This study documented the vascular flora of Crawford and Cherokee counties in southeastern Kansas. Each county experienced limited collecting in recent decades. A Pittsburg State University (PSU) student (Earl Sam Gibson) summarized the flora for Crawford County in 1963, but an extensive survey had never been done for Cherokee County. Fieldwork for the present study occurred mostly in 2014 and 2015. Based on approximately 6450 newly collected specimens, vouchers at PSU (including those of Gibson), and taxa documented by Biota of North America (BONAP) (Kartesz 2019), a total of 1420 unique taxa (species, subspecies and varieties) are reported for both counties combined, including 148 families, 591 genera, and 111 non-nominal infraspecific taxa. Of these, 1177 (82.9%) are native and 243 (17.1%) are non-native. A total of 44 state and 233 county records are documented. Included were 15 species of hybrid origin and 22 that are adventive from other parts of North America. Significant among the state records is the first published adventive occurrence of the genus Pinus in Kansas. Cherokee County has 1281 taxa (including 81 county records), whereas Crawford County includes 1139 taxa (and 152 county records). An important finding of our study, along with those of other recent floristic studies, is that vascular plant distributions at the state and county levels in the U.S.A. are less well documented than probably assumed. This is especially true for weedy taxa occurring in highly agricultural and industrial counties, as well as taxa with small, inconspicuous flowers and inflorescences, and counties relatively distant from universities. Undocumented occurrences of such taxa may adversely affect interpretations and distribution patterns of abundance, as for example when modeling plant distributions.
origin híbrido y 22 que son adventicias de otras partes de Norte América. Significantes entre las citas para el estado es la primera ocurrencia publicada de una especie del género *Pinus* en Kansas. El condado de Cherokee tiene 1281 taxa (incluye 81 citas del condado), mientras el condado de Crawford incluye 1139 taxa (y 132 citas para el condado). Un hallazgo importante de nuestro estudio, junto con otros estudios florísticos recientes, es que las distribuciones de plantas vasculares a los niveles de estado y condado en U.S.A. están menos documentados de lo que se asume. Esto es especialmente cierto para las malas hierbas que aparecen en condados altamente agrícolas e industriales, así como taxa con flores pequeñas e inflorescencias, inconspicuos, y condados relativamente alejados de universidades. Ocurrencias no documentadas de tales taxa pueden afectar adversamente las interpretaciones y patrones de distribución de la abundancia, como por ejemplo cuando se modelizan las distribuciones de plantas.

**INTRODUCTION**

Crawford and Cherokee counties are located in the southeastern corner of Kansas (Fig. 1). Of roughly equal sizes, Crawford County covers approximately 1541 km² (595 mi²) and Cherokee County ca. 1533 km² (ca. 592 mi²), totaling ca. 3074 km² (1187 mi²). Both have relatively diverse vascular floras among counties in Kansas, including approximately half of the known vascular plant flora for the entire state (Kartesz 2019).

Both counties have experienced sporadic and occasionally more focused collecting. For example, working from the University of Kansas, H.A. Stephens collected over 90,000 specimens across the Great Plains in the 1960s and 70s, including southeastern Kansas, which were summarized in *Atlas of the Flora of the Great Plains* (Barker & Barkley 1977) and later in *Flora of The Great Plains* (GPFA 1986). Various projects by the Kansas Biological Survey have evaluated smaller parcels in these counties (see Pryer 2018), and a few masters’ theses from Pittsburg State University studied plant diversity in Crawford County, always on small areas and typically from a perspective of plant succession (Bass 1949; Featherstone 1952; Nelson 1952).

The only county-wide survey of these counties was that of Earl Sam Gibson (1939–2011), who surveyed the entirety of Crawford County nearly sixty years ago (Gibson 1963). (Gibson eventually taught at Missouri Southern State University [then Missouri Southern College] in Joplin, eventually becoming the Chair of the Department of Biology.) Distributional data of plant taxa from the earlier MS theses (Bass 1949; Featherstone 1952; Nelson 1952) at PSU were incorporated by Gibson (1963). However, no extensive floristic surveys had ever been done for Cherokee County.

Bordered by Missouri to the east and Oklahoma to the south, this region lies within the ecotone between the eastern deciduous forest and tallgrass prairie. The landscape is underpinned by a geology that transitions significantly moving from south to north. The Ozark Plateau in the southeastern corner in Cherokee County contains the region’s oldest bedrock; a Mississippian limestone overtopped by mixed deciduous oak hickory forests. The remainder of Cherokee County and about half of Crawford County is underlain by Pennsylvanian bedrock in the Cherokee lowlands, where old surface coal mines are prevalent alongside the prairies. Running diagonally, across the northeast to southwest half of Crawford County are the Osage Cuestas. These are parallel ridges comprised of gentle slopes on the west side and steeper ones to the east; alternating between shale and limestone (Buchanan 2010). Lying between different ecosystems, and having the state’s highest average annual precipitation, it is not surprising that this area of Kansas supports a diverse flora.

The first attempt at documenting the flora of southeastern Kansas was by Leland J. Gier (1931) in his publication *A Preliminary Key to the Herbaceous Dicotyledons of the Cherokee Strip of Southeast Kansas*, which included only about 200 species. The *Flora of Kansas* (Gates 1940) and *A Manual of the Flowering Plants of Kansas* (Barkley 1968) were the first two extensive attempts at documenting the flora of the state. Twenty years later, the first edition of *Flora of The Great Plains* (GPFA 1986) was published, which included southeastern Kansas. In the most recent floristic work, the Kansas Biological Survey established a few natural area sites within Cherokee County in 2005 (Loring et al. 2005), but plant collecting was limited. A floristics survey by two PSU faculty members, Bennington Ross and Harry H. Hall, focused on “Crawford County State Park” (Ross & Hall 1939); however, that area is now known as Mined Lands Wildlife Area No. 1, and the current Crawford County State Park is located farther north between Farlington and the southern border of Bourbon County. A master’s thesis at Pittsburg State University study focused on the systematics of Vitaceae (Kirkpatrick 1973). Although not extensively collected, southeastern Kansas had experienced sporadic collections historically. These collections are housed in several herbaria, including the T.M. Sperry Herbarium, Kansas State
University Herbarium, McGregor Herbarium (University of Kansas), H.A. Stevens Herbarium at Emporia State University, the Wichita State Herbarium, and Missouri Botanical Garden.

**Climate.**—Southeastern Kansas, located in the center of the U.S.A., has a humid continental climate. It is an area with considerable seasonal disparity of average temperatures. Summers tend to be hot and winters typically have one to several (and often protracted) spells of freezing weather. The region experiences weather extremes from severe thunderstorms, ice storms, and tornados.

Based on data obtained from the National Oceanic and Atmospheric Association (NOAA) weather station (GHCND:USC00141740) in Columbus, KS, the average annual precipitation for southeastern Kansas is approximately 117 cm (46 in), with an average temperature of 14°C (57 °F) (NCDC). The temperature ranges from an average minimum of -3.33°C (26°F) to an average maximum of 31°C (88°F). These averages summarize annual data between 1981–2010. Because of the relatively flat topography of the region, weather patterns vary minimally across the sampling area; thus only one weather station is cited.

**Geography.**—Lying within a transitional zone, southeastern Kansas comprises three main physiographic regions (Fig. 2). Cherokee County specifically represents a triangle of approximately 129 km² of the Ozark Plateau (Buchanan 2010) in its southeastern corner, while the Cherokee Lowlands dominate the remainder of the county, extending through half of Crawford County (Buchanan 2010). The Osage Cuestas comprise much of northern half of Crawford County. Persisting strip pits from surface coal mining activities that terminated in the 1970s are prevalent throughout both counties (Buchanan 2010; Bailey & Hooey 2017). On the map of Kansas published by the US Geological Survey, the Ozark Plateau is known as the Springfield Plateau, and the Cherokee Lowlands as the Cherokee Plains (Chapman et al. 2001).

**Ozark plateau:** The small occurrence of the Ozark Plateau in southeastern Cherokee County represents the oldest sediment exposure in Kansas. It was formed in the Mississippian era, about 320–360 million years ago (Fig. 2) (Buchanan 2010). At that time, seas covered much of the land areas in this region and carved tunnels into the underlain bedrock. The Ozark Plateau bedrock, comprised primarily of a soft limestone and embedded with harder chert and flint deposits, eroded over time, leaving most of the chert and flint deposits
intact. Higher elevations in this area are covered with this weathered cherty limestone gravels and various soil types (Buchanan 2010).

**Cherokee lowlands:** The Cherokee Lowlands, comprised of Pennsylvanian shale and sandstone bedrocks, dominate most of Cherokee County and extends approximately halfway into Crawford County (Fig. 2). During the Pennsylvanian era, seas and swamps covered most of Kansas. This region lay peripherally to these seas, and developed into vast swampland. The vegetative detritus that settled into the bottom of these areas formed coal veins (Buchanan 2010), which were mined extensively in the Cherokee Lowlands. Spoil banks and strips of watery pits litter the landscape.

**Osage cuestas:** The Osage Cuestas comprise the other half of Crawford County and extend into the north-west corner of Cherokee County (Fig. 2). The cuestas form parallel ridges that slope gently westward, but more steeply eastward. These slopes alternate between shale and limestone deposits (Buchanan 2010). The highest elevations in the region occur on the Osage Cuestas at approximately 300 meters.

**Land use.**—Past surface mining is evident across much of Crawford and Cherokee counties. The most visible of these are the strip pits, which have evolved into small (but sometimes deep) artificial ponds or lakes, dotting much of the landscape. Coal mining, once the dominating profession here, dwindled in southeastern Kansas in the 1970’s and eventually ceased after legislation was passed regulating mining companies and required cleanup (Brady 2018).

Prior to 1969, coal companies often extracted coal leaving the overburden without attempting reclamation. In 1969 the State of Kansas passed the Mined-Land Conservation and Reclamation Act, Kansas Statute Annotated 49–401 et.seq., which required coal companies to obtain permits, follow reclamation guidelines, and submit to monthly monitoring (Kansas Department of Health and Environment: Regulatory Program 2018). Thereafter, in 1977 the Surface Mining Control and Reclamation ACT (SMCRA) was passed, which established federal guidelines for coal companies (Kansas Department of Health and Environment: Abandoned Mine Land Program 2018). Companies were required to reclaim lands by refilling coal extraction areas’ holes,
and reseeding these areas. The reclamation efforts were to be monitored closely, though already abandoned pits were not reclaimed; today it is common to find both reclaimed and un-reclaimed lands throughout.

Most lands with public access in southeastern Kansas are former strip mines that are now overseen by Kansas Department of Wildlife Parks and Tourism. A total of 47 Mined Land Wildlife Areas occur throughout Crawford and Cherokee counties, totaling approximately 14,500 acres (KDWPT pamphlet). Strip pits that were either un-reclaimed or too deep to fill form small ponds and lakes, which are now stocked with fish. Many of these reclaimed areas are used currently for public recreation, with hunting and fishing being the most popular activities.

Two toxic ores, lead and zinc, were commonly extracted through underground mining activities throughout the Ozark Plateau. These ores were mined extensively from 1870–1970 in the city Galena, in Cherokee County and surrounding areas. Over 2.9 million tons of zinc and 650 thousand tons of lead were extracted from Kansas during that interval (McCauley et al. 1983). To obtain these ores, the cherty rock, common to the Ozark Plateau, was crushed and deposited in large piles known as chat piles, which still dot the landscape along the southern border of Kansas (Buchanan 2010). These piles remain heavily contaminated with lead, zinc, and cadmium and contribute significantly to the heavy metal contamination in southern Cherokee County, southwest Missouri, and northeast Oklahoma (Beyer et al. 2004; Schmitt et al. 2006; Angelo et al. 2007; Merwe et al. 2011; Manders & Aber 2014).

Farming became the most dominant land use in southeastern Kansas after the cessation of mining. Extensive areas of the region are tilled for cropland or used for cattle grazing. The most common crops include corn, wheat, soybeans, sorghum, red clover, and hay (fescue grass, Festuca and Schedonorus).

Soils.—Silt loams are the most common soils in the Cherokee Lowlands of Cherokee and Crawford counties; the most common of which are called the Parsons silt loam. They dominate the Osage Cuestas, particularly in the northwest corner of Crawford County, covering over 90% of the soil types, representing the most common type throughout the study area. However, they are less abundant here than in the Cherokee Lowlands because the cuestas have a considerable diversity of soil types, including silt loams, silty clay loams, and silty clays. The center of Crawford County contains the Zaar silty clay, whereas the northeastern corner contains more silty clay loams (Web Soil Survey 2016).

Silt loams are the dominant soil type in the Ozark Plateau in Cherokee County. Of these, the Clarksville, a very cherty silt loam type and Nixa, a very gravelly silt loam are most prevalent. The remainder of the Ozark Plateau is composed of a variety of silt loams, whereas silty clays are typically absent (Web soil survey 2016). To a lesser degree, loams and silty clay loams occur throughout the region (Web Soil Survey 2016).

MATERIALS AND METHODS

Collecting and processing.—Plant specimens were collected from early spring through fall in both 2014 and 2015, with a few additional collections from 2016 through 2019. Searching a given field site employed the process of “intelligent meandering,” mentioned and used by some floristicians throughout North America (e.g., Legler 2010). The first author, along with occasional assistants, collected in all habitat types and physiographic regions; the second author contributed several reports and assisted in the spring and late summer of the first year and sporadically thereafter. Intensive efforts were made to collect and document all taxa occurring in the counties, except those believed to be purposefully planted. We made no attempt to determine if a taxon’s presence was merely a waif.

When possible, the entire plant was collected, including its underground parts. Cuttings of woody plants of up to ca. 35 cm long were taken from the branch tips. All specimens were marked relative to their specific collection sites. During the first collecting season, one to several duplicates were made for most specimens, while fewer duplicates were made the following year.

Specimens were sorted by location and pressed. Most roots were rinsed and trimmed when necessary. All specimens were frozen at ca. -20°C for one week before entering the Sperry Herbarium.

Each physiographic region (ecoregion) was sampled monthly, although the Cherokee Lowlands and
Osage Cuestas were collected more frequently than the Ozark Plateau because of their large sizes. Collecting trips typically alternated between Crawford and Cherokee counties over a one or two-week period to ensure the likelihood of collecting whatever was flowering or fruiting at a given time in each county. This was subject to change depending on weather conditions.

Rare species, such as the orchid *Platanthera lacera*, were collected only when fifteen or more individuals were observed, then only one specimen was taken. If greater than thirty plants were observed, then two plants were taken for exchange material. If the population exceeded ca. 100 plants then three were collected. To minimize pressure on each population, most orchids were removed above the apex of the root crown.

Biases in plant collecting are well documented amongst herbarium collections (Daru et al. 2017). Since southeastern Kansas has little topographic relief, an elevation bias does not apply to our region. However, among collections in the T.M. Sperry Herbarium at Pittsburg State University (KSP following Thiers 2019), which houses among the largest number of collections from Cherokee and Crawford counties, certain collection biases are evident. These include disproportionate collecting efforts during the dominant growing seasons, collections in close proximity to major roads, spatial biases (e.g., relative distance to the nearest herbarium), and a large portion of the collections have been made by relatively few collectors. Some biases are largely unavoidable. For example, southeastern Kansas and much of the Great Plains are divided into a road grid of 1 × 1 miles. As such, most previous collections are within approximately 100 meters from a road, and the distance to the nearest road is not necessarily a reliable indicator of bias in this region, since few areas are less than 0.5 mile from the nearest navigable road.

Given that most land in Crawford and Cherokee counties is private, and fewer collections typically have been made on private lands, we attempted to mitigate previous spatial sampling bias by collecting on private (with landowner permission) and public lands. Private properties were surveyed mostly to maximize geographical and ecological coverage. Access to private properties occurred largely in spring of 2015, resulting in 2816 collections, or approximately 43.3% of the total. Although many landowners allowed access, not all parts of the properties could be surveyed in depth. As such, successive collecting efforts were focused on areas that appeared to have higher levels of diversity.

Other actions attempted to reduce collecting biases during this study. To reduce temporal bias, collections were made throughout the growing season, including a few in winter. Reducing individual collecting bias can be more difficult. Floristic studies of small geographic areas generally are done by a single individual, which may itself impose a certain degree of collecting bias. This level of bias can also apply to collections at smaller repositories such as that of the T.M. Sperry Herbarium, where relatively few collectors contribute the large majority of collections. One way to reduce collecting bias is to increase the number of collections made for a particular geographic area. With approximately 6450 new specimens from private and public lands, the study hopefully largely avoided any personal collection biases. Stated another way, when fully accessioned and integrated, specimens from this study increased the holdings of the Sperry Herbarium by over nine percent, and likely represent fifteen percent or more of all collections from Crawford and Cherokee counties. The collections from this study thereby should reduce whatever regional biases might have existed for Cherokee and Crawford counties from having only a few “heavy hitting” collectors from these two counties (Bebber et al. 2012).

**Identification of plant specimens.**—*Steyermark’s Flora of Missouri* (Yatskievych 1999, 2006, 2013) was the primary authority used for plant identifications. With few exceptions, taxonomic names and ranks, as well as distributions at the state and county levels, followed *Biota of North America’s Floristic* (BONAP; Kartesz 2019). BONAP not only provides the accepted nomenclature for genera, species, and infraspecific North American taxa as currently curated in the T.M. Sperry Herbarium, and follows the familial classification of the Angiosperm Phylogeny Group IV (APG IV 2016), it also indicates (where known) previously misidentified reports at the state and county levels, and strives to voucher as many reports as possible. It also is the most consistently updated source of information nationally at the state and county level, and accepts vouchered reports from reliable contributors.
Secondary sources used for identification or confirmation included several volumes of *Flora of North America*, *Flora of the Great Plains* (GPFA 1986), and Shinners & Mahler’s *Illustrated Flora of North Central Texas* (Diggs et al. 1999). For several genera we used on keys in *Flora of North America*, including Bromus (Pavlick & Anderton 2007), Muhlenbergia (Peterson 2003), and Amaranthus (Mosyakin & Robertson 2003). Of particular note, the treatment in *Flora of North America* was used for the identification of the grass genus Dichanthelium (Freckmann & Lelong 2003), but we report names as recognized by Kartesz (2019). Since the taxonomy of Dichanthelium is particularly difficult, with various revisions underway (e.g., Thomas 2015; Thomas pers. comm., 2018), taxonomic boundaries of some taxa will likely change.

In the relatively few cases listed below the taxonomic names or ranks were modified from Kartesz (2019) and/or from APG IV (2016), including:

*Acer* is maintained in Aceraceae based on the work of (Buerki et al. 2010), as opposed to its inclusion in Sapindaceae (Kartesz 2019; APG IV 2016).

Fumariaceae are placed in Papaveraceae as per APG IV (2016), instead of Fumariaceae.

*Bromus commutatus* and *Bromus racemosus* (Poaceae) are recognized as distinct following *Flora of North America* (Palvick & Anderton 2007) and Yatskievych (1999), who maintain these as distinct.

Kartesz (2019) occasionally recognizes quadrinomials, as for example in *Symphyotrichum lanceolatum* (Asteraceae). However, the T.M. Sperry Herbarium does not recognize varieties within subspecies based on the ontological aversion of the the second author of recognizing two hierarchical levels of variation within a species, when populations within a species themselves are not expected to be hierarchical. We therefore follow the taxonomy of Yatskievych (2006) in recognizing only one level of infraspecific variation.

**Analysis.**—All specimen data were entered into an Excel™ database using DarwinCore data standards (Wieczorek et al. 2012) and uploaded to Symbiota (Gries et al. 2014). They are available through SEINet, and the portal of the *Consortium of Northern Great Plains Herbaria* (http://ngpherbaria.org/portal/index.php?refurl=/portal/index.php?) and other online aggregators such as the Global Biodiversity Information Facility (GBIF 2019) in Copenhagen (http://www.gbif.org/), the only global database that attempts to collate data worldwide. All locality data can be found on those sites; barcodes are being added to specimens as they are mounted. (At the time of the revised submission, only about five percent of the specimens have been mounted.)

Geo-coordinates and elevations were taken for each collecting location using the IOS app, Elevation for Real (EFR), which is produced by homedatasheet.com INC. This app uses the USGS web service to provide GPS coordinates for locations with a horizontal confidence radius of 5 m. Sometimes Google Earth™ was consulted at the lab if the mobile device was not working or within reach during collection. Comparing this app to Google Earth and another GPS devices used in the Sperry herbarium, EFR gave the same reading as the others mentioned for the first five decimal places.

To confirm state and county records, the currently accepted names and synonyms (Kartesz 2019) were checked against other sources. These records also were checked against online specimen data available from Kansas State University Herbarium and the McGregor Herbarium (University of Kansas). Names and potential synonyms also were checked against Gibson (1963). When unable to confirm a report for Crawford County by Gibson (1963), either at KSP or other herbaria in Kansas, we did not include that name. For state records, specimens were checked by the first and second authors. All possible state records, except for easily identified specimens, were confirmed against specimens in the Missouri-Illinois reference collection at the Missouri Botanical Garden, or at the McGregor Herbarium at University of Kansas.

