTERACEAE	<i>Centaurea americana</i> Nutt.	basketflower
ASTERACEAE	<i>Cirsium texanum</i> Buckley	Texas thistle
ASTERACEAE	<i>Eclipta prostrata</i> (L.) L.	false daisy
ASTERACEAE	<i>Erigeron tenuis</i> Torr. & A. Gray	slenderleaf fleabane
ASTERACEAE	<i>Eupatorium serotinum</i> Michx.	lateflowering thoroughwort

ASTERACEAE	Gaillardia pulchella Foug.	Indian blanket
ASTERACEAE	Gutierrezia texana (DC.) Torr. & A. Gray	Texas snakeweed
ASTERACEAE	Rudbeckia hirta L.	black eyed susan
ASTERACEAE	Solidago altissima L.	Canada goldenrod
ASTERACEAE	Symphotrichum ericoides (L.) G.L. Nesom	white heath aster
ASTERACEAE	Symphotrichum sp.	aster
ASTERACEAE	Xanthium strumarium L.	rough cocklebur
CAMPANULACEAE	Triodanis perfoliata (L.) Nieuw.	devil's-tongue
EUPHORBIACEAE	Croton monanthogynus Michx.	oneseed croton
EUPHORBIACEAE	Euphorbia bicolor Engelm. & A. Gray	snow on the prairie
EUPHORBIACEAE	Tragia brevispica Engelm. & A. Gray	shortspike noseburn
FABACEAE	Dalea candida Michx. ex Willd.	white prairie clover
FABACEAE	Desmanthus illinoensis (Michx.) McM. ex Robins. & Fern.	Illinois bundleflower
FABACEAE	Gleditsia triacanthos L.	honeylocust
FABACEAE	Lupinus texensis Hook.	Texas bluebonnet
FABACEAE	Medicago sp.	black medick
FABACEAE	Vicia ludoviciana Nutt.	Louisiana vetch
GERANIACEAE	Erodium cicutarium (L.) L'Hér. ex Aiton	Redstem stork's bill (*)
GERANIACEAE	Geranium carolinianum L.	Carolina geranium
KRAMERIACEAE	Krameria lanceolata Torr.	rattany
LAMIACEAE	Monarda citriodora Cerv. ex Lag.	lemon beebalm
LAMIACEAE	Salvia azurea Michx. ex Lam.	Azure blue sage
LAMIACEAE	Scutellaria drummondii Benth.	Drummond's skullcap
MALVACEAE	Callirhoe involucrata (T. & G.) Gray	winecup
MENISPERMACEAE	Cocculus carolinus (L.) DC.	Carolina snailseed vine
ONAGRACEAE	Oenothera speciosa Nutt.	showy primrose
OXALIDACEAE	Oxalis dillenii Jacq.	wood sorrel
PLANTAGINACEAE	Plantago virginica L.	Virginia plantain
RANUNCULACEAE	Anemone berlandieri Pritz.	tenpetal thimbleweed
RANUNCULACEAE	Ranunculus sp.	buttercup
RHAMNACEAE	Ceanothus herbaceus Raf.	Jersey tea
ROSEACEAE	Rubus riograndis Bailey	Rio Grande dewberry
RUBIACEAE	Stenaria nigricans (Lam.) Terrell var. nigricans	Stenaria nigricans
SAPINDACEAE	Sapindus saponaria L.	wingleaf soapberry
SAPOTACEAE	Sideroxylon lanuginosum Michx.	gum bully
SCROPHULARIACEAE	Agalinis sp.	false foxglove
SOLANACEAE	Physalis angulata L.	cutleaf groundcherry
SOLANACEAE	Solanum carolinense L.	Carolina horsenettle
ULMACEAE	Celtis laevigata Willd.	sugarberry
ULMACEAE	Ulmus crassifolia Nutt.	cedar elm
VERBENACEAE	Phyla nodiflora (L.) Greene	turkey tangle fogfruit
VERBENACEAE	Verbena halei Small	Texas vervain
VISCACEAE	Phoradendron tomentosum (DC.) Engelm. ex A. Gray	Christmas mistletoe

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