Taxa that we collected that were not listed in Kartesz (2019) by any currently accepted names or synonyms for Crawford or Cherokee counties are reported as county (or state) records. It is widely understood among taxonomists that older specimens may exist in other herbaria (possibly unreported in the literature or misidentified) that represent some of the records listed. However, given that they are not reported in any of our regional or national sources, this article may be considered the first official report for many county and state records.

**Reporting.**—All collections were deposited in the T.M. Sperry Herbarium at Pittsburg State University. Collection numbers are primarily of the first author (Young 1–400; Pryer 401–6425), including those that were
modified later via adding suffixes a and b when multiple taxa were collected for the same specimen number. This increased the total sequence of collecting numbers to 6497, although some later were discarded due to absence of fertile material. Relevant collections of the second author to this study included over fifty of Snow (10,736–10,776; 10,785–10,786; 10,974; 10,980; 11,138). Following current data in Kartesz (2019), taxa are reported as native or non-native to North America; rare, noxious, extirpated, or adventive (a native North American taxon occurring beyond its original range) and (where applicable) as State or county records. In a few cases barcode numbers of the Sperry Herbarium are indicated in parentheses of older collections in square brackets. This work strived to meet high standards for floristics research proposed by Palmer and Richardson (2012) regarding categories of information and their levels of detail.

RESULTS AND DISCUSSION

Taxonomic summary.—A total of 1420 unique taxa (species and subspecies or varieties) were documented for Crawford (1139) and Cherokee (1281) counties based on new collections and vouchered reports from Gibson (1963) and Kartesz (2019). Approximately 6450 specimens were collected for this survey, resulting in 1021 vouchered taxa. Thus, despite two complete field seasons and sporadic opportunistic collecting after the 2014–2015 field seasons, only 71.9% of the vascular plants known to occur in the two counties were collected. This is suggestive of the time, effort, geographical coverage, and intensity of sampling required to fully document the flora of a given area, even at the county level. As another example of the effort needed to fully document a flora, species accumulation curves across five common habitat types from a floristic survey in northeastern New Mexico had not yet asymptoted after two complete field seasons that included over 9600 newly collected specimens (Schiebout et al. 2008).

Collected taxa that are absent for either Cherokee or Crawford counties in BONAP (Kartesz, 2019) as accepted names or synonyms were considered county (or state) records. The 399 known taxa for the two counties (combined) that were not collected for this project were confirmed with vouchers from Gibson’s vouchers in the Sperry Herbarium or by reports from BONAP (Kartesz 2019). Of the 1021 taxa collected, 494 occurred on the Ozark Plateau, 578 on the Osage Cuestas, and 808 in the Cherokee Lowlands. Assignments to these three major ecoregions were not made for taxa that we did not collect (See Appendix for distribution of taxa by ecoregions.)

The overall totals included 148 families and 591 genera (Table 1). Angiosperms comprised 98.0% of the taxa, with 1391 specific and infraspecific taxa, including 135 families and 570 genera (Table 1). Ferns and fern allies accounted for approximately 1.8% (11 families; 17 genera; 25 taxa) and gymnosperms approximately 0.3% of the total (2 families; 3 genera; 4 taxa) of the overall taxa (Table 1). Of the 1420 specific and infraspecific taxa, 1177 (ca. 82.9%) are considered native to the North America (Kartesz 2019). Twenty-two taxa (1.5%) in the area are native but considered adventive from elsewhere in North America. A total of 243 taxa (1.7%) are considered “rare” in BONAP, based on information provided primarily from the Kansas Biological Survey (J. Kartesz, pers. comm.). Eight taxa presently are listed as “extirpated” in BONAP, but given the number of county and state records we discovered, reports of extirpated should not be taken as definitive.

The ten largest families collectively comprise approximately 53.1% of the flora (750 taxa), but just the five largest comprise approximately 41.5% of the diversity (586 taxa). The ten largest families typically comprise a large percentage of the taxa in similar floristic studies for most continental U.S. counties (e.g., Snow 1994; Hazlett 2004; Schiebout et al. 2008; Legler 2010). Poaceae (181 taxa; 12.7% of the total unique taxa) was the largest family, followed by Asteraceae (180; 12.7%), Fabaceae (106; 7.5%), Cyperaceae (92; 6.5%), Rosaceae (47; 3.3%), Brassicaceae (41; 2.9%), Lamiaceae (40; 2.8%), Apiaceae (29; 2.0%), Ranunculaceae (29; 2.0%), and Plantaginaceae (27; 1.9%).

The ten largest genera comprise approximately 12.8% of the total (181 taxa), including: Carex (54 taxa), Symphyotrichum (19), Euphorbia (15), Quercus (15), Juncus (15), Solidago (14), Dichanthelium (13), Asclepias (13), Viola (12), and Desmodium (11). Many species are near the western edges of their geographical distribution. See the Appendix (Annotated Checklist) for the complete list of taxa.
Non-native and invasive taxa.—Non-natives were represented by 243 taxa (17.1% of the unique taxa), a figure considerably higher than some areas (e.g., 9.3% [Schiebout et al. 2008] and 10.5% [Larson et al. 2014]). Of the 1420 total taxa, 54 (3.8%) are considered noxious by various state agencies. The noxious taxa were spread across 14 families and 30 genera, including 23 considered native and 31 non-native. Convolvulaceae had the highest number with 11 noxious taxa, due primarily to the genus *Cuscuta*. The Cherokee Lowlands had the highest number of noxious plants with 33 taxa. Twenty-five noxious taxa were recorded for the Osage Cuestas and 15 for the Ozark Plateau.

The significant percentage of non-native taxa is unsurprising given that both counties have been surface-mined or farmed heavily. The tallgrass prairies historically native to southeastern Kansas now are restricted to small remnant patches, such as the O’Malley Prairies owned by Pittsburg State University, and some privately owned parcels. Roadside in southeastern Kansas sometimes retain remnant prairie patches. Gibson (1963) correctly predicted that a majority of the remaining prairie parcels he had surveyed would disappear. Much of his collecting was from the northwest corner of Crawford County, but most of that area now has been tilled, with few existing native prairie remaining. According to several local landowners (pers. comm. to SYP), some remnants are in danger of being converted to cropland.

Many of the prairie remnants in southeastern Kansas are rarely if ever burned. The lack of fire may promote the invasive non-native species, including fescue grasses (*Schedonorus* and *Festuca*) and ox-eye daisy (*Leucanthemum*). Longer absences of fire can give way to woody species such as the native cedar (*Juniperus virginiana*) and green ash (*Fraxinus americana*). Given that some landowners take great pride in maintaining native prairies, there is room for hope that some will remain in perpetuity.
Callery Pear (*Pyrus calleryana*), also known as Bradford Pear, has naturalized in both counties and is documented in both for the first time. It is native to China and was imported to the U.S.A. in 1917 to help combat fire blight in the pear tree, *Pyrus communis* (Culley & Hardiman 2007). It has become a common landscape tree because of its fast growth, pyramidal growth habit, and abundant white flowers in early spring. However, it is now considered an invasive species occurring across the eastern half of the U.S.A. and reported westward into California and Utah. The Missouri Department of Conservation, Kansas Department of Wildlife Parks and Tourism, Kansas Wildlife Federation, the New York State Urban Forestry Department and others are requesting that people stop planting this tree, despite its attributes. Efforts are underway in several states, including Kansas to remove the species because of its invasive tendencies. Another widely planted and now weedy tree is *Elaeagnus umbellata*, which is spreading rapidly in some areas in the Cherokee Lowlands.

**Rare species.**—Of the approximately 500 rare taxa tracked for Kansas (Kartesz 2019), 243 (17.1% of the total unique taxa) have been reported in Crawford or Cherokee counties. Corroborating current data suggesting they are rare, 127 (52.3%) of the 243 rara taxa were not found during the present study. Cyperaceae included the most rare taxa (36). The most rare taxa at the generic level was *Carex* (21 taxa, of which 14 were collected during this study). Rare taxa collected during this study included 55 from the Ozark Plateau, 50 in the Cherokee Lowlands, and 27 in the Osage Cuestas (with many occurring in more than one of these ecoregions). Limestone bedrocks in the Ozark Plateau comprise only a small part of Cherokee County, but plant species often have high fidelity on these calcareous substrates (Yatskievych 1999). Cherokee County is the only one in Kansas with this bedrock, which likely explains why it also has the most rare taxa among counties in the state (Kartesz 2019). The Cherokee Lowlands, which comprise the remainder of Cherokee County, have a relatively small total coverage in Kansas.

**Species of special concern and rare taxa.**—Mead's milkweed (*Asclepias meadii*; Apocynaceae) and the western prairie fringed orchid (*Platanthera praeclara*; Orchidaceae) are federally listed as Threatened. Their historical ranges extended into southeastern Kansas. *Asclepias meadii* has been reported for most of the eastern tier counties of Kansas, including Crawford County (USFWS 2003; Kartesz 2019), and Kindscher et al. (2009) indicated that eastern Kansas is the core of its range. *Platanthera praeclara* has been reported in several of the northeastern counties in Kansas and also Crawford County. Despite considerable effort to relocate these species, no populations were found in Cherokee or Crawford counties. The state of Kansas does not report plants as becoming species of concern, threatened, or endangered. However, it does list taxa it considers rare. Of the 24 taxa listed as rare for Kansas (Kartesz 2019), 18 were collected as county records for Crawford County and 6 for Cherokee County.

**Noxious taxa.**—Designation of a taxon as noxious is made individually by each state, and may apply to native or non-native taxa. A designation of noxious in Kansas applies to six of the county records and one state record.

**New records for Kansas.**—Although many represent relatively short-distance range extensions or fill-ins between neighboring counties, a higher number of state and county records were discovered during this study than expected. Forty-four taxa new to Kansas are reported here, representing 26 families and 42 genera (Table 2). The current number of vouchered, unique taxa in Kansas is 2479 (Kartesz 2019). Interestingly, only approximately one quarter of the state records (12; 27.3%) were non-native taxa, and of these only three are adventive from ornamental plantings (*Leucojum aestivum* subsp. *aestivum*, *Narcissus poeticus*, and *Syringa vulgaris*). One, *Allium vineale* subsp. *compactum*, is considered noxious in surrounding states, and all taxa of *Allium* are considered noxious in Kansas.

A total of 233 county records are reported for combined totals of Crawford (152) and Cherokee (81) counties, representing 193 unique taxa. (Country records herein exclude designations of taxa as Kansas state records.) Of the 193 unique taxa representing new county records, 55 are non-native and 138 are native. Somewhat unexpectedly, the number of county records for taxa native to North America is 257% (= 139/54 [100%]) higher than the non-native taxa. These ratios for southeast Kansas indicate that new county and state records represent substantially more than uncollected non-native (and often weedy) taxa.
Table 2. First published state records for Kansas, including counties in which they were collected and nativity status; see Appendix for voucher specimens and other discussions.

<table>
<thead>
<tr>
<th>Family</th>
<th>Species Name</th>
<th>County collected</th>
<th>Nativity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alliaceae</td>
<td>Allium vineale subsp. compactum</td>
<td>Cherokee; Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td>Altingiaceae</td>
<td>Liquidambar styraciflua</td>
<td>Cherokee; Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Amaryllidaceae</td>
<td>Leucojum aestivum subsp. aestivum</td>
<td>Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td></td>
<td>Narcissus poeticus</td>
<td>Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td>Aquifoliaceae</td>
<td>Ilex opaca var. opaca</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Araliaceae</td>
<td>Hedera helix</td>
<td>Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td>Asteraceae</td>
<td>Euthamia leptochephal</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Fleischmannia incarnata</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Solidago arguta var. caroliniana</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td>Bignoniaceae</td>
<td>Catalpa ovata</td>
<td>Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td>Blechnaceae</td>
<td>Woodwardia areolata</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Boraginaceae</td>
<td>Myosotis macroperma</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Brassicaceae</td>
<td>Cardamine hirsuta</td>
<td>Cherokee; Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td></td>
<td>Erysimum capitatum</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Caryophyllaceae</td>
<td>Arenaria serpilifolia var. tenuior</td>
<td>Cherokee</td>
<td>Non-native</td>
</tr>
<tr>
<td></td>
<td>Stellaria neglecta</td>
<td>Cherokee; Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td>Convolvulaceae</td>
<td>Cuscuta compacta var. compacta</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Cyperaceae</td>
<td>Carex amphibia</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Fabaceae</td>
<td>Desmodium viridiflorum</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Lathyrus venosus</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Lespedeza frutescens</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td>Fagaceae</td>
<td>Quercus falcata</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Quercus michauxii</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td>Hypericaceae</td>
<td>Hypericum gymnanthum</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Juncaceae</td>
<td>Juncus secundus</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Lamiaceae</td>
<td>Callicarpa americana</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Salvia farinacea</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Oleaceae</td>
<td>Syringa vulgaris</td>
<td>Cherokee</td>
<td>Non-native</td>
</tr>
<tr>
<td>Pinaceae</td>
<td>Pinus taeda</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td>Poaceae</td>
<td>Bromus sterilis</td>
<td>Cherokee; Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td></td>
<td>Diarrhena americana</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Elymus riparius</td>
<td>Cherokee; Crawford</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Eragrostis pilosa var. pilosa</td>
<td>CR</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Microstegium vimineum</td>
<td>Cherokee</td>
<td>Non-native</td>
</tr>
<tr>
<td></td>
<td>Paspalum dilatatum</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Sorghum bicolar subsp. drummondi</td>
<td>Cherokee</td>
<td>Non-native</td>
</tr>
<tr>
<td></td>
<td>Urochloa platyphylla</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
<tr>
<td>Ranunculaceae</td>
<td>Ficaria verna subsp. calthifolia</td>
<td>Cherokee</td>
<td>Non-native</td>
</tr>
<tr>
<td>Rosaceae</td>
<td>Geum virginianum</td>
<td>Cherokee; Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Salicaceae</td>
<td>Populus deltoides subsp. deltoides</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Smilacaceae</td>
<td>Smilax glauca</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td>Solanaceae</td>
<td>Solanum americanum</td>
<td>Crawford</td>
<td>Native</td>
</tr>
<tr>
<td></td>
<td>Solanum sarrachoides</td>
<td>Cherokee; Crawford</td>
<td>Non-native</td>
</tr>
<tr>
<td>Violaceae</td>
<td>Viola affinis</td>
<td>Cherokee</td>
<td>Native</td>
</tr>
</tbody>
</table>

Some taxa collected previously in Kansas, such as Solanum sarrachoides, Eragrostis pilosa var. pilosa, and Allium vineale subsp. compactum, to the best of our knowledge had not been published (Kartesz 2019). A few to many specimens of each were found during this study in T.M. Sperry Herbarium (Pittsburg State University) and R.L. McGregor Herbarium (University of Kansas). In the case of Eragrostis and Allium, our infraspecific designations are not recognized at R.L. McGregor Herbarium, although these taxa were observed among specimens there (SYP, pers. obsv., March 2018). To re-emphasize, these taxa have been present in Kansas for some time, and their reports here reflect a discrepancy of current taxonomic concepts.

**Range expansions.**—Several surprising range expansions were noted. For example, Stellaria neglecta (Caryophyllaceae) was known previously from Newton County, Arkansas (ca. 200 km). Although the first
The author confirmed this taxon in Kansas early in 2014, its regional occurrence was noted by Snow et al. (2017) in Ottawa County, Oklahoma. Interestingly, *Stellaria neglecta* had been recorded previously only in eleven counties across the U.S.A. (Kartesz 2019). Perhaps because of its non-native status, it had been reported infrequently, and in fact most floras do not include it in keys and descriptions. It closely resembles *S. media*, the common chickweed that occurs across the U.S.A., differing by its conical tubercles on the mature seeds, in contrast to the hemispherical tubercles of *S. media*. Collections of *S. neglecta* documented in Crawford and Cherokee counties comprise almost half of the collections made of *Stellaria* for this study. It likely is common in surrounding counties as well.

A second surprising range expansion was *Ficaria verna* subsp. *calthifolia* (Ranunculaceae), a non-native taxon with the closest reported occurrence being in St. Louis County, Missouri, ca. 400 km to the east. The specimens occurred in low-lying and moist areas, which are abundant in the Cherokee Lowlands. Most documented records for this species, including all of the recognized subspecies, occur along the East coast, with a sparse occurrence into the Midwest. Nesom (2008) reported it naturalizing in Texas and later noted that the population continues to grow locally (Nesom 2015). It was first introduced to the U.S.A. in the 19th century as a garden ornamental (Post et al. 2009). The specimens collected in Kansas were found growing abundantly on a private property in Cherokee County. The owner, who is now retired, recalls it as being common on his property throughout most of his lifetime, but he did not plant it (anonymous pers. comm. to SYP, 2014). Its origin in Kansas is unknown, and on the property it is abundant in areas that are neither landscaped nor mowed. Post et al. (2009) also indicated that *Ficaria verna* and its several subspecies are likely to naturalize where introduced in New England. They expected its existence in Kansas in low irrigated areas or wetlands, though unirrigated areas of Kansas are usually too arid for this species to persist. Southeastern Kansas has more average annual precipitation than the rest of the state, thus its continued naturalization within the region is likely.

A comparison of the specimens of *Ficaria verna* subsp. *calthifolia* (Ranunculaceae) was made with materials from Missouri-Illinois Reference collection of Missouri Botanical Garden. Our materials key out well using *Flora Europaea* (Tutin 1964), except that the achenes were mostly glabrous. The specimen keys out well using Post et al. (2009), as the leaves are crowded at the base, not on elongated stems, and are not 4 × 4 cm or less.

A specimen of *Catalpa ovata* (Bignoniaceae) was collected from a pasture in Crawford County. The specimen was a small tree not planted by the owner, but subsequently cut during haying season. A dense patch of suckering shoots was observed the following year. No additional eradication measures were planned (anonymous pers. comm. to SYP, 2014). *Catalpa ovata* has been recorded for 12 states, mostly northern New England states, to West Virginia, Ohio, extending into Pennsylvania, Minnesota, and Wisconsin. The closest records to Kansas are from Boone (ca. 300 km) and Crawford (ca. 325 km) counties in Missouri. It was reported in one county of Nebraska, but eradicated from the state (Kartesz 2019). The genus *Catalpa* was planted widely, with significant plantings also of *Ailanthus ailanthus* (ailanthus), in the long-defunct St. Louis-San Francisco (“Frisco”) Tree Farm in Farlington, about 18 km to the north-northwest from where *C. ovata* was collected. However, the last tree harvests occurred in 1918 (Nelson 1952). It is possible that farm was a source of seed to the area where it was collected for this study.

Our records of *Allium vineale* subsp. *compactum* (Alliaceae) are not surprising, but noteworthy. It is considered noxious in surrounding states. This taxon has been reported only in four states and eight counties nationwide (Kartesz 2019), though some of these reports may be due to taxonomic confusion. *Allium vineale* subsp. *vineale* is widespread throughout the eastern half of the U.S.A., and some to possibly many of those collections may be subspecies *compactum*; moreover, some herbaria may not recognize this taxon at the infraspecific level. For instance, both expressions were observed in the T.M. Sperry Herbarium and R.L. McGregor Herbarium, not yet differentiated.

*Leucojum aestivum* subsp. *aestivum* (Amaryllidaceae) was a surprising find and a significant range expansion, with the closest record being in Boone County, Missouri (ca. 300 km). It appears to be rather common in some of the southern states, including Louisiana and Alabama; with spotty distributions along the east coast and with some occurrences in California and one from Oregon. The specimens were growing abundantly
along a small creek bed in Schlanger Park in Pittsburg, where 100+ plants were observed. Since the population was hidden in the trees along a creek and otherwise not planted, it is here considered naturalized.

Several plants of *Salvia farinacea* (Lamiaceae) were found in the State of Kansas Mined Land Wildlife Areas, where they likely had re-established naturally, given that these areas typically were not reclaimed after the cessation of surface mining activities (Bailey & Hooey 2017). The closest record is from Delaware County, Oklahoma (ca. 100 km). This taxon has a limited distribution across the U.S.A., persisting mostly in southern arid areas of Texas and New Mexico, with records in seven counties in Oklahoma, three in Louisiana, and two in Florida. It has been reported and labeled as adventive in Ohio and Connecticut. One specimen was found for Kansas in the R.L. McGregor Herbarium (*Holland 5857*, Neosho County, KS September 4, 1987), though it was listed as “under cultivation.” This is the first report of this taxon occurring outside of cultivation for the state.

*Callicarpa americana* (Lamiaceae) was reported previously in four counties of Missouri and listed as rare for that state in BONAP (Kartesz 2019). It is common in the southeastern U.S.A., with Kansas being at northern terminus of its range (Kartesz 2019). It has also been reported as occurring in Virginia and Maryland, with its closest records from Taney County, Missouri (ca. 170 km), Washington County, Oklahoma (ca. 150 km), and Washington County, Arkansas (ca. 160 km).

*Quercus michauxii* (Fagaceae) is distributed throughout much of the southeastern U.S.A., with its closest record in Carroll County, Arkansas (ca. 150 km). Kansas represents the northwestern extent of its known range. The farthest west it had been reported was in Canadian County, Oklahoma. This specimen comes from Schermerhorn Park, a nature park in Cherokee county. This park preserves the natural flora of the Ozark Plateau and according to the caretakers they avoid plantings (J. Rader, park manager, pers. comm. to S. Pryer, 2014). Though some work to make trails more accessible and remove invasive species has been done, to our knowledge no tree plantings have occurred.

**Extripated Taxa.**—Eight taxa are considered extripated from Kansas (Kartesz 2019). However, of these, the first author collected four taxa and Gibson (1963) reported two more. Species collected for this study previously considered extripated in Kansas are included in all the tallies and the Annotated Checklist.

**Exclusions.**—A few taxa excluded from the tallies are considered remnants from previous plantings they are included in the Annotated Checklist but excluded from numerical tallies. We note here their presence for the benefit of future workers: *Castanea mollissima*, *Crocus vernus*, *Chaenomeles speciosa*, and *Forsythia suspensa*. Gibson (1963) earlier reported *Broussonetia papyrifera*, *Cornus foemina*, *Viburnum rafinesquianum*, and *Ziziphus jujuba*.

**Identification notes.**—Specimens of *Plantago lanceolata* (Plantaginaceae) did not always key easily in Yatskievych (2013). However, they keyed well in Kaul et al. (2011). Many specimens of *P. lanceolata* have bracts that are conspicuously hairy on the midrib, not just the margins. Since Yatskievych (2013) uses this to separate the species, *P. lanceolata* typically fell outside of the key.

Two specimens of *Cyperus lupulinus* (Cyperaceae; *Pryer 5104* and 5666) show a similar discrepancy when keying to subspecies. Both specimens have only three florets, which would indicate subsp. *macilentus*, but their scales are 4.0 mm and 3.3 mm (respectively), which would indicate subsp. *lupulinus*. For this reason, subspecific designation was not studied.

Kartesz (2019) indicates *Coreopsis grandiflora* var. *harveyana* (Asteraceae) as being common in Kansas. However, given that none of the primary identification sources (Steyermark’s *Flora of Missouri*, *Flora of North America*, *Flora of the Great Plains*) provide identification information for varieties, we do not include varietal designations.

As noted in the Methods, for *Prunus* (Ranunculaceae) we follow the treatment in *Flora of North America*, which reports *Prunus rivularis* (Rosaceae), but not *Prunus munsoniana*. If both were recognized taxonomically, then both would occur here.

A specimen of *Juncus brachycarpus* (*Pryer 1830*) (Juncaceae) appears to have vegetative bulblets growing from the inflorescence. If so, this might be the first reported case for *Juncus* (Grant 1981). However, the bulblets may be an effect of an endophytic fungus. Fungal endophytes are found more commonly on grasses, though
one case was reported for *Juncus effusus* in New Hampshire (Kilpatrick et al. 1961). Clay (1990) suggested that this was probably a case of host range expansion, given that there has only been one other case reported in rushes. Another possibility, and maybe a more likely one, is that the appearance of apomixis is evidence of a gall caused by a psyllid (Patch 1916; Hodkinson 1984; Wier 1986). These galls at maturity have a much different appearance than that present on this specimen, however it may just be in the early stages of growth.

Finally, several specimens of *Desmodium* (Fabaceae) could not be identified confidently to species, given that their flowers were absent, in bud only, or had flowers much larger than any listed in the identification sources (Pryer numbers 1742, 2202, 2412, 2053, 3050, and 3197). These could be of interest to revisionary taxonomists and may represent one or more range expansions.

**Conclusions**

This work represents the first in-depth floristic survey for Cherokee County and the first extensive survey published for Crawford County in 57 years.

Prior to this survey, a total of 1300 unique vascular plant taxa (species, nothospecies, subspecies, and varieties) had been reported for (combined) Crawford and Cherokee counties in southeastern Kansas (1169 for Cherokee Co. and 1007 for Crawford Co) (Gibson 1963; Kartesz 2019). Here we report a total of 1420 taxa for the combined counties (1281 for Cherokee Co. and 1139 for Crawford Co.), representing known increase in vascular plant taxa of 9.2% overall, including 9.6% for Cherokee County, and 13.1% for Crawford County. The 44 state and 233 county records documented for Crawford and Cherokee counties were substantially higher than expected.

Plant collecting in most areas of North America has declined since the 1970s (Prather et al. 2004 a,b), as have field studies in general (Ríos-Saldaña et al. 2018), despite the fact that specimens are being used more extensively now than ever before (e.g., Pyke & Ehrlich 2010; Lavoie 2013). Since publication of the *Flora of the Great Plains* (GPFA 1986), relatively few large-scale floristic studies have occurred in the Midwest, including none in southeastern Kansas. Although we suspect there is a persisting notion (even among some botanists) that plant distributions in North America are well documented, our study and those of others strongly suggest otherwise at county and even state levels (Hartman & Nelson, 1998; Erter 2000; Schiebout et al. 2009; Legler 2010; Charboneau 2013; Larson et al. 2014; Martine & Ward 2013; Snow et al. 2017; Gillespie et al. 2017).

The taxonomic and distributional data from floristic surveys provide valuable information to land managers and policy makers, and such data can be used in numerous ways for ecological studies, particularly now that data increasingly are available online (Funk 2004; Chapman 2005; Bebber et al. 2010, 2012; Pyke & Ehrlich 2010; Culley 2013; Lavoie 2013; Daru et al. 2017; Queenborough 2017; James et al. 2018).

**Future Work.**—Additional floristic and vegetative studies that focus on the Mined Land Wildlife Areas in southeastern Kansas would be useful. In particular, floristic quality assessments, analyses of species richness, and the production of site-specific lists of taxa on the numerous mined areas would be useful to managers of these areas.
APPENDIX
Annotated Checklist of the Vascular Plants of Crawford and Cherokee counties, Kansas.

The Checklist is organized by Pteridophytes and Lycophytes (Ferns and Fern-Allies), Gymnosperms, and Angiosperms. All families and taxa within each family are arranged alphabetically. Common names follow Kartesz (2017), as do the rare, nosious, or adventive designations. These designations, as well as all state and county records are bolded. Voucher numbers for both state and county records are also provided. Commentary is provided for certain taxa, including distribution summaries for state records and rare plants. For the purpose of this study, if a taxon was reported in 0–20 counties in the combined surrounding states (Missouri, Oklahoma, and Arkansas), it was considered rare for the area, but if reported for 20 or more counties, it was considered common for the area. The widely used phrase “4-state region” refers to the general area including southeast Kansas, northwest Oklahoma, southwest Missouri, and northwest Arkansas.

Gibson (1963) did not recognize infraspecific expressions for many species complexes. For these, when two or more expressions were recognized, an additional name was entered into the list, indicating that although he collected the species, he did not differentiate expressions. In these cases, only taxa with varieties or subspecies are included within the tally results.

Example:
Taxon name Authors – Common Name. Counties collected [Collectors]. Nativity. Notes including rare, nosious, extirpated, or adventive. Physiographic region. Record (vouchers). Additional commentary.

FERNS AND FERN ALLIES

ASPLENIIACEAE (Spleenwort Family)

Asplenium platyneuron (L.) B.S.P. – Ebony Spleenwort. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.


Asplenium rhizophyllum L. – Walking Fern. CH [I, K], CRW [G]. OP.

Asplenium platyneuron var. pseudocaudatum (Clute) Heller – CH [K]. OP.

Asplenium michauxianum (Clute) B.S.P. – Ebony Spleenwort. CH [I, K], CRW [G]. Native. OP, OC.

BLECHNACEAE (Chern Family)

Woodwardia areolata (L.) T. Moore – Netted Chain Fern. CRW [I]. Native. CL. State Record (Pryer 1462). Collected on a mined land in Crawford County. Abundant with hundreds of fronds present. This taxon is considered rare in the state of Missouri, with the closest records in Barton and Lawrence counties. It is common in the southeastern and eastern portion of the United States, including Arkansas where it has been reported in all but two counties.

CYSTOPTERIDACEAE (Bladder Fern Family)


DENNSTAEDTIACEAE (Bracken Fern Family)

Pteridium aquilinum (L.) Schott – Christmas Fern. CH [!, K]. Native. OP. Recorded from ten counties in Kansas. Rare. Extirpated.

Pleopeltis polypodioides (L.) T. Moore – Netted Chain Fern. CRW [I]. Native. OP, OC. CL.

Sceptridium dissectum (Spreng.) Lyon – Cut-Leaf Grape Fern. CH [K]. Native. OP, OC, CL.

Pellaea glabella Mett. ex Kuhn subsp. glabella – Smooth Cliffbrake. CH [K], CRW [K, G]. Native. Gibson did not recognize subspecies of this taxon.

THELYPTERIDACEAE (Maidenhair Fern Family)


WOODSIACEAE (Cliff Fern Family)

Woodia obtusa (Spreng.) Torr. – Blunt-Lobe Cliff Fern. CRW [G]. Gibson did not identify his specimens to subspecies.

Juniperus virginiana (L.) – Eastern red-cedar. CH [I, K], CRW [I, K, G]. Native. OC.
Taxodium distichum (L.) L.C. Rich. var. distichum – Southern Bald-Cypress. CRW [!, K]. Native. Adventive. CL. Gibson originally listed Taxodium distichum, however his specimens were young Juniperus virginiana var. virginiana.

PINACEAE (Pine Family)
Pinus banksiana Lamb. – Jack Pine. CRW [!, K]. Most likely long-ago introduced to the PSU’s Natural History Reserve, where it has been collected previously and, possibly adventive. CL.
Pinus taeda L. – Lobloily Pine. CH [!]. CL. Adventive. State Record (Pryer 3755 [KSP023158], Pryer 6427 [KSP024294]). The specimens were taken from an older large tree in the middle of Minned Land Wildlife Area #27, one of the largest such areas in southeastern Kansas, and an nearby younger tree. The two large and one small trees in the immediate vicinity have no indication, given their locality, of being intentional plantings. A separate area nearby indicated several other trees of various age classes, including some areas that are mostly only accessible by boat. No obvious human establishments are nearby. This species occurs mostly in the southeastern United States, with the nearest current native range being northcentral Arkansas (e.g., Pope County). Kartesz (2019) reports it as beyond its native range in six counties in Missouri, with the nearest being Polk Co.

ANGIOSPERMS

ACANTHACEAE (Acanthus Family)
Dichostachys brachiata (Pursh) Spreng. – Branched Foldwing. CH [!], K, CRW [!, K, G]. Native. OP, OC, CL.

Allium canadense (L.) Vahl – American Water-Willow. CH [!, K], CRW [!, K]. Native. OC, CL.

Ruellia strepens Nutt. – Fringe-Leaf Wild Petunia. CH [!, K], CRW [!, K]. Native. OP, OC, CL.

Ruellia humilis Nutt. – Single-Cluster Wild Petunia. CH [!, K], CRW [!, K]. Native. OP, OC, CL.

ACERACEAE (Maple Family)

Acer floridanum (Chapman) Pax – Florida Maple. CH [K]. Native. OP, OC, CL.

Acer negundo L. var. negundo – Ash-Leaf Maple. CH [!], K, CRW [!, K, G]. Native. OP, OC, CL.

Echinodorus cordifolius (L.) Griseb. – Creeping Burrhead. CH [!, K]. Native. OP, OC, CL.

Echinodorus berteroi (Spreng.) Fassett – Upright Burrhead. CH [!, K]. Native. OP, OC, CL.

Alisma subcordatum (Water-Plantain Family)


Allium sativum – Crow Garlic. CH [!], CRW [!, K]. Native. Non-native. CL.

Camassia angusta (Engelm. & A. Gray) Blank. – Prairie Camas. CH [K], CRW [!, K, G]. Native. OP, OC, CL.

Camassia scilloides (Raf.) Cory – Atlantic Camas. CH [K], CRW [!, K, G]. Native. OP, OC, CL.

Juniperus virginiana var. virginiana – Southern Bald-Cypress. CH [!, K]. Native. Adventive. CL. Gibson originally listed Taxodium distichum, however his specimens were young Juniperus virginiana var. virginiana.

PINACEAE (Pine Family)
Pinus banksiana Lamb. – Jack Pine. CRW [!, K]. Most likely long-ago introduced to the PSU’s Natural History Reserve, where it has been collected previously and, possibly adventive. CL.
Pinus taeda L. – Lobloily Pine. CH [!]. CL. Adventive. State Record (Pryer 3755 [KSP023158], Pryer 6427 [KSP024294]). The specimens were taken from an older large tree in the middle of Minned Land Wildlife Area #27, one of the largest such areas in southeastern Kansas, and an nearby younger tree. The two large and one small trees in the immediate vicinity have no indication, given their locality, of being intentional plantings. A separate area nearby indicated several other trees of various age classes, including some areas that are mostly only accessible by boat. No obvious human establishments are nearby. This species occurs mostly in the southeastern United States, with the nearest current native range being northcentral Arkansas (e.g., Pope County). Kartesz (2019) reports it as beyond its native range in six counties in Missouri, with the nearest being Polk Co.

ANGIOSPERMS

ACANTHACEAE (Acanthus Family)
Dichostachys brachiata (Pursh) Spreng. – Branched Foldwing. CH [!], K, CRW [!, K, G]. Native. OP, OC, CL.

Allium canadense (L.) Vahl – American Water-Willow. CH [!, K], CRW [!, K]. Native. OC, CL.

Ruellia strepens Nutt. – Fringe-Leaf Wild Petunia. CH [!, K], CRW [!, K]. Native. OP, OC, CL.

Ruellia humilis Nutt. – Single-Cluster Wild Petunia. CH [!, K], CRW [!, K]. Native. OP, OC, CL.

ACERACEAE (Maple Family)

Acer floridanum (Chapman) Pax – Florida Maple. CH [K]. Native. OP, OC, CL.

Acer negundo L. var. negundo – Ash-Leaf Maple. CH [!], K, CRW [!, K, G]. Native. OP, OC, CL.

Echinodorus cordifolius (L.) Griseb. – Creeping Burrhead. CH [!, K]. Native. OP, OC, CL.

Echinodorus berteroi (Spreng.) Fassett – Upright Burrhead. CH [!, K]. Native. OP, OC, CL.

Alisma subcordatum (Water-Plantain Family)


Allium sativum – Crow Garlic. CH [!], CRW [!, K]. Native. Non-native. CL.

Camassia angusta (Engelm. & A. Gray) Blank. – Prairie Camas. CH [K], CRW [!, K, G]. Native. OP, OC, CL.

Camassia scilloides (Raf.) Cory – Atlantic Camas. CH [K], CRW [!, K, G]. Native. OP, OC, CL.

Juniperus virginiana var. virginiana – Southern Bald-Cypress. CH [!, K]. Native. Adventive. CL. Gibson originally listed Taxodium distichum, however his specimens were young Juniperus virginiana var. virginiana.

PINACEAE (Pine Family)
Pinus banksiana Lamb. – Jack Pine. CRW [!, K]. Most likely long-ago introduced to the PSU’s Natural History Reserve, where it has been collected previously and, possibly adventive. CL.
Pinus taeda L. – Lobloily Pine. CH [!]. CL. Adventive. State Record (Pryer 3755 [KSP023158], Pryer 6427 [KSP024294]). The specimens were taken from an older large tree in the middle of Minned Land Wildlife Area #27, one of the largest such areas in southeastern Kansas, and an nearby younger tree. The two large and one small trees in the immediate vicinity have no indication, given their locality, of being intentional plantings. A separate area nearby indicated several other trees of various age classes, including some areas that are mostly only accessible by boat. No obvious human establishments are nearby. This species occurs mostly in the southeastern United States, with the nearest current native range being northcentral Arkansas (e.g., Pope County). Kartesz (2019) reports it as beyond its native range in six counties in Missouri, with the nearest being Polk Co.
Chenopodiastrum simplex (Torr.) S. Fuentes, Uttila & Borsch – Giant-Seed Mock Goosefoot. CH [K], CRW [!, K]. Native. OC, CL.

Chenopodium album var. album – Lamb’s-Quarters. CH [!, K], CRW [K]. Non-native. CL.

Chenopodium berlandieri Moq. var. bushianum (Aellen) Bassett & Crompton – Lamb’s-Quarters. CRW [!]. Native. OC. Crawford County Record (Pryer 6032).

Chenopodium berlandieri Moq. var. zschacki (Murr) Murr – Pit-Seed Goosefoot. CRW [K]. Native.

Chenopodium praeterecoro Rydb. – Desert Goosefoot. CH [!, K], CR [!]. Native. OC, CL. Crawford County Record (Pryer 6033).

Chenopodium standleyanum Aellen – Standley’s Goosefoot. CH [!, K], CRW [!, K], G. Native. OP, CL.

Cycloloma atropliicifolium (Spreng.) Coutl. – Winged-Pigweed. CH [K]. Native.


Froelichia floridana (Nutt.) Moq. var. campestris (Small) Fernald – Plains Snake-Cotton. CH [K], CRW [!]. Native. CL. Crawford County Record (Pryer 5333).

Froelichia gracilis (Hook.) Moq. – Slender Snake-Cotton. CH [K]. CRW [!, K]. Native. OP, CL.

Iresine rhizomatosa (Hook.) Fernald – Spotted Water-Hemlock. CH [!, K], CRW [!, K]. Native. OP, CL.

Leucojum aestivum (Daffodil Family) – Summer Snowflake. CRW [!]. Native. OC.


Polytaenia nuttallii (Carrot Family) – Nuttall’s Prairie-Parsley. CH [!, K], CRW [!, K, G]. Native. OP, CL.

Chaerophyllum tainturieri (Carrot Family) – Hairy-Fruit Chervil. CH [!, K], CRW [!, K, G]. Native. OP, CL.

Cicuta maculata L. – Spotted Water-Hemlock. CRW [G]. Gibson collection. He did not recognize varieties for this taxon.

Cicuta maculata L. var. angustifolia Hook. – Spotted Water-Hemlock. CH [K]. Native.

Cicuta maculata L. var. bolanderi (S. Wats.) G.A. Mulligan – Spotted Water-Hemlock. CH [K], CRW [!, K]. Native. CL.

Cicuta maculata L. var. maculata – Spotted Water-Hemlock. CH [K], CRW [!, K]. Native. CL.

Conium maculatum L. – Poison-Hemlock. CH [!, K], CRW [!, K]. Non-native. OC, CL.

Cryptotaenia canadensis (L.) DC. – Canadian Honewort. CH [K], CRW [K, G]. Native.

Daucus carota L. – Queen Anne’s-Lace. CH [!, K], CR [!, K, G]. Non-native. Noxious. OC, CL.

Daucus pusillus Michx. – American Wild Carrot. CH [K]. Native. Rare. Reported from six counties in Kansas and common in surrounding states.

Eryngium bulbosum (Michx.) Nutt. – Harbinger-of-Spring. CH [K], CRW [K, G]. Native. Rare. Reported from four counties in Kansas. Common in Missouri and Arkansas, but considered rare in Oklahoma.


Eryngium prostratum Nutt. ex DC. – Creeping Eryngo. CH [K]. Native. Rare. Reported in one county in Kansas, though this is the most northerwestern report this taxon. Common in surrounding states.

Eryngium yuccifolium Michx. var. yuccifolium – Button Eryngo. CH [!, K], CRW [!, K]. Native. OP, CL.


Lomatium foeniculaceum (Nutt.) Coul. & Rose subsp. dauofilm (Torr. & A. Gray) W.L. Theob. – Carrot-Leaf Desert-Parsley. CRW [!, K]. Native. OC.


Osmorhiza longistylis (Torr.) DC. – Aniseroot. CH [K], CRW [!, K, G]. Native. OP, CL.

Perideridia americana (Nutt. ex DC.) Reichemb. – Eastern Yampah. CH [!, K], CRW [!, K, G]. Native. OP, CL.

Polytoenia nuttallii DC. – Nuttall’s Prairie-Parsley. CH [!, K], CRW [!, K, G]. Native. OP, CL.

Sanicula canadensis L. var. canadensis – Canadian Black-Snakeroot. CH [I, K], CRW [I, K]. Native. OP, OC, CL.
Sanicula odorata (Raf.) K.M. Pryer & L.R. Phillippe – Clustered Black-Snakeroot. CH [I, K], CRW [I, K, G]. Native. OC, CL.
Taanedia integerrima (L.) Drude – Yellow-Pimpernel. CH [I, K], CRW [I]. Native. OP, OC. Crawford County Record (Pryer 5429).
Thaspium arvensis (Huds.) Link subsp. – Spreading Hedge-Parsley. CH [I, K], CRW [I, K, G]. Non-native. OC, CL.
Zizia aurea (L.) W.D.J. Koch – Golden Alexanders. CH [I, K], CRW [I, K, G]. Native. OC, CL.

APOCYNACEAE (Dogbane Family)

APRYPHILACEAE (Aristolochia Family)
Asclepias incarnata – Swamp Milkweed. CH [I, K]. Native. OP, OC, CL.
Asclepias amplexicaulis Sm. – Clasping Milkweed. CH [I, K]. Native. OP, OC.

ARACEAE (Canna Family)
Amsenia dracontium – Greendragon. CH [I, K]. Native.
Arisaema dracontium – Greendragon. CH [I, K]. Native.

ARALIACEAE (Ginseng Family)
Hedera helix L. – English Ivy. CRW [I]. Non-native. CL. State Record (Pryer 6413). Abundant in a reclaimed mined land that is now used as a public walking area. This taxon has a wide distribution in the United States. It has scattered reports in Missouri and Arkansas and none in Oklahoma. The closest report is from McDonald County, Missouri. One specimen was located at McGregor Herbarium, University of Kansas for Douglas County, Kansas (C. Morse s.n.; December 2007).

ARISTOLOCHIACEAE (Birthwort Family)
Asarum canadense L. – Canadian Wild Ginger. CH [I, K], CRW [I, K, G]. Native. OP.
Isofrema tomentosum (Arum Family)
Spirodela polyrhiza (L.) Schleid. – Common Duckweed. CH [I, K], CRW [K]. Native. OP.

Asparagaceae (Asparagus Family)
Asparagus viridis Raf. – Green Comet Milkweed. CH [K], CRW [I, K, G]. Native. OP, OC, CL.
Asparagus viridis Wilt. – Green Antelope-Horn. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Cynanchum laeve (Michx.) Pers. – Honeyvine. CH [K], CRW [I, K, G]. Native. Noxious. OC.

Gonorobus suberosus (L.) R. Br. var. granulatus (Scheele) Krings & Q.Y. Xiang – Angular-Fruit Angelopod. CH [I, K], CRW [G]. Native. Rare. OP. Only reported in Cherokee County, Kansas, but common in surrounding states.

Matelea decipiens (Alexander) Woods. – Oldfield Milkvine. CH [I, K]. Native. Rare. OP. Reported in two counties in Kansas and common in surrounding states.


AQUIFOILIAEAE (Holly Family)
Ilex decidua Walt. – Deciduous Holly. CH [I, K], CRW [I, K, G]. Native. CL.
Ilex opaca Aiton var. opaca – American Holly. CRW [I]. Native. CL. State Record (Pryer 3456). Older tree located at the bottom of a srew in a mined land wildlife area. Where this specimen was growing, it was unlikely to have been purposefully planted. This taxon is common throughout the southeastern United States, with scattered records throughout the southern half of Missouri. This taxon is considered rare in Oklahoma and common throughout Arkansas. The closest records are in Craig County, Oklahoma and Greene County, Missouri.

ARACEAE (Aram Family)
Amsenia dracontium (L.) Schott var. dracontium – Greendragon. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.
Amsenia amabilis (L.) Schott subsp. amabilis – Jack-in-the-Pulpit. CH [K], CRW [I, K, G]. Native. OC.

Lema aquinoocitios Welv. – Lesser Duckweed. CRW [K]. Native.
Lema minuta Kunth – Least Duckweed. CH [I, K]. Native. OP, OC.
Lema minuta Kunth – Least Duckweed. CH [I, K], CRW [I, G]. Native.

ARALIACEAE (Ginseng Family)
Hedera helix L. – English Ivy. CRW [I]. Non-native. CL. State Record (Pryer 6413). Abundant in a reclaimed mined land that is now used as a public walking area. This taxon has a wide distribution in the United States. It has scattered reports in Missouri and Arkansas and none in Oklahoma. The closest report is from McDonald County, Missouri. One specimen was located at McGregor Herbarium, University of Kansas for Douglas County, Kansas (C. Morse s.n.; December 2007).

ARISTOLOCHIACEAE (Birthwort Family)
Amsenia canadense L. – Canadian Wild Ginger. CH [I, K], CRW [I, K, G]. Native. OP.

Isotrema tomentosum (Arum Family)
Spirodela polyrhiza (L.) Schleid. – Common Duckweed. CH [I, K], CRW [K]. Native. OP.

Wolffia brasiliensis Wedd. – Brazilian Watermeal. CH [K]. Native. Rare. Reported in ten counties in Kansas and scattered across the state. Common in surrounding states, but with scattered distribution.

Wolffia columbiana Karst. – Columbia Watermeal. CH [K].
Amphiachrysis dracunculoides (DC.) Nutt. – Prairie Broomweed. CH [K]. CRW [I, K, G]. Native. OC.
Antennaria neglecta Greene – Field Pussytoes. CH [I, K]. CRW [I, K, G]. Native. OP. CL.
Antennaria parlinii Fernald subsp. fallax (Greene) Bayer & Stebbins – Parlin’s Pussytoes. CH [I, K]. CRW [K]. Native. OP.
Arctium minus (Hill) Berl. – Lesser Burdock. CH [K], CRW [I, K, G]. Native. OC, CL.
Arnoglossum atriplicifolium (L.) H. Rob. – Pale Indian-Plantain. CH [K], CRW [I, K]. Native. OC.
Artemisia ludoviciana Nutt. subsp. ludoviciana – White Sagebrush. CRW [I, G]. Native. OC.
Artemisia arctophylla (L.) H. Rob. – Groove-Stem Indian-Plantain. CH [I, K], CRW [I, K, G]. Native. OC, CL.
Bidens cernua L. – Spanish-Needles. CH [!, K], K, CRW [!, K, G]. Native. OC.
Bidens aristosa (Michx.) Britton – Bearded Beggarticks. CH [!, K], Willd. ex Spreng. – Mexican Wormwood. CH [!, K], CRW [K], Willd. ex Spreng. – Mexican Wormwood. CH [!, K]. Native. OC.
Cirsium minus (Hill) Bernh. – Lesser Burrdock. CH [K], CRW [I, K, G]. Native. OC, CL.
Anthemis cotula Fernald subsp. (Greene) Bayer & Stebbins Antennaria parlinii fallax (DC.) Nutt. – Prairie Broomweed. CH [!, K], CRW (Savi) Ten. – Bull Thistle. CH [!, K], CRW [!, K]. Non-native. OC.
Cirsium arvense (L.) Scop. – Canadian Thistle. CR [K]. Native. Non-native. OC.
Cichorium intybus (L.) var. corymbulosa (Nutt.) Semple – Soft Bradbury-Bush. CH [!, K], CRW [!, K]. Native. OC, CL.
Boltonia asteroides (L.) L’Hér. var. latisquama (A. Gray) Cronquist – White Doll’s Daisy. CH [I, K], CRW [I, K, G]. Native. CL.
Boltonia asteroides (L.) L’Hér. var. recognita (Fernald & Griscom) L ’Hér. var. Boltonia asteroides (A. Gray) Cronquist – Boltonia asteroides L. – Devil’s-Pitchfork. CH [!, K], CRW [!, K]. Native. OC, CL.
Carduus nutans (L.) var. pulchellus (Michx. var. pulchellus) Michx. – Dwarf Horseweed. CH [!, K], CRW [!, K, G]. Native. OC, CL.
Coreopsis lanceolata L. – Lance-Leaf Tickseed. CH [I]. Native. Rare. OP. CL. Cherokee County Record (Pryer 372, Pryer 3162). Reported in eight counties in Kansas and common in surrounding states.
Coreopsis palmata Nutt. – Stiff Tickseed. CH [I], CRW [K]. Native. OP.
Coreopsis pubescens Elliott var. pubescens – Star Tickseed. CH [K], CRW [K]. Native. Rare. Reported in two counties in Kansas and common in surrounding areas.
Coreopsis tinctoria Nutt. var. tinctoria – Golden Tickseed. CH [I, K], CRW [I, K, G]. Native. OC. Crawford County Record.
Coreopsis tripteris L. – Tall Tickseed. CH [K]. Native. Rare. Reported in six counties in Kansas and common in surrounding states.
Cyanus segetum Hill – Garden Cornflower. CH [P.H. Ireland s.n., May 19, 1966; Roxy Blessant 1, May 9, 1985], CRW [John D. Smith s.n., April 30, 1974; Ian Sangster 52, April 25, 1976; J.J. Williams 132, May 5, 1978]. Non-native. OP. CL. Gibson reported this taxon by the older name Centaurea cyanus L.
Echinacea angustifolia DC. – Blacksamson. CH [I, K], CRW [G]. Native. OP.
Echinacea pallida (Nutt.) Nutt. var. pallida – Pale Purple-Coneflower. CH [I, K], CRW [I, K, G]. Native. OC, CL.
Echinacea purpurea (L.) Moench. – Eastern Purple-Coneflower. CH [K]. Native. Rare. CL. Crawford County Record (Pryer 3523). Reported from 3 counties in Kansas (including this report) and common in surrounding area.
Eclipta prostrata (L.) – False Daisy. CH [I, K], CRW [K, G]. Native. OC, CL.
Eupatorium perfoliatum L. – Common Boneset. CH [!, K], CRW [!, K, G]. Native. OC, CL.
Eupatorium divaricatus L. var. philadelphicus – Philadelphia Fleabane. Native. OC, CL.
Eupatorium pilosum L. – Common Boneset. CH [I, K], CRW [I, K, G]. Native. OP, CL.
Eupatorium perfoliatum L. – Common Boneset. CH [I, K], CRW [I, K, G]. Native. OP, CL.
Erythranthe harveyana (A. Gray) in both counties. Reported in six counties in Kansas and common in surrounding states.
Euthamia graminifolia Eurybia hemispherica Eupatorium serotinum L. – Common Boneset. CH [!, K], CRW [!, K, G]. Native. OC, CL.
Eupatorium perfoliatum L. – Tall Thoroughwort. CH [!, K]. Native. OC, CL.
Erechitites hieraciifolius (L.) L. – False Daisy. CH [I, K], CRW [I, K, G]. Native. OC, CL.
Eupatorium perfoliatum L. var. tinctoria – Golden Tickseed. CH [I], CRW [I, K, G]. Native. OC, CL.
Eupatorium perfoliatum L. var. tinctoria – Golden Tickseed. CH [I], CRW [I, K, G]. Native. OC, CL.
Bidens frondosa L. – Devil’s-Pitchfork. CH [I, K], CRW [I, K]. Native. OP, CL.
Pluchea tingitana L. – Maltese Daisy. CH [I, K], CRW [I, K, G]. Native. OP, CL.
Brickellia eupatorioides (L.) var. corymbulosa (Torr. & A. Gray) Shinners – ShinnersFalse Boneset. CH [K], CRW [I, K, G]. Native. OC, CL.
Cirsium altissimum (L.) Spreng. – Tall Thistle. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.
Cirsium arvense (L.) Scop. – Canadian Thistle. CR [K]. Non-native. OC.
Cirsium discolor (Muhl. ex Willd.) Spreng. – Field Thistle. CH [I], CRW [I]. Native. OC, CL. Cherokee County Record (Pryer 35887), Crawford County Record (Pryer 2354, Pryer 2416, Pryer 2550, Pryer 2660, Pryer 2708, Pryer 2908, Pryer 3557, Pryer 3622),
Cirsium undulatum (Nutt.) Spreng. – Wavy-Leaf Thistle. CH [K], CRW [K]. Native.
Cirsium vulgare (Savi) Ten. – Bull Thistle. CH [I, K], CRW [I, K]. Non-native. Noxious. OC, CL.
Conoclinium coelestinum (L.) DC. – Blue Mistflower. CH [I, K], CRW [K, G]. Native. OP.
Coreopsis grandiflora Hogg ex Sweet – Large-Flower Tickseed. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL. Given that Flora of North America and Steyermark’s Flora of Missouri do not recognize varieties for this species, none were identified to infraspecific level. Kartesz (2017) reports Coreopsis grandiflora Hogg ex Sweet var. Harveyana (A. Gray) in both counties.
Kansas, including this report. Considered rare in Oklahoma and scattered throughout Missouri. Common in the northeastern United States.

_Euthamia gymnospemoides_ Greene – Texas Goldentop. CH [!, K], CRW [!, K, G]. Native. CL.

_Euthamia leptocarpa_ (Torr. & A. Gray) Greene ex Porter & Britton – Bushy Goldentop. CR [!]. Native. CL. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Eutrochium purpureum_ (L.) E. Lamont var. _Eutrochium purpureum_ (Rydb.) E. Holzinger – Texas Goldentop. CH [!, K], CRW [!, K, G]. Native. OP.

_Eutrochium purpureum_ (L.) E. Lamont var. _Eutrochium purpureum_ (Rydb.) E. Holzinger – Texas Goldentop. CH [!, K], CRW [!, K, G]. Native. OP.

_Helianthus pauciflorus_ Lam. – Ashy Sunflower. CH [!], K], CRW [!, K, G]. Native. OP. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Euthamia leptocephala_ (Torr. & A. Gray) Greene ex Porter & Britton – Texas Goldentop. CH [!, K], CRW [!, K, G]. Native. OP. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Euthamia leptocephala_ (Torr. & A. Gray) Greene ex Porter & Britton – Texas Goldentop. CH [!, K], CRW [!, K, G]. Native. OP. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Helianthus annuus_ L. – Common Sunflower. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Helianthus × kellermanii_ Britton (pro sp.) – CRW [K]. Native. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Helianthus × kellermanii_ Britton (pro sp.) – CRW [K]. Native. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Helianthus strumosus_ L. – Leafless Sunflower. CH [!, K], CRW [!, K, G]. Native. OP, OC. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Helianthus tuberosus_ L. – Jerusalem Artichoke. CH [!, K], CRW [!, K, G]. Native. OP, OC. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Heliposis helianthoides_ (L.) var. _scabridum_ (Dunal) Fernald – Sweet-Smooth Oxeye. CH [!, K], CRW [!, K, G]. Native. OP, CL. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Hieracium gnomonii_ L. – Queenest. CH [!, K], CRW [K]. Native. OP. Reported from nine counties in Kansas, but common in surrounding states.

_Hieracium longigum_ Torr. ex Hook. – Hairy Hawkweed. CH [!, K], CRW [!, K, G]. Native. CL.

_Hieracium scabrum_ Michx. – Rough Hawkweed. CH [K]. Native. Reported only from Cherokee County, Kansas. This taxon is also considered rare in Oklahoma and Arkansas, but common in Missouri.

_Hymenopappus scabiosaeus_ L'Hér. var. _corymbosus_ (Torr. & A. Gray) B.L. Turner – Carolina Woollywhite. CH [K], CRW [K]. Native. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Krigia cespitosa_ (Raf.) Chambers var. _cespitosus_ – Weedy Dwarf-Dandelion. CH [!, K], CRW [!, K, G]. Native. OP, CL.

_Krigia dandelion_ (L.) Nutt. – Potato Dwarf-Dandelion. CH [K], CRW [!, K, G]. Native. OP, CL. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Krigia occidentalis_ Nutt. – Western Dwarf-Dandelion. CH [K], CRW [!, K, G]. Native. OP, CL. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Lactuca canadensis_ L. – Canadian Blue Lettuce. CH [!], K], CRW [!, K, G]. Native. OP, OC, CL. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Lactuca floridana_ (L.) Gaertn. – Woodland Lettuce. CH [!], K], CRW [!, K, G]. Native. OP, CL. _State Record_. Crawford County Voucher (Pryer 1908). This taxon has a southern distribution in the United States and has been reported throughout Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Lactuca serriola_ (L.) var._serriola_ – Dotted Gayfeather. CH [!, K], CRW [!, K, G]. Native. OP, CL. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Lactuca serriola_ (L.) var._serriola_ – Dotted Gayfeather. CH [!, K], CRW [!, K, G]. Native. OP, CL. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.

_Lactuca serriola_ (L.) var._serriola_ – Dotted Gayfeather. CH [!, K], CRW [!, K, G]. Native. OP, CL. _County Voucher_. (State Record) Thoroughwort. CH [!]. Native. OP, CL. The closest record is in Jasper County, Missouri. Arkansas. It is considered rare in Oklahoma and only recorded in three southern counties and few counties in Missouri. The closest record is in Jasper County, Missouri.
Pryer et al., Flora of Crawford and Cherokee counties, Kansas

Packera glabella (Poir.) C. Jeffrey – Cress-Leaf Groundsel. CH [K], CRW [I, K, G]. Native. Rare. Reported in seven counties in Kansas and common in surrounding states.


Packera platensis (Nutt.) W.A. Weber & A. Love – Prairie Groundsel. CH [I, K], CRW [I, K]. Native. OP, CL.

Parthenium integrifolium – Wild Quinine. CH [I, K], Native. OP, CL.

Pluchea camphorata (L.) DC. – Plowman’s-Wort. CRW [I, K]. Native. Rare. CL. Reported in 15 counties in Kansas, but common in surrounding area. Found mostly in southern regions including Oklahoma and Arkansas.


Pyrophapsus carolinianus (Walt.) DC. – Carolina Desert-Chicory. CH [I, K]. CRW [I, K]. Native. OP, OC, CL.

Ratibida columnifera (Nutt.) Woot. & Standl. – Red-Spike Mexican-Hat. CH [I, K]. CRW [I, K]. Native. OC, CL.

Ratibida pinnata (Vent.) Barnh. – Gray-Head Mexican-Hat. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Rudbeckia grandiﬂora – Green-Head Coneflower. CH [I, K]. Native. OP, CL.

Rudbeckia laciniata – Green-Head Coneflower. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Rudbeckia hirta hirta – Black-Eyed-Susan. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Rudbeckia hirta var. hirta – Black-Eyed-Susan. CH [I, K]. CRW [I, K, G]. Native. OP, OC, CL. Gibson did not recognize varieties for this taxon.

Rudbeckia laciniata var. laciniata – Green-Head Coneflower. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL. Gibson did not recognize varieties for this taxon.

Rudbeckia subtomentosa Pursh – Sweet Coneflower. CH [K], CRW [I, K, G]. Native. CL.

Rudbeckia triloba var. triloba – Brown-Eyed-Susan. CH [I, K], CRW [I, K]. Native. OP, OC, CL.

Senecio hieraciifolius – American Burnweed. CH [I, K], CRW [I, K, G]. Native. OP, CL.

Solidago altissima var. altissima – Tall Goldenrod. CH [I, K], CRW [I, K, G]. Native. OC, CL. Crawford County Record (Pryer 2588, Pryer 2691, Pryer 2711, Pryer 2851, Pryer 2936, Pryer 2944, Pryer 3310, Pryer 3315, Pryer 3385, Pryer 3394, Pryer 3535, Pryer 3555, Pryer 3615, Pryer 5893, Pryer 5921, Pryer 6096, Pryer 6209, Pryer 6232). Gibson did not recognize varieties for this taxon.


Solidago arguta Aiton var. boottii (Hook.) E.J. Palmer & Steyerm. – Atlantic Goldenrod. CH [I, K]. Native. Rare. OP. Reported from Cherokee County, Kansas, but common in the surrounding areas.

Solidago arguta Aiton var. caroliniana A. Gray – Atlantic Goldenrod. CH [I]. Native. OP. State Record. Cherokee County Voucher (Pryer 6303). This taxon has a southeastern distribution in the United States. It has been reported in several southern counties in Missouri and in Arkansas. The closest record is Barry County, Missouri.

Solidago delicatula Small – Smooth Elm-Leaf Goldenrod. CH [K]. CRW [I, K]. Native. OP, CL.

Solidago gigantea Aiton – Late Goldenrod. CH [I, K]. CRW [I, K, G]. Native. OP, OC, CL.

Solidago missouriensis Nutt. – Missouri Goldenrod. CH [I, K], CRW [I, K, G]. Native. OP, CL.

Solidago nemoralis Aiton var. langiopetiolata (Mack. & Bush) E.J. Palmer & Steyerm. – Goldenrod. CH [I], CRW [I, G]. Native. OP, CL.

Crawford County Record (Pryer 3015, Pryer 6347). .

Solidago nemoralis Aiton var. nemoralis A. Gray – Goldenrod. CH [I, K], CRW [I, K]. Native. OP, OC, CL.

Solidago petiolaris Aiton var. angusta (Torr. & A. Gray) A. Gray – Downy Ragged Goldenrod. CH [I, K], CRW [K]. Native. OP.

Solidago radulata Nutt. – Western Rough Goldenrod. CH [I], CRW [I]. Native. CL.

Crawford County Record (Pryer 3434).

Solidago rigida L. subsp. rigidus – Hard-Leaf Flat-Top Goldenrod. CH [K], CRW [I, K]. Native. OC, CL. Gibson did not recognize subspecies for this taxon.


Solidago ulmilfolia Muhl. Ex Willd. var. ulmilfolia – Elm-Leaf Goldenrod. CH [I], CRW [I, K, G]. Native. Gibson did not recognize varieties for this taxon.

Sonchus asper (L.) Hill – Spiny-Leaf Sow-Thistle. CH [I, K], CRW [I, K, G]. Non-native. OP, OC, CL.

Sonchus oleraceus L. – Common Sow-Thistle. CRW [I]. Non-native. CL.

Crawford County Record (Pryer 1137).

Symphyotrichum anomala (Engel.) Nesom – Many-Ray American-Aster. CH [I, K]. Native. Rare. OP. Reported in counties in Kansas, but common in surrounding areas.

Symphyotrichum cordifolium (L.) Nesom – Common Blue American-Aster. CH [I], CRW [I]. Native. OP, OC. Crawford County Record (Pryer 6273). Cherokee County Record (Pryer 2961, Pryer 3228).

Symphyotrichum drummondii (Lindl.) Nesom var. drummondii – Drummond’s American-Aster. CH [I, K], CRW [I, K, G]. Native. OP, CL.

Symphyotrichum drummondii (Lindl.) Nesom var. texanum (Burgess) Nesom – Drummond’s American-Aster. CH [I], CRW [I, K, G]. Native. OP, OC, CL.

Crawford County Record (Pryer 2959, Pryer 2968, Pryer 2987, Pryer 3189, Pryer 6293, Pryer 6315), Crawford County Record (Pryer 6164, Pryer 6173, Pryer 6277).

Symphyotrichum ericoides (L.) Nesom var. ericoides – White Heath American-Aster. CH [I, K], CRW [I, K, G]. Native. OC, CL. Gibson did not recognize varieties for this taxon. He reported Aster ericoides.


Crawford County State Record (Pryer 6408).

Symphyotrichum lanceolatum (Willd.) Nesom subsp. lanceolatum – White Paniced American-Aster. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Symphyotrichum lateriflorum (L.) A.D. Love – Farewell-Summer. CH [K]. Native. Rare. Reported from four counties in Kansas but common in surrounding states.


Symphyotrichum oblongifolium (Nutt.) Nesom – Aromatic American-Aster. CH [K], CRW [I, K]. Native. CL.
**Symphyotrichum ontario** (Wieg.) Nesom var. ontario – Ontario American-Aster. CH [K], CRW [K, G], Native.

**Symphyotrichum oolentangiense** (Riddell) Nesom – Sky-Blue American-Aster. CH [I, K], CRW [I, K], Native. OP, CL.

**Symphyotrichum parviceps** (Burgess) Nesom – Small-Head American-Aster. CH [K], Native.

**Symphyotrichum patens** (Alton) Nesom var. patens – Late Purple American-Aster. CH [I, K], Native. OP.

**Symphyotrichum praefaltum** (Aiton) Nesom var. patens – Willow-Leaf American-Aster. CH [I, K], CRW [K, G], Native.

**Symphyotrichum pilosum** (Willd.) Nesom var. pilosum – White Oldfield American-Aster. CH [I, K], CRW [I, K, G], Native. OP, CL.

**Symphyotrichum praetaltum** (Poiret) Nesom var. praetaltum – Willow-Leaf American-Aster. CH [I, K], CRW [I, K, G], Native, OP, CL.

**Symphyotrichum turbinellum** (L.) Willd. – Brookside Alder. CH [K]. Native.

**BETULACEAE** (Birch Family)

- **Betula nigra** L. – River Birch. CH [I, K], CRW [I, K, G], Native. OP, CL. Plant observed in Crawford County but not collected.
- **Corylus americana** Marshall – American Hazelnut. CH [K], CRW [I, K, G], Native. OC.
- **Ostrya virginiana** (P. Mill.) Koch – Eastern Hop-Hornbeam. CH [K], CRW [K], Native.

**BIGNONIACEAE** (Trumpet-Creeper Family)

- **Campsis radicans** (L.) Seem. ex Bureau – Trumpet-Creeper. CH [I, K], CRW [I, K, G], Native. OP. CL.
- **Catalpa bignonioides** Walt. – Southern Catalpa. CH [I], CRW [I, G], Native. Adventive. CL. Cherokee County Record (Pryer 4956, Pryer 4963, Pryer 5041)

**Catalpa ovata** G. Don – Chinese Catalpa. CRW [I]. Non-native. CL.

**State Record. Crawford County Voucher (Pryer 2083).** One tree located in the middle of a hay field and suckering. Present two years in a row. Reported from few counties nationwide, in mostly northeastern states. Reported only from two counties in Missouri, Boone and Crawford. The Missouri records are the closest reports.

**Catalpa speciosa** Warder ex Engelm. – Northern Catalpa. CH [K], CRW [I, K, G], Native. Adventive. OC, CL.

**BORAGEACEAE** (Borage Family)

- **Buglossoides arvensis** (L.) I.M. Johnst. – Corn-Gromwell. CH [I, K], CRW [I, K, G], Native. Non-native. OP, CL.
- **Ellisia nyctelea** (L.) – Aunt Lucy. CH [K], CRW [I, K, G], Native. OP, CL.
- **Hackelia virginiana** (L.) I.M. Johnst. – Beggar’s-Lice. CH [K], CRW [I, K, G], Native.
- **Heliotropium indicum** L. – Indian Heliotrope. CH [I, K], CRW [I, K, G], Native. OP.
- **Heliotropium tenellum** (Nutt.) Torr. – Pasture Heliotrope. CRW [I, K, G], Native. OC.
- **Hydrophyllum virginianum** L. var. virginianum – Shawnee-Salad. CH [K], CRW [K, G], Native. Gibson did not recognize varieties of this taxon.
- **Lithospermum canescens** (Michx.) Lehm. – Hoary Pucoon. CH [K], CRW [K, G], Native.
- **Lithospermum incisum** Lehm. – Fringed Gromwell. CH [I, K], CRW [I, K, G], Native. OC, CL.
- **Lithospermum occidentale** (Mack.) Weakley, Wissel & D. Estes – Western Marbleseed. CRW [I, K, G], Native. OC.
- **Myosotis macroserpa** Engelm. – Large-Seed Forget-Me-Not. CRW [I], Native. CL. State Record. Crawford County Vouchers (Pryer 598, Pryer 987, Pryer 4223, Pryer 4270). This taxon is common throughout the south and eastern United States, including the 4-State region. The closest reports are Barton and Jasper counties, Missouri.
- **Myosotis verna** Nutt. – Spring Forget-Me-Not. CH [I, K], CRW [I, K, G], Native. OP, CL.
- **Phacelia giloidea** Brand – Brand’s Scorpion-Weed. CH [K], CRW [K, G], Native.
- **Phacelia hisruta** Nutt. – Fuzzy Scorpion-Weed. CH [K], CRW [I, K, G], Native. OC.

**BRASSICACEAE** (Mustard Family)

- **Abra brachycarpa** (Nutt. ex Torr. & A. Gray) Greene – Smooth Cross-Hair Cress. CH [I, K], CRW [I, K, G], Native. OC, CL.
- **Alliaria petiolata** (Bieb.) Cavara & Grande – Garlic-Mustard. CRW [I]. Non-native. Noxious. OC, CL. Crawford County Record (Pryer 4261, Pryer 4313, Pryer 4541).


- **Arabis pycnocarpa** M. Hopkins – Hairy Eared Rockcress. CH [K]. Native. Rare. Only reported from Cherokee County, Kansas, but common in Missouri; considered rare in Arkansas and has not been reported in Oklahoma.
Boraginaceae (Borage Family)

Barbarea vulgaris W.T. Aiton – Garden Yellow-Rocket. CH [I], CRW [I, K, G]. Non-native. OC, CL.


Borodinia dentata (Raf.) P.J. Alexander & Windham – Short’s False Rockcress. CH [I, K], Native. OP. OC, Reported in three counties in Kansas, but common in surrounding states.

Borodinia missouriensis (Greene) P.J. Alexander & Windham – Green False Rockcress. CH [I, K], Native. Rare. OP. Only reported in Cherokee County, Kansas, but common in surrounding states.


Brassica rapa L. var. rapa – Rape (Canola). CRW [I]. Non-native. Oxious. CL. Crawford County Record (Pryer 100, Pryer 110, Pryer 4257).

Camelina microcarpa Andr. ex DC. – Little-Pod False Flax. CH [K], CRW [K, G]. Non-native.

Capsella bursa-pastoris (L.) Medic. – Shepherd’s-Purse. CH [I, K], CRW [I, K, G]. Non-native. OC, CL.

Cardamine bulbosa (Schreb. ex Muhl.) R.S.P. – Bulbous Bittercress. CH [K]. Native. Rare. Reported from five counties in Kansas, but common in surrounding states.

Cardamine concatenata (Michx.) Sw. – Cut-Leaf Toothwort. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Cardamine hirsuta L. – Hairy Bittercress. CH [I], CRW [I]. Non-native. OP, OC. State Record. Crawford County Vouchers (Pryer 4116, Pryer 4128, Pryer 4207, Pryer 4208). Crawford County voucher (Pryer 4035, Pryer 4066). This taxon is scattered through the United States and most common throughout the southeast. It is commonly reported in the 4-state region. The closest reports are from Barry County, Missouri and Osage County, Oklahoma. This taxon was also collected in Leavenworth County, Kansas and is accessioned in the McGregor Herbarium at the University of Kansas (KANU 359596 – C.C. Freeman 25760).

Cardamine parviflora L. – Sand Bittercress. CH [I, K], CRW [I, K, G]. Native. OC, CL.


Chorispora tenella (Pallas) DC. – Crossflower. CRW [I]. Non-native. OC. Crawford County Record (Pryer 4857).

Descurainia pinnata (Walt.) Britton subsp. brachycarpa (Richardson) Detting. – Western Tansy-Mustard. CH [I], CRW [I, G]. Native. OP. OC. Crawford County Record (Pryer 556, Pryer 4291, Pryer 4334, Pryer 4391, Pryer 4514, Pryer 4515, Pryer 4567).

Draba brachycarpa Nutt. ex Torr. & A. Gray – Short-Pod Whitlow-Grass. CH [I, K], CRW [I, G]. Native. OC, CL.

Draba cuneifolia Nutt. ex Torr. & A. Gray var. cuneifolia – Wedge-Leaf Whitlow-Grass. CH [K], CRW [I, K, G]. Native. OC. Gibson did not recognize varieties of this taxon. Crawford County Record (Pryer 4337).

Draba reptans (Lam.) Fernald – Carolina Whitlow-Grass. CH [K], CRW [I, K, G]. Native. OC.

Erysimum capitatum (Dougl. ex Hook.) Greene – Sand-Dune Wallflower. CRW. Native. State Record. Collected in 1998 along the roadside of Highway 160. Crawford County Voucher (Timme 15028). This taxon is common in western states and adventive in the Great Plains region. The closest report is Benton County, Arkansas, Barry County, Missouri, and Rogers County, Oklahoma.

Erysimum repanum L. – Spreading Wallflower. CH [K], CRW [I, K, G]. Non-native. Oxious. OC, CL.
Triodanis lamprosperma McVaugh – Prairie Venus’-Looking-Glass. CH [K]. Native. Rare. Reported in three counties in Kansas; common in Oklahoma and Arkansas, but rare in Missouri.

Triodanis leptocarpa (Nutt.) Nieuwl. – Slim-Pod Venus’-Looking-Glass. CH [!, K]. Native. CL.

Triodanis perfoliata (L.) Nieuwl. subsp. perfoliata (L.) Nieuwl. – Clasping-Leaf Venus’-Looking-Glass. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Triosteum angustifolium (Raf.) Fernald var. tenuior (Hornwort Family) – Lesser Chickweed. CRW [!, K]. Non-native. OP, OC, CL.

Triosteum perfoliatum (L.) Vill. – Trumpet Honeysuckle. CH [K], CRW [!, K, G]. Native. OP, OC, CL.

Turcz. – Winter-Creeper. CH [!, K]. CRW [!, K]. Native. CL.

Cerasium glareosum (Engelm. ex A. Gray) B.L. Rob. – Short-Stalk Mouse-Ear Chickweed. CH [K], CRW [!, K, G]. Native. OC.

Cerasium fontanum Baumg. subsp. vulgare (Hartman) Greuter & Burdet – Common Mouse-Ear Chickweed. CH [!, K], CRW [!, K, G]. Non-native. OP, OC, CL.

Cerasium glomeratum Thuill. – Sticky Mouse-Ear Chickweed. CH [!, K], CRW [!, K, G]. Non-native. OP, OC, CL.

Cerasium nutans Raf. var. nutans – Nodding Mouse-Ear Chickweed. CH [K], CRW [K]. Native.

Cerasium pumilum W. Curtis – European Mouse-Ear Chickweed. CH [!, K], CRW [!, K]. Non-native. OP, OC. Crawford County Record (Pryer 4456, Pryer 4458, Pryer 4497, Pryer 4587, Pryer 4765).

Dianthus amoenus L. – Deptford Pink. CH [!, K], CRW [!, K, G]. Non-native. OP, OC, CL.


Gypsophila philae Siebold – Snowy Baby’s-Breath. CRW [K]. Non-native. OC.

Holosteum umbellatum L. – Jagged-Chickweed. CRW [K]. Native. OC.

Minuartia punctata (Michx.) Mattf. – Pitcher’s Stitchwort. CH [K], CRW [!, K, G]. Native. OP, OC, CL.

Paronychia fastigiata (Raf.) Fernald var. fastigiata – Hairy Forked Nailwort. CH [K], CRW [!, K]. Native. OC.


Saponaria officinalis L. – Bouncing-Bett. CH [K], CRW [!, K, G]. Native. OP, OC, CL.

Schramannus annuus L. – Annual Knapweed. CH [K], CRW [!, K]. Non-native. OC.

Silene antirrhina L. – Sleepy Catchfly. CH [K], CRW [!, K, G]. Native. OP, OC, CL.

Silene regia Sims – Royal Catchfly. CH [K]. Native. Extirpated. This most recent specimen was found at McGregor Herbarium, University of Kansas, made on July 24, 1995 (K.M. Highfill s.n.).

Silene stellata (L.) W.T. Aiton – Widow’s-Flr. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Silene virginica (L.) W.T. Aiton – Widow’s-Frill. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Stellaria media (L.) Vill. – Common Chickweed. CH [K], CRW [!, K, G]. Non-native. OP, OC, CL.

Stellaria neglecta Weihe – Greater Chickweed. CH [!, K], CRW [!, K]. Non-native. OP, OC, CL. State Record. Cherokee County vouchers (Pryer 4054, Pryer 4159, Pryer 4196, Pryer 4964). Crawford County vouchers (Pryer 33, Pryer 49, Pryer 64, Pryer 4069, Pryer 4070, Pryer 4231, Pryer 4232, Pryer 4268, Pryer 4316, Pryer 4373, Pryer 4533, Pryer 4584). Abundant in both counties. This taxon has been reported in few counties nationwide, including one in Arkansas, three in Missouri, and one in Oklahoma. The closest report is from Ottawa County, Oklahoma.

Stellaria pallida (Dumont) Crépin – Lesser Chickweed. CRW [K]. Non-native. Not reported by Gibson (1963) and present in about 14 counties in Kansas (Kartesz 2019). Vouchers for Crawford County at KSC include Stahl s.n. (KSC cat. no. 18825; det. by McGregor) and Holland 10382 (KSC cat. no. 18808; det. by collector, confirmed by M. Mayfield in 2019).

CLEAULACTACEAE (Bittersweet Family)

Celastrus orbiculatus Thunb. – Asian Bittersweet. CRW [!, K]. Non-native. CL. Crawford County Record (Pryer 337, Pryer 3283, Pryer 3458).

Celastrus scandens L. – American Bittersweet. CH [!, K], CRW [!, K, G]. Native. OP, CL.


Euonymus alatus (Thunb.) Siebold – Winged Spindletree. CH [K], CRW [!] Native. OC. Crawford County Record (Pryer 6412).

Euonymus atropurpureus Jacq. var. atropurpureus – Eastern Wahoo. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL. Gibson did not recognize varieties of this taxon.

CERATOPHYLLACEAE (Hornwort Family)

Ceratophyllum demersum L. – Coon’s-Tail. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.
CISTACEAE (Rock-Rose Family)
Lechea mucronata Raf. – Hairy Pinweed. CH [K]. Native. Rare. Reported in eight counties in Kansas, but common in surrounding states.

Lechea tenuifolia Michx. – Narrow-Leaf Pinweed. CH [I, K], CRW [G]. Native.

CLEOMACEAE (Spider-Flower Family)
Polanisia dodecandra (L.) DC. subsp. trachysperma (Spider-Flower Family)

Lechea tenuifolia Michx. – Narrow-Leaf Pinweed. CH [I, K], CRW [G]. Native. Rare. Reported in five counties in Kansas, but common in Missouri and Arkansas; considered rare in the Oklahoma.

COMMELINACEAE (Spiderwort Family)
Commelina communis L. – Asiatic Dayflower. CH [!, K], CRW [!, K, G]. Native. OP, CL.
Commelina diffusa Burm. f. var. diffusa – Climbing Dayflower. CH [I, K]. Native. Rare. OP. CL. Reported in ten counties in Kansas, but common in surrounding states.

Commelina vulgaris L. – Virginia Dayflower. CH [K], CRW [!]. Native. OP, OC. Crawford County Record (Pryer 3240).


CONVOLVULACEAE (Morning-Glory Family)
Calystegia macounii (Green) Brunmitt – Macoun’s False Bindweed. CH [I]. Native. Noxious. CL. Cherokee County Record (Pryer 626b).
Calystegia sepium (L.) R. Br. subsp. angulata Brunmitt – Hedge False Bindweed. CH [I], CRW [I, G]. Native. Noxious. OC. CL.

Cornus obliqua Raf. – Hedge Spiderwort. CH [I, K], CRW [I]. Native. Noxious. OP, OC. Crawford County Record (Pryer 2446).

Sedum sarmentosum Snow 10974

Lechea tenuifolia Michx. – Narrow-Leaf Pinweed. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Cystospermum angulatum L. – Field Bindweed. CH [I, K], CRW [I, K, G]. Native. Noxious. CL.

Cystospermum nemorale L. subsp. melopepo (Cucumber Family)

Ipomoea hederacea Engelm. – Smartweed Dodder. CH [K], CRW [G]. Native. OP, OC.

Ipomoea purpurea (L.) Roth. – Common morning-glory. CH [I, K], CRW [I, K, G]. Native. Noxious. OC.


Ipomoea pandurata (L.) G.F.W. Mey. – Man-of-the-earth. CH [I, K], CRW [I, K]. Native. Noxious. OC, CL.

Ipomoea purpurea (L.) Roth. – Common morning-glory. CH [I, K], CRW [I, K, G]. Non-native. Noxious.

CORNACEAE (Dogwood family)
Cornus drummondii C.A. Mey. – Rough-leaf dogwood. CH [I, K], CH [I, K, G]. Native. OC, CL.

Cornus florida L. – Flowering Dogwood. CH [I, K], CRW [!]. Native. OP, CL. Crawford County Record (Pryer 6422).

Cornus obliqua Raf. – Pale Dogwood. CH [K], CRW [K, G]. Native.

CRASSULACEAE (Stonecrop Family)
Hylotelephium erythrostictum (Michx.) H. Ohba – Garden Annual-Stonecrop. CH [K]. Non-native.

Sedum pulchellum Michx. – Widow’s-Cross. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Sedum sarmentosum Bunge – Stringy Stonecrop. CRW (Snow 10974, G). Non-native.

CUCURBITACEAE (Cucumber Family)
Citrullus lanatus (Thunb.) Matsumura & Nakai var. lanatus – Watermelon. CH [K]. Non-native.

Cucurbita pepo L. subsp. pepo – Field Pumpkin. CH [K]. Native. Adventive.


Melothria pendula L. var. pendula – Guadeloupe-Cucumber. CH [!]. Native. Rare. Cherokee County Record (Pryer 669, Pryer 3173).

Reported in nine counties in Kansas; this considered rare in Missouri, but common in Oklahoma and Arkansas.

Sicyos angulatus L. – One-Seed Burr-Cucumber. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

CYPERACEAE (Sedge family)

Carex aggregata Mack. – Glomerate Sedge. CH [K]. CRW [I, K]. Native. OC, CL.

Carex bicolor Willd. ex Spreng. var. bicolor – White-Tinge Sedge. CH [I, K], CRW [K, G]. Native. OP.

Carex amphibola Steud. – Eastern Narrow-Leaf Sedge. CRW [!]. Native. CL. State Record. Crawford County Voucher (Pryer 1042).

This taxon has been reported throughout the south and eastern states and is common in the 4-state region. The closest reports are from Jasper and Vernon counties, Missouri.

Carex annectens (Bickn.) Bickn. – Yellow-Frond Sedge. CH [I, K], CRW [I, K, G]. Native. OP, CL.

Carex arkansana (Bailey) Bailey – Arkansas Sedge. CH [K]. Native. Rare. Reported in ten counties in Kansas and is rare in surrounding areas.

Carex aspera Mack. – Southern Sedge. CH [K]. Native.

Carex bicknellii Britton – Bicknell’s Sedge. CH [I, K], CRW [I, K, G]. Native. OP.

Carex bollandii Dewey – Eastern Woodland Sedge. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Carex brevior (Dewey) Mack. – Short-Beak Sedge. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Carex bushii Mack. – Bush’s sedge. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Carex caroliniana Schwein. – Carolina sedge. CH [I, K]. Native. Rare. Reported in three counties in Kansas, but common in surrounding areas.

Carex cephalophora Muhl. ex Willd. – Oval-leaved sedge. CH [I, K], CRW [I, K, G]. Native. OC, CL.
Carex conjuncta Boott – Soft fox sedge. CH [K]. Native. Rare. Reported in eleven counties in Kansas and common in Missouri, but considered rare in Arkansas and known from only two counties in Oklahoma.

Carex corruagata Fernald – Prune-fruit sedge. CH [I, K], CRW [I]. Native. CL. Crawford County Record (Pryer 567, Pryer 568, Pryer 1297).

Carex crus-corvi Shuttlw. ex Kunze – Raven-foot sedge. CH [I, K], CRW [I, K, G]. Native. Rare. CL. Reported in ten counties in Kansas but common in surrounding states.

Carex davisi Schwien. & Torr. – Davis’s sedge. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Carex emoryi Dewey – Emory’s Sedge. CH [K]. Native.

Carex festucacea Schukr. ex Willd. – Fescue sedge. CH [K], CRW [!, K, G]. Native.

Carex fissa Schkuhr ex Willd. – Hammock Sedge. CH [K]. Native. OP, CL.

Carex flavida Bailey – Heavy Sedge. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Carex grayi Carey – Gray’s Sedge. CH [I, K]. Native. OP, CL.

Carex grisea Wahlenb. – Inflated Narrow-Leaf Sedge. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Carex hirsutella Mack. – Fuzzy-Wuzzy Sedge. CH [I, K], CRW [I, K, G]. Native. Rare. OP, CL. Reported in eleven counties in Kansas but common in surrounding states.

Carex hyalinolepis Steud. – Shoreline Sedge. CH [K], CRW [K, G]. Native.

Carex inops subsp. heliophila (Mack.) Crins – Long-Stolon Sedge. CRW [K]. Native.

Carex jamesii Schwein. – James’ Sedge. CRW [I, K]. Native. OC, CL.

Carex leavenworthii Dewey – Leavenworth’s Sedge. CH [I, K], CRW [I, K, G]. Native. OP, CL.

Carex lineata Schkuhr ex Willd. – Hop Sedge. CH [I, K], CRW [I, K, G]. Native.

Carex meadii Dewey – Mead’s Sedge. CH [K], CRW [I, K, G]. Native. OC.

Carex moschata Mack. – Midland Sedge. CH [I], CRW [I, K]. Native. Rare. OP, CL. Cherokee County Record (Pryer 165, Pryer 1207). Reported in ten counties in Kansas, including this report; considered rare in Arkansas and common in Missouri, but not reported for Oklahoma.

Carex microdonta Mack. – Oklahoma Sedge. CH [I], CRW [I, K, G]. Native. OC, CL.

Carex molesta Mack. ex Bright – Troublesome Sedge. CH [I, K], CRW [I, K]. Native. OP, CL.

Carex muehlenbergii Schkuhr ex Willd. var. enervis Boott – Muhlenberg’s Sedge. CH [I, K], CRW [I]. Native. Rare. OC, CL. Crawford County Record (Pryer 302, Pryer 1159, Pryer 4467). Reported in fourteen counties in Kansas, including this report and common in surrounding states.

Carex muehlenbergii Schkuhr ex Willd. var. muehlenbergii – Muhlenberg’s Sedge. CH [I], CRW [I]. Native. OP, OC. Cherokee County Record (Pryer 414, Pryer 412). Crawford County Record (Pryer 4650).

Carex normalis Mack. – Greater Straw Sedge. CH [K, CRW [I]. Native. OC. Crawford County Record (Pryer 723, Pryer 1057, Pryer 4657, Pryer 4846).

Carex oklahomensis Mack. – Oklahoma Sedge. CH [K], CRW [K, G]. Native. Rare. Reported in four counties in Kansas, but common in surrounding areas; considered rare in Oklahoma but common in Missouri and Arkansas.

Carex oligocarpa Schkuhr ex Willd. – Richwoods Sedge. CRW [I, K]. Native. OC, CL.

Carex opaca (F.J. Herm.) P. Rothr. & Reznicek – CH [I, K], CRW [I, K]. Native. CL.

Carex pellita Muhl. ex Willd. – Woolly Sedge. CRW [I, G]. Native. CL.

Carex radiata (Wahlenb.) Small – Eastern Star Sedge. CH [K], CRW [K, G]. Native. Rare. Reported in eight counties in Kansas, but common in Missouri; considered rare in Arkansas.

Carex retroflexa Muhl. ex Willd. – Reflexed Sedge. CH [K], CRW [K]. Native. Rare. Reported in seven counties in Kansas, but common in surrounding states.

Carex rosea Schkuhr ex Willd. – Rosy Sedge. CH [K], CRW [I]. Native. Rare. CL. Crawford County Record (Pryer 616). Reported in nine counties in Kansas, including this report; common in Missouri and Arkansas but rare in Oklahoma.

Carex scoparia Schkuhr ex Willd. – Pointed Broom Sedge. CH [K], CRW [I, K]. Native. CL.

Carex shortiana Dewey – Short’s Sedge. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Carex sparganioides Muhl. ex Willd. – Burt-Reed Sedge. CH [I], CRW [I, K]. Native. OP, CL. Cherokee County Record (Pryer 420, Pryer 508, Pryer 525, Pryer 949, Pryer 1206, Pryer 1208, Pryer 1210a, Pryer 1218, Pryer 5088).

Carex squarrosa L. – Squarrose Sedge. CH [K], CRW [K, G]. Native. Rare. Reported in three counties in Kansas, but common in surrounding areas.

Carex triangularis Boeckeler – Eastern Fox Sedge. CH [K]. Native. Rare. Reported in only Cherokee County, Kansas. This taxon is common in Oklahoma and Arkansas, but considered rare in Missouri.

Carex trinervis Steud. – Pointed Broom Sedge. CH [I, K], CRW [I]. Native. CL.

Carex tribuloides Wahlenb. var. songamonensis Clokey – Blunt Broom Sedge. CH [I, K], CRW [I]. Native. Crawford County Record (Pryer 994, Pryer 1459, Pryer 1460, Pryer 1461, Pryer 2233, Pryer 2234).

Carex umbellata Schkuhr ex Willd. – Parasol Sedge. CH [K], CRW [K]. Native.

Carex vulpinoides Michx. – Common Fox Sedge. CH [I, K], CRW [K, G]. Native. CL.


Cyperus echinatus L. Wood – Globe Flat Sedge. CH [I, K], CRW [I, K, G]. Native. OP, CL.

Cyperus erythrorhizos Muhl. – Red-Root Flat Sedge. CH [I, K], CRW [I, K]. Native. OP, OC, CL. Crawford County Record (Pryer 2758, Pryer 2759, Pryer 2808, Pryer 3331, Pryer 3453, Pryer 3455).

Cyperus esculentus L. var. leptostachyus Boeckeler – Chufa CH [I, K], CRW [I, K]. Native. OP, CL. Gibson did not recognize varieties of this taxon.

Cyperus hortensis (Salzm. & Steud.) Dorr – Low Spike Sedge. CH [I, K], CRW [I, K]. Native. Rare. Crawford County Record (Pryer 3561, Pryer 5688). In Kansas known from four eastern counties; common in Missouri, Arkansas and eastern Oklahoma.

Cyperus lupulinus (Spreng.) Marcks subsp. lupulinus – Great Plains Flat Sedge. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Cyperus esculentus L. – Rusty Flat Sedge. CH [I, K], CRW [I, K, G]. Native. OC, CL.
Cyperus squarrosus L. – Marsh Flat Sedge. CH [I], K, CRW [I, K], Native. Rare. OP, CL. Reported in fifteen counties in Kansas but common in surrounding states.

Cyperus pseudovegetus Steud. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus strigosus L. – Straw-Color Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus cumperus (L.) Kunth – Cottongrass Bulrush. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus squarrosus L. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus pseudovegetus Steud. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus strigosus L. – Straw-Color Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus rotundus L. – Round-Green Bulrush. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus squarrosus L. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus pseudovegetus Steud. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus strigosus L. – Straw-Color Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus cumperus (L.) Kunth – Cottongrass Bulrush. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus squarrosus L. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus pseudovegetus Steud. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus strigosus L. – Straw-Color Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus cumperus (L.) Kunth – Cottongrass Bulrush. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus squarrosus L. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus pseudovegetus Steud. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus strigosus L. – Straw-Color Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus cumperus (L.) Kunth – Cottongrass Bulrush. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus squarrosus L. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus pseudovegetus Steud. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus strigosus L. – Straw-Color Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.

Cyperus cumperus (L.) Kunth – Cottongrass Bulrush. CH [I], K, CRW [I, K, G], Native. OC, CL.

Cyperus squarrosus L. – Marsh Flat Sedge. CH [I], K, CRW [I, K, G], Native. OP, OC, CL.
Only reported in Cherokee County, Kansas, but common in surrounding states.

Acalypha monocado (Englem. ex A. Gray) L. Mill. & Gandhi – Single-Seed Three-Seed-Mercury. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Acalypha ostryfolia Riddell – Pineland Three-Seed-Mercury. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Acalypha rhomboidea Raf. – Common Three-Seed-Mercury. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Acalypha virginica L. – Virginia Three-Seed-Mercury. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Croton capitatus Michx. – Hogwort. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Croton glandulosus L. var. septentrionalis Muell.-Arg. – Vente-Conmigo. CH [I, K], CRW [I, K, G]. Native. OP, CL. Gibson did not recognize varities of this taxon.

Croton michauxii G.L. Webster var. ellipticus (Willd.) B.W. van Ee & P.E. Berry – Narrow-Leaf Rushfoil. CH [I, K]. Native. OP.

Croton monanthogynus Michx. – Prairie-Tea. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Euphorbia corollata L. – Flowering Spurge. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Euphorbia cyathophora Murr. – Fire-on-the-Mountain. CH [I, K], CRW [K, G]. Native. OP, CL.

Euphorbia davidii Subils – David’s Spurge. CH [K], CRW [I, K]. Non-native. OP, CL.

Euphorbia dentata Michx. var. dentata – Toothed Spurge. CH [I, K], CRW [K, G]. Native. OP, OC, CL.

Euphorbia humistrata Engelm. ex A. Gray – Spreading Sandmat. CH [I, K], CRW [G]. Native. OP, CL.

Euphorbia glyptosperma Engelm. – Rib-Seed Sandmat. CH [I, K]. Native. CL.

Cherokee County Record (Pryer 4029).

Euphorbia maculata L. – Spotted Sandmat. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Euphorbia marginata Pursh – Snow-on-the-Mountain. CH [K], CRW [K]. Native.

Euphorbia missurica Raf. – Prairie Sandmat. CH [K], CRW [K, G]. Native. OP, OC, CL.

Euphorbia nutans Lag. – Eyebane. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Euphorbia prostrata Alton – Prostrate Sandmat. CR [I, K]. Native. CL.

Euphorbia pubentissima Michx. – False Flowering Spurge. CH [K]. Native.

Euphorbia serpens Kunth – Matted Sandmat. CH [K], CRW [I, K, G]. Native. OP, OC, CL.

Euphorbia spathulata Lam. – Warty Spurge. CH [K], CRW [K, G]. Native. OC.

Euphorbia stictospora Engelm. – Slim-Seed Sandmat. CH [I, K]. Native. OP, CL.

Tragia betonicifolia Nutt. – Betony-Leaf Noseburn. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

FABACEAE (Pea Family)

Acmispon americanus (Nutt.) Rydb. var. americanus – American Deerweed. CH [K], CRW [I, K, G]. Native. CL.

Albizia julibrissin Durazz. – Silktree. CH [I, K], CRW [I, K, G]. Native. CL.

Amorpha canescens Pursh – Leadplant. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Amorpha fruticosa L. – False Indigo-Bush. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Amphicarpaea bracteata (L.) Fernald var. bracteata – American Hog-Peanut. CH [I, K], CRW [I, G]. Native. OP, Cherokee County Record (Pryer 1747, Pryer 6294). Crawford County Record (Pryer 6157, Pryer 6163).

Aptos americana Medik. – Groundnut. CH [K], CRW [I, K, G]. Native.
Desmodium paniculatum (L.) DC. – Paniced-Leaf Tick-Trefoil. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Desmodium perplexum Schub. – Perplexed Tick-Trefoil. CH [!, K], CRW [!, K, G]. Native. OP, CL.

Desmodium rotundifolium DC. – Prostrate Tick-Trefoil. CH [K]. Native. Rare. Only reported in Cherokee County, Kansas, but common in surrounding states.


Desmodium sp. – Species unidentifiable. Flowers much larger than other species of Desmodium

Desmodium viridiflorum (L.) DC. – Panicled-Leaf Tick-Trefoil. CH [!, K], Desmodium perplexum (L.) DC. – Prostrate Tick-Trefoil. CH [K]. Native. Rare. Only reported in Cherokee County, Kansas, but common in surrounding states.


Hylodesmum volubilis (L.) Britton var. volubilis – Downy Milk-Pea. CH [K]. Native.

Galactia regularis (L.) K. Koch – Kentucky Coffeetree. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Lotus corniculatus L. – Garden Bird’s-Foot-Trefoil. CH [!, K], CRW [!, K, G]. Native. OL.

Lotus tenuis Waldst. & Kit. – Narrow-Leaf Bird’s-Foot-Trefoil. CRW [!, K]. Native. CL.

Medicago lupulina L. – Black Medick. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Medicago minima (L.) ex. Bartalini – Alfalfa. CH [!, K], CRW [!, K, G]. Native. CL.

Medicago sativa L. subsp. sativa – Alfalfa. CH [!, K], CRW [!, K, G]. Native. CL. Gibson did not recognize subspecies of this taxon.

Mellotis officinalis (Lam.) Lam. – Yellow Sweet-Clover. CH [!, K], CRW [!, K, G]. Native. OC, CL.

Orchis purpurea L. – Wild Orchid. CRW [!, K]. Native. OP, OC, CL.

Orchis promenans (L.) Pers. – Goat’s-Rue. CH [!, K], CRW [K, G]. Native. CL.

Securigera varia (L.) Lassen – Purple Crown-Vetch. CH [!, K], CRW [!, K]. Native. OC, CL.

Trifolium dubium (L.) Pers. – Goat’s-Rue. CH [!, K], CRW [K, G]. Native. CL.

Trifolium pratense (L.) Pers. – Red Clover. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Trifolium pratense L. – Red Clover. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.
Trifolium reflexum L. – Buffalo Clover. CH [!, K, CRW [!, K, G]. Native. OP, OC, CL.
Trifolium repens L. – White Clover. CH [!, K], CRW [!, K, G]. Non-native. OP, OC, CL.
Vicia sativa L. subsp. nigra (L.) Ehrl. – Garden Vetch. CH [!]. Non-native. OP. Cherokee County Record (Pryer 234, Pryer 4186).
Vicia villosa Roth subsp. varia (Host) Corb. – Winter Vetch. CH [K], CRW [!, K], G. Non-native. CL.

FAGACEAE (Beech Family)
Quercus alba – Northern White Oak. CH [!, K], CRW [!, K]. Native. OP, CL. Crawford County Record (Pryer 5683).
Quercus x bushii Sarg. – CH [K]. Native.
Quercus x deamii Trel. – CRW [!, K]. Native. CL. Crawford County Record (Pryer 3340).
Quercus x fernowii Trel. – CH [K]. Native.
Quercus falcata Michx. – Southern Red Oak. CH [!, K]. Native. OP. State Record. Cherokee County Voucher (Pryer 3054). This taxon is common throughout the southeastern and eastern states, including the 4-state region. The closest reports are from Ottawa County, Oklahoma and Barry County, Missouri. Quercus macrocarpa Michx. var. macrocarpa – Burr Oak. CH [!, K], CRW [!, K]. Native. OC. CL. Gibson did not recognize varieties of this taxon.
Quercus marilandica (L.) Muenchh. – Blackjack Oak. CH [!, K]. Native. OP.
Quercus michauxii Nutt. – Swamp Chestnut Oak. CH [!]. Native. OP. State Record. Cherokee County Voucher (Pryer 2951). This taxon is common throughout the southeastern United States. In Missouri the distribution is restricted to the southeastern portion of the state. It has only been reported in three counties in Oklahoma and throughout Arkansas. The closest report is from Carroll County, Arkansas. Our one collection is from Schemerhorn Park, part of the Southeast Kansas Nature Center, located on the edge of the Ozark Plateau. The plant occurred in forest between a parking lot along a trail towards an overlook into a cave. We consider it unlikely the tree was manage for native plants. To our knowledge, they have not recorded.
Quercus muehlenbergii Engelm. – Chinkapin Oak. CH [!, K], CRW [!, K, G]. Native. OP, CL.
Quercus palustris Muenchh. – Pin Oak. CH [!, K], CRW [!, K, G]. Native. OC. CL.
Quercus prinoides Muenchh. – Pin Oak. CH [!, K], CRW [!, K, G]. Native. OP, CL.
Quercus rubra – Northern Red Oak. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.
Quercus rubra macrocarpa – Burr Oak. CH [!, K], CRW [!, K, G]. Native. OP.
Quercus × deamii Sarg. – CRW [K]. Native.
Quercus × bushii L. – Northern White Oak. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

GENTIANACEAE (Gentian Family)
Gentiana puberulenta J.S. Pringle – Downy Gentian. CR [!, K]. Native. GC.
Gentianella quinguefolia L. subsp. occidentalis (A. Gray) J. Gillett – SmallAgueweed. CH [K]. Rare. Only reported in Cherokee County, Kansas, but common in Missouri and Arkansas. This taxon has not been reported in the state of Oklahoma. Sabatia angularis (L.) Pursh – Rose-Pink. CH [!, K], CRW [!, K, G]. Native. Rare. OP, CL. Reported in two counties in Kansas, but common in surrounding states. Sabatia canepis Nutt. – Texas-Star. CH [!, K], CRW [!, K, G]. Native. OC, CL.

GERANIACEAE (Geranium Family)
Erodium cicutarium (L.) L'Hérit. – Red-Stem Stork's-Bill. CRW [!]. Non-native. OC. Crawford County Record (Pryer 4315).
Geranium carolinianum L. – Carolina Crane's-Bill. CH [!, K], CRW [!, K, G]. Native. OP, CL.

GROSSULARIACEAE (Currant Family)
Ribes aureum Pursh var. villosum DC. – Golden Currant. CH [K], CRW [!, K, G]. Native. OP, OC, CL.
Ribes missouriense Nutt. – Missouri Gooseberry. CH [!, K], CRW [!, K, G]. Native. OP, CL.

HALORAGACEAE (Water-Milfoil Family)
Myriophyllum aquaticum (Vell.) Verd. – Parrot's-Feather. CH [!]. Non-native. CL. Cherokee County Record (Pryer 4938).

HEMERACTIONEAE (Day-Lily Family)
Hemerocallis fulva (L.) L. – Orange Day-Lily. CH [!, K], CRW [!, K, G]. Native. CL.

HYACINTHACEAE (Hyacinth Family)
Muscaria botryoides (L.) P. Mill. – Common Grape-Hyacinth. CRW [!, K]. Native. CL.
Ornithogalum umbellatum L. – Sleepy-dick. CH [K], CRW [!, K, G]. Native. OC, CL.

HYDRAEGACEAE (Hydrangea Family)

HYDROCHARITACEAE (Tape-Grass Family)
Najas guadalupensis (Spreng.) Magnús subsp. guadalupensis – Guadalupe Watermilfoil. CH [K], CRW [K]. Native. Gibson did not recognize subspecies of this taxon.

HYPERICACEAE (St. John’s-Wort Family)
Hypericum gymnarthrum Engelm. & A. Gray – Clasping-Leaf St. John’s-Wort. CRW [!]. Native. CL. State Record. Crawford County Voucher (Pryer 1475, Pryer 5508). This taxon has been reported in most southern states, including Arkansas and Missouri, but is considered rare in Oklahoma. The closest reports are from McDonald and Newton counties, Missouri. Hypericum hypericoides (L.) Crantz subsp. multicaula (Michx. ex Willd.) Robson – St. Andrew’s-Cross. CH [!, K]. Native. Rare. OP. Reported in two counties in Kansas, but common in surrounding states.
Hypericum muticum L. – Dwarf St. John’s-Wort. CH [!, K], CRW [!, K, G]. Native. OP, CL.
Hypericum perforatum L. – Common St. John’s-Wort. CH [!, K], CRW [!, K, G]. Non-native. OC, CL.
Hypericum punctatum Lam. – Spotted St. John’s-Wort. CH [!, K], CRW [!, K, G]. Native. OP, CL.
Hypericum sphaerocarpum Michx. – Round-Seed St. John’s-Wort. CH [K], CRW [!, K, G]. Native. OC, CL.

HYPOXIDACEAE (Yellow Star-Grass Family)
Hyoscyamus tenuis (L.) Hill – Lesser Poverty Rush. CH [K], CRW [!, K, G]. Native. OP, CL.

IRIDACEAE (Iris Family)
Belamcanda chinensis (Quillwort Family)
Isoetes butleri (Quillwort Family)
Isoetes dudleyi – Slender Rush. CH [!, K], CRW [!, K]. Native. OD, CL.

JUGLANDACEAE (Walnut Family)
Carya brownii Sarg. – CH [K]. Native.

JUNCACEAE (Rush Family)
Juncus anthelatus (L.) K. Koch – Shag-Back Hickory. CH [!, K], CRW [!, K, G]. Native. OC, CL.
Juncus brachycarpus (Wieg.) R.E. Brooks – Kentucky Rush. CH [!, K], CRW [!, K, G]. Native. OC, CL.

LAMIACEAE (Mint Family)
Agastache nepetoides (L.) Kuntze – Giant Hyssop. CH [!, K], CRW [!, K, G]. Native. OC, CL.

Lamium amplexicaule L. – Giraffehead. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.
Lamium biflorum L. – Slender Snow-White. CH [!, K], CRW [!, K, G]. Native. OD, CL.
Lamium galeobdolon L. – Yellow Archangel. CH [!, K], CRW [!, K, G]. Native. OD, CL.

Monarda citriodora Cerv. ex Lag. subsp. citriodora – Lemon Beebalm.
CRW [!] [G]. Native. OC. CL. Gibson did not recognize varieties for this taxon.

Monarda fistulosa L. subsp. fistulosa – Oswego-Tea. CH [!] [K], CRW [!] [K, G]. Native. CL. Gibson did not recognize subspecies for this taxon.

Nepeta cataria L. – Catnip. CH [!, K], CRW [!] [K, G]. Non-native. OC, OP, CL.

Perilla frutescens (L.) Britton var. frutescens – Beeskeapplant. CH [!] [K], CRW [!] [K, G]. Native. Rare. OC. CL. Reported in seventeen counties in Kansas, but common in surrounding states.

Physostegia virginiana – Obedient-Plant. CH [!] [K], CRW [!] [K, G]. Native. Rare. OC. CL. Reported in seven counties in Kansas, but common in surrounding states.

Physostegia virginiana (L.) Benth. subsp. praemorsa (Michx. ex Lam. var. (L.) T. Dur. & B.D. Jackson ex B.L. Rob. &

Pycnanthemum albescens L. subsp. lanceolata (L.) Benth. subsp. praemorsa (Michx. ex Lam. var. (L.) T. Dur. & B.D. Jackson ex B.L. Rob. &


Pycnanthemum verticillatum (Michx.) Pers. var. pilosum (Nutt.) Cooper:


Salvia azurea Michx. ex Lam. var. grandiflora Benth. – Azure-Sage

Salvia farinacea Benth. – Mealy-Cup Sage. CRW [!] [K]. Native. State Record. Crawford County Voucher (Pryer 3901). Several (10+) plants located on a mined land area next to a strip pit. One specimen was collected in Neosho County, Kansas, but was noted as “under cultivation” (W.W. Holland 5857; September 4, 1987). The specimen is held in the McGregor Herbarium, University of Kansas. This taxon has only been reported in New Mexico, Texas, Louisiana, Oklahoma, Florida, Ohio, and Connecticut. The closest report is from Delaware County, Oklahoma.

Scutellaria incana Biehler – Hoary Skullcup. CH [!] [K]. Native. Rare. OP. Only reported in Cherokee county; common in Missouri and Arkansas but rare in Oklahoma.

Scutellaria lateriflora L. var. lateriflora – Mad Dog Skullcup. CH [!] [K], CRW [!] [K, G]. Native. OP.

Scutellaria ovata Hill subsp. ovata – Heart-Leske Skullcap.

Scutellaria parvula Michx. – Small Skullcup. CH [!] [K], CRW [!] [K, G]. Native. OP, OC.

Stachys pilosa Nutt. var. pilosa – Hairy Hedge-Nettle. CRW [!] [K]. Native. Rare. OP. Crawford County Record (Pryer 3363). Reported in six counties in Kansas, but rare in surrounding states and not yet reported for Arkansas.

Stachys tenuifolia Willd. – Smooth Hedge-Nettle. CH [!] [K], CRW [!] [K, G]. Native. OC, CL.

Teucrium canadense L. var. canadense – American Germander. CH [!] [K], CRW [!] [K, G]. Native. OC, CL.


Trichostema brachiatum L. – False Pennyroyal. CRW [K, G], Native.

LentiBulArIACeAE (Bladderwort Family)

Utricularia gibba L. – Humped Bladderwort. CH [K, CRW [!] [K, G]. Native. CL.

Utricularia macrorhiza Le Conte – Greater Bladderwort. CRW [!] [K]. Native. CL.

LiliACEAE (Lily Family)

Erythronium albidum Nutt. – Small White Fawn-Lily. CH [!] [K], CRW [!] [K, G]. Native. CL.

Erythronium mesochoreum Knerr – Midland Fawn-Lily. CH [!] [K], CRW [!] [K, G]. Native. CL.

Erythronium rostratum W. Wolf – Yellow Trout-Lily. CH [!] [K]. Native. Rare. Only reported in Cherokee County, Kansas, but common in surrounding states.

Lilium michiganense Farw. – Michigan Lily. CH [!] [K], CRW [!] [K, G]. Native. Rare. Reported in eleven counties in Kansas; common in Missouri and Arkansas but with only one county report in Oklahoma.

LINACEAE (Flax Family)

Linum medium (Planch.) Britton var. texanum (Planch.) Fernald – Stiff Yellow Flax. CH [!] [K], CRW [!] [K, G]. Native. Rare. Reported in three counties in Kansas but common in surrounding states.

Linum sulcatum Riddell var. sulcatum – Grooved Yellow Flax. CH [!] [K], CRW [!] [K, G]. Native. OC. CL. Gibson did not recognize varieties of this taxon.


LINdERNIACEAE (False Pimpernel Family)

Lindernia dubia (L.) Pennell – Yellow-Seed False Pimpernel. CH [!] [K], CRW [!] [K, G]. Native. OP, CL. Variety was not able to be determined. Kartesz (2017) recognizes Lindernia dubia (L.) var. anagalloidea (Michx.) CH [K].

LOsACEAE (Blazingstar Family)

Mentzelia albescens (Gillies & Arn.) Griseb. – Wavy-Leaf Blazingstar. CH [!] [K]. Native. Adventive.

Mentzelia oligosperma Nutt. ex Sims – Chickenthief. CH [K]. Native.

lyTHRACEAE (Loosestrife Family)

Ammannia coccinea Rottb. – Valley Redstem. CH [!] [K], CRW [!] [K, G]. Native. OC, CL.

Ammannia robusta Heer & Regel – Grand Redstem. CH [!] [K], CRW [!] [K]. Native. OC. CL. Crawford County Record (Pryer 5613).

Cuphea viscosissima Jacq. – Blue Waxweed. CH [!] [K], CRW [!] [K, G]. Native. OP, OC, CL.

Didiplis diandra (Nutt. ex DC.) Wood – Water-Purslane. CH [!] [K], CRW [!] [K, G]. Native. OP.


Lythrum californicum Pursh – Virginia Redstem. CH [!] [K], CRW [!] [K, G]. Native. CL.

Rotala ramosior (L.) Koehne – Lowland Toothcup. CH [!] [K], CRW [!] [K, G]. Native. OP, CL.

MALVACEAE (Mallow Family)


Callirhoe alcaeoides (Michx.) A. Gray – Light Poppy-Mallow. CH [!] [K], CRW [!] [K, G]. Native. OP, OC, CL.

Callirhoe digitata Nutt. – Winecup. CH [!] [K]. Native. Rare. Reported in two counties in Kansas but common in surrounding states.

Hibiscus laevis All. – Halberd-Leaf Rose-Mallow. CH [!] [K], CRW [!] [K, G]. Native. CL.

Malva neglecta Wallr. – Dwarf Mallow. CH [K], CRW [K, G]. Non-native. CL.
Malva pusilla Sm. – Low Mallow. CH [K]. Non-native. CL.
Malvastrum angustum A. Gray – Hairy False Mallow. CRW [K]. Native.
Sida spinosa L. – Prickly Fanpetals. CH [I, K], CRW [I, K, G]. Native. Adventive. OC, CL.

MARSILEACEAE (Water-Clover Family)
Marsilea quadrifolia L. – European Water-Clover. CH [K]. Non-native. CL. Probably originally planted near an old homestead, though obviously naturalizing at this point. State Record (Pryer 4023).

MELASTOMACEAE (Melastome Family)
Rhododendron maximum L. – American Five-Leaves. CH [I, K]. Native. Rare. Reported in seven counties in Kansas; common in Missouri and Arkansas but rare in Oklahoma.

MELASTOMATACEAE (Melia Family)
Rhaphidophora tetrasperma (L.) O. Kuntze – Eclipse Tree. CH [I, K]. Native. Rare. Reported in two counties in Kansas but common in surrounding states.

MENISpermACEAE (Moonseed Family)
Calycocarpum floridicum (Pursh) Nutt. – Thread-Leaf Evening-Primrose. CH [I, K], CRW [I, K, G]. Native. OP, OC. CL.

MOLLUGINACEAE (Carpetwood Family)
Gliricidia sepium (Jacq.) Walpers – Gliricidia. CH [K]. Native. CL. Probably planting at an old homestead. Included here for reference, but not included in any tallies.

MONTIACEAE (Candy-Flower Family)
Claytonia virginica L. var. virginica – Virginia Springbeauty. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

MORACEAE (Mulberry Family)
Fatsia japonica (Thunb.) Nakai – White Mulberry. CRW [I, K]. Non-native. CL. Crawford County Record (Pryer 2313, Pryer 2319).

NYMPHAEAE (Water-Lily Family)
Nuphar lutea (L.) DC. – Yellow Pond-Lily. CH [I, K]. Rare. CL. Reported in seven counties in Kansas; common in Arkansas but rare in Oklahoma.

OLACACEAE (Olive Family)
Foresteria occidentalis (Michx.) Pursh. – Eastern Swamp-Privet. CH [I, K]. Native. Rare. OP. Reported in two counties in Kansas; common in Arkansas and parts of Missouri but rare in Oklahoma.

ONAGRACEAE (Evening-Primrose Family)
Campanula rotundifolia L. – Bellflower. CH [I, K], CRW [I, K, G]. Native. OP, CL.

PAPAVERACEAE (Poppy Family)
Papaver rhoeas L. – Red Poppy. CH [I, K], CRW [I, K, G]. Native. OP, OC. CL.

PELARGONIUMACEAE (Geranium Family)
Pelargonium sidoides (Thunb.) Link – Potato-Scented Geranium. CH [I, K], CRW [I, K, G]. Native. OP, OC. CL. Probably originally planted near an old homestead, though obviously naturalizing at this point. State Record (Pryer 4023).

PERSICARIAEAE (Evening-Primrose Family)
Persicaria hydropiper L. – Water-Purslane. CH [I, K], CRW [I, K, G]. Native. OP, OC. CL.

PSEUDOROSEACEAE (Spring-beauty Family)

PRIMULACEAE (Primrose Family)
Primula vulgaris (L.) L. – Common Primrose-Willow. CH [K]. Native. CL. Probable planting at an old homestead. Included here for reference, but not included in any tallies.
Spiranthes lucida (H.H. Eaton) Ames – Shining Ladies'-Tresses. CH [K]. Native. Rare. Reported in two counties in Kansas; common in Missouri and Arkansas but rare in Oklahoma.

Spiranthes tuberosa (Bigelow) Luer – Northern Slender Ladies'-Tresses. CH [K]. Native. Rare. Reported in eighteen counties in Kansas, but considered extirpated from the state of Oklahoma.

Platanthera lacera (Michx.) G. Don – Green Adder's-Mouth Orchid. CH [K]. Native. Rare. Reported in eight counties in Kansas; common in Missouri and Arkansas but rare in Oklahoma.

Platanthera praecala Sheviak & Bowles – Great Plains White Fringed Orchid. CRW [K, G]. Native. Rare. Federally listed as threatened. Reported in fourteen counties in Kansas. This taxon in considered rare wherever it occurs. It has been reported throughout eastern North Dakota, and scattered in counties in Oklahoma, but is considered extirpated from the state of Oklahoma.


Spiranthes lacera (Raf.) Raf. – Northern Slender Ladies'-Tresses. CH [K]. Native. CL. Variety could not be determined in Kansas specimens since none of the identification texts used recognized varietes.

Spiranthes lucida (H.H. Eaton) Ames – Shining Ladies'-Tresses. CH [K]. Native. Rare. Reported in two counties in Kansas; common in Missouri and Illinois. Variety could not be determined in Kansas specimens since none of the identification texts used recognized varietes.

Spiranthes atrata (L.) L. – Whiteflower Ladies'-Tresses. CH [K]. Native. Rare. Reported in two counties in Kansas; common in Missouri and Illinois. Variety could not be determined in Kansas specimens since none of the identification texts used recognized varietes.

Spiranthes vernalis Engelm. & A. Gray – Spring Ladies'-Tresses. CH [K]. Native. OP, OC, CL.

Oxalis dilleni Jacq. – Slender Yellow Wood-Sorrel. CH [K], CRW [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Oxalis stricta L. – Upright Yellow Wood-Sorrel. CH [K]. CRW [K]. Native. OP, OC, CL.

Oxalis violacea Jacq. – Slender Yellow Wood-Sorrel. CH [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Oxalis corniculata L. – Creeping Yellow Wood-Sorrel. CH [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Oxalis stricta L. – Upright Yellow Wood-Sorrel. CH [K]. Native. OP, OC, CL.

Oxalis violacea L. – Violet Wood-Sorrel. CH [K]. Native. OP, OC, CL.

Papaveraceae (Pappy Family)

Corydalis exigua L. – Mealy Fumewort. CH [K], CRW [K]. Native.

Corydalis flava (L.) L. – Yellow Fumewort. CH [K]. Native. OP, OC, CL.


Corydalis micrantha (Engelm. ex A. Gray) A. Gray subsp. micrantha – Small-Flower Fumewort. CRW [K]. Native. CRW Crawford County Record (Pryer 92, Pryer 4351, Pryer 43516).

Dicentra cucullaria Nutt. – Dutchman's Breeches. CH [K], CRW [K]. Native. OP, OC, CL.

Papaver rhoas L. – Corn Poppy. CH [K], CRW [K]. Native. OP, OC, CL.

Passifloraceae (Passion-Flower Family)

Passiflora incarnata L. – Purple Passion-Flower. CH [K], CRW [K]. Native. OP, OC, CL.

Passiflora lutea L. – Yellow Passion-Flower. CH [K]. CRW [K]. Native. OP, OC, CL.

Pennell – Large-Flower Yellow False Foxglove. CH [K]. Native.

Agalinis purpurea (L.) Pennell – Purple False Foxglove. CH [K], CRW [K]. Native. Rare. CL.


Agalinis purpurea (L.) Pennell – Purple False Foxglove. CH [K], CRW [K]. Native. Rare. CL.

Phyllanthaceae (Leaf-Flower Family)

Phyllanthus caroliniensis Walt. subsp. caroliniensis – Carolina Leaf-Flower. CH [K], CRW [K]. Native. Rare. Gibson did not recognize

in the Midwest south to the Gulf Coast, but considered rare wherever it occurs.

Corallorhiza odontorhiza (Willd.) Poir. – Autumn Corallorhiza. CH [K]. Native.

Corallorhiza wisteriana Conrad – Spring Corallorhiza. CH [K]. Native.

Cypripedium parviflorum Salisb. var. parviflorum – Yellow Lady's-Slipper. CH [K]. Native.

Malaxis unifolia Michx. – Green Adder's-Mouth Orchid. CH [K]. Native. Rare. Reported in two counties in Kansas; common in Missouri and Arkansas but rare in Oklahoma.

Aureolaria grandiflora (Benth.) Pennell var. serrata (Torr. ex Benth.) Pennell – Large-Flower Yellow False Foxglove. CH [K], CRW [K]. Native. Rare. OP, OC, Crawford County Record (Pryer 2770).

Castilleja coccinea (Engelm. ex A. Gray) A. Gray subsp. australis – Scarlet Indian-Paintbrush. CH [K], CRW [K]. Native. OC, CL.

Onobrychis alpina (L.) Jacq. – Small-Flower Fumewort. CH [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Onobrychis alpina (L.) Jacq. – Small-Flower Fumewort. CH [K], CRW [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Onobrychis alpina (L.) Jacq. – Small-Flower Fumewort. CH [K], CRW [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Onobrychis alpina (L.) Jacq. – Small-Flower Fumewort. CH [K], CRW [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Onobrychis alpina (L.) Jacq. – Small-Flower Fumewort. CH [K], CRW [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Onobrychis alpina (L.) Jacq. – Small-Flower Fumewort. CH [K], CRW [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Onobrychis alpina (L.) Jacq. – Small-Flower Fumewort. CH [K], CRW [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.

Onobrychis alpina (L.) Jacq. – Small-Flower Fumewort. CH [K], CRW [K]. Native. Rare. Reported in fifteen counties in Kansas, but considered rare wherever it is reported. The most concentrated distribution is in Kansas, Missouri, Iowa, and Illinois.
subspecies of this taxon. Reported in five counties in Kansas but common in surrounding states.

**PHYTOLACCACEAE** (Pokeweed Family)

*Phytolacca americana* L. var. *americana* – American Pokeweed. CH [I], K, CRW [I, K, G]. Native. CL. Gibson did not recognize varieties of this taxon.

**PLANTAGINACEAE** (Plantain Family)

*Callitriche heterophylla* (Raf.) Terrestrial Water-Starwort. CH [I, K], CRW [I, K, G]. Native. CL.

*Callitriche terrestris* Raf. – Terrestrial Water-Starwort. CH [K], Native. Rare. Reported in seven counties in Kansas; common in Missouri and Arkansas but rare in Oklahoma.

*Chaenorhinum minus* (L.) Lange – Dwarf-Snapdragon. CH [I], K. Non-native. OP.

*Collinsia violacea* Nutt. – Violet Blue-Eyed Mary. CH [I, K], CRW [I, K, G]. Native. OC, CL.

*Giraltia neglecta* Torr. – Clamyde Hedge-Hyssop. CH [I], K, CRW [K, G]. Native. CL.


*Leucospora multifida* (Michx.) Nutt. – Narrow-Leaf Paleseed. CH [K], CRW [I, K, G]. Native. OC, CL.


*Mecardonia acuminata* (Walt.) Small var. *acuminata* – Axil-Flower. CH [K]. Native. Rare. Only reported in Cherokee County, Kansas; common in Oklahoma and Arkansas but rare in Missouri.

*Nuttallanthus canadensis* (D.A. Sutton – Oldfield-Toadflax. CH [I], K], CRW [K, G]. Native. OP. Cherokee County Record

*Penstemon digitalis* Nutt. ex Sims – Foxglove Beardtongue. CH [I, K], CRW [I, K, G]. Native. OC, CL.

*Penstemon tubiflorus* Nutt. var. *tubiflorus* – White Wand Beardtongue. CH [I, K], CRW [I, K, G]. Native. OC, CL. Gibson did not recognize varieties for this taxon.

*Plantago arистata* Michx. – Large-Bract Plantain. CH [I, K], CRW [I, K, G]. Native. OP. OC, CL.

*Plantago elongata* Pursh – Prairie Plantain. CH [K]. Native.


*Plantago major* L. – Great Plantain. CH [I, K], CRW [K, G]. Non-native. OP. Cherokee County Record

*Plantago rhudosperma* Deene. – Red-Seed Plantain. CH [I], CRW [I]. Native. OP. OC. Cherokee County Record (Pryer 426). Crawford County Record (Pryer 4841, Pryer 4918).

*Plantago rubelli* Deene. – Black-Seed Plantain. CH [I, K], CRW [I, K, G]. Native. OP. OC, CL.

*Plantago virginica* L. – Pale-Seed Plantain. CH [I, K], CRW [I, K, G]. Native. OP. OC, CL.


*Veronica arvensis* L. – Corn Speedwell. CH [I, K], CRW [I, K, G]. Non-native. OC, CL.

*Veronica *peregrina* L. subsp. *peregrina* – Neckweed. CH [I, K], CRW [I, K, G]. Native. OP. OC, CL.

*Veronica *peregrina* L. subsp. *xalapensis* (Kunth) Pennell – Neckweed. CH [I, K], CRW [K, G]. Native. CL.

*Veronica polita* Fr. – Field Speedwell. CH [I, K], CRW [I, K, G]. Non-native. OP. OC, CL.

*Veronicastrum virginicum* (L.) Farw. – Culver’s-Root. CH [K]. Native.

**PLATANACEAE** (Planetree Family)

*Platanus occidentalis* L. – American Sycamore. CH [I, K], CRW [I, K, G]. Native. OP. OC, CL.

**POACEAE** (Grass Family)


*Agrostis eliotii* J.A. Schultes – Elliot’s Bent. CH [K], CRW [K, G]. Native. Rare. Reported in eleven counties in Kansas but common in surrounding states.

*Agrostis gigantea* Roth – Black Bent. CH [K], CRW [I, K, G]. Non-native. OC.

*Agrostis hyemalis* (Walt.) B.S.P. – Winter Bent. CH [I, K], CRW [I, K, G]. Native. OP. OC, CL.

*Agrostis perennans* (Walt.) Tuckerman – Upland Bent. CH [I, K], CRW [I, K]. Native. OC. CL.

*Agrostis scabra* Willd. – Rough Bent. CH [K]. Native. Rare. Only reported in Cherokee County, Kansas, and rare in all surrounding states.

*Agrostis stolonifera* L. – Spreading Bent. CH [K], CRW [I, K]. Non-native. CL.

*Alopecurus carolinianus* Walt. – Tufted Meadow-Foxtail. CH [I, K], CRW [K, G]. Native.

*Andropogon gerardi* Vitman – Big Bluestem. CH [I, K], CRW [I, K, G]. Native. OC. CL.

*Andropogon ternarius* Michx. – Split-Beard Bluestem. CH [I, K], CRW [I, K, G]. Native. OP. CL.

*Andropogon virginicus* L. var. *virginicus* – Broom-Sedge CH [I, K], CRW [I, K, G]. Native. OC, CL. Gibson did not recognize varieties of this taxon.

* Aristida adscensionis* L. – Six-Weeks Three-Awn. CH [I]. Native. CL. Cherokee County Record (Pryer 5054).

*Aristida basireamama* Engelm. ex Veasey – Forked Three-Awn. CH [K], CRW [I]. Native. CL. Crawford County Record (Pryer 6081).

*Aristida dichotoma* Michx. var. *curtisii* A. Gray ex S. Wats. & Coutl. – Church-Mouse Three-Awn. CH [K], CRW [K]. Native.

*Aristida dichotoma* Michx. var. *dichotoma* – Church-Mouse Three-Awn. CH [K], CRW [I, K]. Native. CL.

*Aristida longespica* Poir. var. *geniculata* (Raf.) Fernald – Red Three-Awn. CRW [I]. Native. CL. Crawford County Record (Pryer 6089).


*Aristida oligantha* Michx. – Prairie Three-Awn. CH [I, K], CRW [I, K, G]. Native. OP. OC, CL.

*Aristida purpurascens* Poir. var. *purpurascens* – Arrow-Feather Three-Awn. CH [I, K], Native. OP. CL.

*Aristida ramossissima* Engelm. ex A. Gray – S-Curve Three-Awn. CH [I, K]. Native. Rare. Only reported in Cherokee County, Kansas but rare in the immediately surrounding area and considered extirpated from Missouri.

*Arthraxon hispidus* (Thunb.) Makino – Small Carp Grass. CH [K], CRW [I]. Non-native. CL. Crawford County Record (Pryer 3666).

*Bothriochloa bladhii* (Retz.) S. T. Blake – Australian Beard Grass. CH [I]. Non-native. OP. Cherokee County Record (Pryer 5784).

*Bothriochloa ischaemum* (L.) Keng – Turkestan Beard Grass. CH [I], CRW [I]. Non-Native. CL. Cherokee County Record (Pryer 1622, Pryer 1641).


*Bouteloua curtipendula* (Michx.) Torr. var. curtipendula – Side-Oats Grama. CH [I, K], CRW [I, K, G]. Native. OP. CL. Gibson did not recognize varieties of this taxon.

*Bouteloua dactyloides* (Nutt.) Columbus – Buffalo Grass. CH [I], CRW
Brachyelytrum erectum (Schreb. ex Spreng.) Beauv. – Bearded Shorthusk. CH [!], Native. Rare. Cherokee County Record (Pryer 3836, Pryer 3952).

Bromus catharticus Vahl var. Vahl var. – Field Brome. CH [!], K, CRW [!], K, G. Non-native. OC, CL.

Bromus commutatus L. – Bald Brome. CH [!], CRW [!]. Non-native. OC. Crawford County Record (Pryer 5987).


Bromus hordeaceus L. subsp. hordeaceus – Soft Brome. CH [!], Non-native. OP, OC, CL.

Chasmanthium latifolium (Hack.) Fernald – Innocent-Weed. CH [!], K, CRW [!], K, G. Non-native. OC, OP, CL.

Chloris virgata (L.) Thunb. – American beakgrain. CRW [!], K, G. Native. OP, CL.

Chloris verticillata (Michx.) Yates – Indian Wood-Oats. CH [!, K], CRW [!], K, G. Non-native. OC, CL.

Cynodon dactylon (L.) Pers. – Bermuda Grass. CH [!], K, CRW [!], K, G. Non-native. CL.

Danthonia spicata (L.) Beauv. ex Roemer & J.A. Schultz – Poverty Wild Oat Grass. CH [!], K, CRW [!]. Native. OP.

Danthonia americana Beauv. – American beakgrass. CRW [!]. Native. State Record: Voucher (Pryer 1610b (KSP021213)). Known (but rare) in many counties in Missouri, two in eastern Oklahoma, and twelve counties in western and northern Arkansas.

Diarrhoea ravenii Beauv. – Mexican Wild Oat Grass. CH [!], K, CRW [!]. Native. OP, OC.

Dichanthelium acuminatum (Sw.) Gould & C.A. Clark var. acuminatum – Tapered Rosette Grass. CH [!], K, CRW [!], K, G. Native. OP, OC.


Dichanthelium clandestinum (L.) Gould – Deer-Tongue Rosette Grass. CH [!], K, CRW [!], K, G. Native. OP, OC.

Dichanthelium decipiens (MuHl.) Gould – Starved Rosette Grass. CRW [!]. Native. CL. Crawford County Record (Pryer 1166).

Dichanthelium dichotomum (L.) Gould var. dichotomum – Cypress Rosette Grass. CH [!], CRW [!]. Native. OP, OC. Cherokee County Record (Pryer 5072, Pryer 5084).

Dichanthelium luteolum (L.) Harville – Broad-Leaf Rosette Grass. CH [!], K. Native. OP.

Dichanthelium laxiflorum (Lam.) Gould – Open-Flower Rosette Grass. CH [!], K. Native.

Dichanthelium leibergii (Vasey) Freckmann – Leiberg’s Rosette Grass. CH [!], K. Native. Rare. Reported from six counties in Kansas; rare in Missouri and not yet reported for Oklahoma or Arkansas.

Dichanthelium lineariifolium (Scribn. ex Nash) Gould – Slim-Leaf Rosette Grass. CH [!], K, CRW [!], K. Native. OP, CL.


Dichanthelium oligosanthes (J.A. Schultz) Gould – Heller’s Rosette Grass. CH [!], K, CRW [!], K, G. Native. OC, CL.

Dichanthelium scoparium (Lam.) Gould – Broom Rosette Grass. CH [!], K, CRW [!], K, G. Native. OP, OC.

Dichanthelium spherocephalon (Elliot) Gould – Round-Seed Rosette Grass. CH [!], K, CRW [!], K, G. Native. OP, OC. Kartesz (2017) recognizes the varieties isophyllum and sphaerocephalon, however due to the difficulty in identifying this genus, no specimens were identified to the infraspecific level.

Digitaria ciliaris (Retz.) Koel. – Southern Crab Grass. CH [!], K, CRW [!], K. Non-native. OP, OC, CL.

Digitaria sanguinalis (L.) Scop. – Hairy Crab Grass. CH [!], K, CRW [!], K, G. Native. OP, OC, CL.

Digitaria sanguinalis (L.) Scop. – Hairy Crab Grass. CH [!], K, CRW [!], K, G. Native. OP, OC, CL.

Digitaria sanguinalis (L.) Scop. – Hairy Crab Grass. CH [!], K, CRW [!], K, G. Native. OP, OC, CL.

Digitaria sanguinalis (L.) Scop. – Hairy Crab Grass. CH [!], K, CRW [!], K, G. Native. OP, OC, CL.

Dinebra panicea (Retz.) Selloa – Early-Leaf Brome. CH [!]. Native. Rare. Reported in five counties in Kansas, including this report.

Dinera panicosa (Retz.) P.M. Peterson & N. Snow – Needle Viper Grass. CH [!], K, CRW [!], K, G. Native. CL. Cherokee County Record (Pryer 2490).

Dinebra panicosa (Retz.) P.M. Peterson & N. Snow – Needle Viper Grass. CH [!], K, CRW [!], K, G. Native. CL. Cherokee County Record (Pryer 2490).

Dinebra panicosa (Retz.) P.M. Peterson & N. Snow – Needle Viper Grass. CH [!], K, CRW [!], K, G. Native. CL. Cherokee County Record (Pryer 2490).
Echinochloa crus-galli (L.) Beauv. – Large Barnyard Grass. CRW [I, K]. Non-native. CRW County Record (Pryer 3563).

Echinochloa colona (L.) Beauv. – Barnyard Grass. CRW [I, K]. Non-native. OC, CL. Cherokee County Record (Pryer 3767, Pryer 5470).

Festuca paradoxa Desv. – Clustered Fescue. CRW [K], CRW [K]. Native.


Elymus hystrix L. – Nodding Wild Rye. CH [!, K], CRW [!, K, G]. Native. OC, CL.


Elymus macgregorii R.E. Brooks & J. Campbell – Macgregor’s Wild Rye. CH [!, K], CRW [!, K, G]. Native. OC, CL.

Elymus glabrescens (L.) Gaertn. – Indian Goose Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Elymus repens Bowden – CH [K]. Native.

Elymus × maltei Elymus macgregorii R.E. Brooks & J. Campbell – Macgregor’s Wild Rye. CH [!, K], CRW [!, K]. Native. OP, OC, CL.


Elymus repens Bowden – CH [K]. Native.

Eleusine indica (L.) Gaertn. – Indian Goose Grass. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Eragrostis spectabilis (Pursh) Steud. – Petticoat-Climber. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Eragrostis trichodes (Lam.) B.S.P. – Teal Love Grass. CH [K], CRW [K]. Native.

Eriochloa contracta (Lam.) P. M. Peterson & N. Snow – Bearded Beetle Grass. CH [I, K], CRW [I, K, G]. Native. CL.

Eriochloa spectabilis (Pursh) Steud. – Petticoat-Climber. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Eriochloa spectabilis (Pursh) Steud. – Petticoat-Climber. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Euphorbia esula L. – Horseweed. CRW [!, K]. Native. OC, CL.


Festuca subverticillata (Pers.) A. Camus – Nodding Fescue. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Glyceria striata (Lam.) A.S. Hitchc. – Fowl Manna Grass. CRW [I, K, G]. Native. OC, CL.

Hordeum jubatum L. subsp. jubatum – Fox-Tail Barley. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Koeleria macrantha (Ledeb.) J.A. Schultes – Prairie Koeler’s Grass. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Leersia lenticularis Michx. – Catchfly Grass. CH [K]. Native. Rare. Reported in four counties in Kansas but common in surrounding states.

Leersia oryzoides (L.) Sw. – Rice Cut Grass. CH [I, K], CRW [I, K]. Native. OP, CL.

Leersia virginica Willd. – White Grass. CH [!, K], CRW [I, K]. Native. OC, CL.


Melica nitens (Scribn.) Nutt. ex Piper – Three-Flower Melic Grass. CH [I, K], CRW [K, G]. Native. OP. Reported in sixteen counties in Kansas but common in surrounding states.

Microstegium vimineum (Trin.) A. Camus – Japanese Stilt Grass. CH [!]. Non-native. OP. State Record. Cherokee county voucher (Pryer 6318). Reported throughout the eastern United States including scattered reports in Missouri, Arkansas, and Oklahoma. The closest reports are from McDonald and Barry counties Missouri and Delaware County, Oklahoma.

Muhlenbergia bushii Pohl – Nodding Muhly. CH [I, K], CRW [I, K]. Native. OP, OC, CRW County Record (Pryer 5962, Pryer 5969, Pryer 6007, Pryer 6067, Pryer 6205, Pryer 6255).


Muhlenbergia mexicana (L.) Trin. – Mexican Muhly. CH [K], CRW [G]. Native.

Muhlenbergia paniculata (Nutt.) Columbus – Tumble Grass. CH [K], CRW [K, G]. Native.

Muhlenbergia racemosa (Michx.) B.S.P. – Green Muhly. CRW [!]. Native. CL. CRW County Record (Pryer 3268, Pryer 3368).

Muhlenbergia schreberi J.F. Gmel. – Nimblewill. CH [I, K], CRW [I, K, G]. Native. OP, OC.

Diplachne fusca (L.) Beav. ex Roemer & J.A. Schultes subsp. fasciculati (Lam.) P.M. Peterson & N. Snow – Bearded Beetle Grass. CRW [I, K]. Native. CL.

Echinochloa colonum (L.) Link – Jungle-Rice. CRW [!]. Non-native. CL.

Crawford County Record (Pryer 3767, Pryer 5470).

Echinochloa crus-galli (L.) Beauv. – Large Barnyard Grass. CH [I, K], CRW [I, K]. Non-native. OC, CL. Cherokee County Record (Pryer 3767, Pryer 5470, Crawford County Record (Pryer 1363b, Pryer 1364, Pryer 1407, Pryer 1496, Pryer 1553, Pryer 1999, Pryer 2072, Pryer 6039).

Echinochloa muricata (Beauv.) Fernald var. microstachya (Beauv.) Fernald ex Roemer & J.A. Schultes subsp. microstachya (Beauv.) Fernald var. Wieg. – Rough Barnyard Grass. CH [I, K], CRW [I, K]. Native. OC, CL. Crawford County Record (Pryer 1407b, Pryer 1496b, Pryer 1689, Pryer 2811, Pryer 5493).

Echinochloa muricata (Beauv.) Fernald var. microstachya – Rough Barnyard Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Eleusine indica (L.) Gaertn. – Indian Goose Grass. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Elymus hystrix L. – Nodding Wild Rye. CH [I, K], CRW [I, K, G]. Native. OC, CL.


Elymus repens Bowden – CH [K]. Native.

Elymus repens Bowden – CH [K]. Native.

Elymus virgulanus L. var. virgulanus – Virginia Wild Rye. CH [I, K], CRW [I, K, G]. Native. OC, OP, CL.

Eragrostis capillaris (L.) Nees – Lace Grass. CH [I, K], CRW [I, K, G]. Native. CL.

Eragrostis ciliaris (All.) Vignolo ex Janch. – Stink Grass. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Eragrostis frankii C.A. Mey. ex Steud. – Sandbar Love Grass. CH [I, K], CRW [I, K]. Native. OP, OC, CL. Cherokee County Record (Pryer 2305, Pryer 3004, Pryer 3732). Crawford County Record (Pryer 2902).

Eragrostis hypnoides (Lam.) B.S.P. – Teal Love Grass. CH [K], CRW [K]. Native.

Eragrostis intermedia A.S. Hitchc. – Plains Love Grass. CH [I, K], CRW [I, K]. Native. OP, OC, CL.

Eragrostis minor Host – Little Love Grass. CRW [I, G]. Non-native. OC.

Eragrostis pectinacea (Michx.) Nees ex Jed. var. pectinacea – Purple Love Grass. CH [I, K], CRW [I, K, G]. Native. OC, CL. Gibson did not recognize varieties of this taxon.

Eragrostis pilosa (L.) Beauv. var. pilosa – Indian Love Grass. CRW [!]. Native. Adventive. OC. State Record (Pryer 5452).


Eragrostis spectabilis (Pursh) Steud. – Petticoat-Climber. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Muhlenbergia sobolifera (Muhl. ex Willd.) Trin. – Rock Muhly. CH [I, K]. CRW [I, K]. Native. OP, OC, CL.

Muhlenbergia sylvatica (Torr.) Torr. ex A. Gray – Woodland Muhly. CH [K].

Neearagrostis reptans (Míchx.) Nīcara – Creeping Love Grass. CH [K]. Native. 

Panicum capillare L. – Common Panic Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Panicum dichotomiflorum Michx. var. dichotomiflorum – Fall Panic Grass. CH [I, K]. CRW [I, K, G], Native. OP, OC, CL. Gibson did not recognize varieties of this taxon. 

Panicum flexile Michx. var. – Fall Panic 

Panicum capillare L. – Common Panic Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL. Gibson did not recognize varieties of this taxon.

Panicum virgatum P. – Western-Wheat Grass. CH [K], Native. OC, CL.

Paspalum dilatatum Poir. – Golden Grass. State Record. Cherokee County (Curran s.n., Oct 2017; confirmed by N. Snow).

Paspalum floridanum Michx. – Florida Crown Grass. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Paspalum loevei Michx. – Field Crown Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.


Poa annua L. – Annual Blue Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Phleum pratense L. – Common Timothy. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Phragmites australis (Cav.) Trin. ex Steud. – Broom-Corn. CH [I, K]. Native. CL.

Phalaris canariensis (L.) L. – Eastern Mock Grama. CH [!, K], CRW [!, K]. Native. OP, OC, CL. 

Phalaris arundinacea L. – Reed Canary Grass. CH [I]. CRW [I]. Native. CL. Cherokee County Record (Pryer 520, Pryer 632). Crawford County Record (Pryer 1953, Pryer 2127).

Phalaris arundinacea Walt. – May Grass. CRW [K, G]. Native. 

Sperobolus vaginiflorus (Lam.) A.S. Hitchc. – Target Dropseed. CRW [I]. Native. OC, CL.

Sperobolus clandestinus (Biehler) A.S. Hitchc. – Rough Dropseed. CRW [I]. Native. OC, CL.

Sorghum bicolor (L.) Moench subsp. bicolor – Broom-Corn. CH [K], CRW [K, G]. Non-native.

Sorghum bicolor (L.) Moench subsp. drummondii (Steud.) de Wet ex Davidsie – Broom-Corn. CH [I], CRW [I]. Non-native. CL. State Record. Cherokee County Vouchers (Pryer 5823). This subspecies has scattered reports in several states including Missouri, unreported for Oklahoma or Arkansas with the closest reports from Jasper and McDonald counties, Missouri. Previous concepts of infraspecific taxa have varied. Mark Mayfield (KSC, pers. comm. 2018) indicates that Gates (1936) likely saw some specimens for Kansas but reported them as S. bicolor var. sudanense (Piper) A.S. Hitchc. Thus, this is the first report of this taxon for Kansas under this name.

Sorghum halepense (L.) Pers. – Johnson Grass. CH [I, K], CRW [I, K, G]. Non-native. NOXIOUS. OP, OC, CL.

Sphenopholis intermedia (Rydby) Rydb. – Slender Wedgescale. CH [K], CRW [I, K, G]. Native. CL.

Sphenopholis obtusata (Michx.) Scribn. – Prairie Wedgescale. CH [I], CRW [I, K, G]. Native. OC, CL.

Sporobolus clandestinus (Biehler) A.S. Hitchc. – Rough Dropseed. CH [I, K], CRW [I, K]. Native. OC, CL.

Sporobolus compositus (Poir.) Merr. var. compositus – Head-Like Dropseed. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Sporobolus compositus (Poir.) Merr. var. maceter – Head-Like Dropseed. CH [I, K], CRW [I, K, G]. Native. OC, CL. Crawford County Record (Pryer 3376, Pryer 5690, Pryer 6280).


Sporobolus neglectus Nash – Small Dropseed. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Sorbus oblongifolia (L.) A.S. Hitchc. – Target Dropseed. CRW [I, K], Native. OC, CL.

Sorbus pyramidalis (Lam.) A.S. Hitchc. – Target Dropseed. CRW [I, K], Native. OC, CL.

Sorbus vaginiflora (Torr. ex A. Gray) Wood – Poverty Dropseed. CH [K], CRW [I, K]. Native. CL.

Thinopyrum intermedium Host. – Broom-Corn. CRW [I, K]. Native. CL. Crawford County Record (Pryer 1373).

Triticeae drummondii (L.) A.S. Hitchc. var. flavus – Tall Redtop. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Triticeae strictus (Nutt.) Nash – Long-Spike Fluff Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Sclerochloa dura (Steud.) Bailey – Common Hard Grass. CRW [K]. Non-native.

Setaria faberi R.A.W. Herrm. – Japanese Bristle Grass. CH [I, K], CRW [I, K]. Non-native. NOXIOUS. OP, CL.

Setaria italica (L.) Beauv. – Italian Bristle Grass. CH [I]. Non-native. CL. Cherokee County Record (Pryer 1825). 

Setaria parviflora (Poir.) Kerguelen – Marsh Bristle Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Setaria parviflora (Poir.) Roemer & J.A. Schultes subsp. humilis – Yellow Bristle Grass. CH [I, K], CRW [I, K]. Non-native. OC, CL.

Sorghum bicolor (L.) Moench subsp. bicolor – Broom-Corn. CH [K], CRW [K, G]. Non-native.

Sorghum bicolor (L.) Moench subsp. drummondii (Steud.) de Wet ex Davidsie – Broom-Corn. CH [I], CRW [I]. Non-native. CL. State Record. Cherokee County Vouchers (Pryer 5823). This subspecies has scattered reports in several states including Missouri, unreported for Oklahoma or Arkansas with the closest reports from Jasper and McDonald counties, Missouri. Previous concepts of infraspecific taxa have varied. Mark Mayfield (KSC, pers. comm. 2018) indicates that Gates (1936) likely saw some specimens for Kansas but reported them as S. bicolor var. sudanense (Piper) A.S. Hitchc. Thus, this is the first report of this taxon for Kansas under this name.

Sorghum halepense (L.) Pers. – Johnson Grass. CH [I, K], CRW [I, K, G]. Non-native. NOXIOUS. OP, OC, CL.

Sphenopholis intermedia (Rydby) Rydb. – Slender Wedgescale. CH [K], CRW [I, K, G]. Native. CL.

Sphenopholis obtusata (Michx.) Scribn. – Prairie Wedgescale. CH [I], CRW [I, K, G]. Native. OC, CL.

Sporobolus clandestinus (Biehler) A.S. Hitchc. – Rough Dropseed. CH [I, K], CRW [I, K]. Native. OC, CL.

Sporobolus compositus (Poir.) Merr. var. compositus – Head-Like Dropseed. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Sporobolus compositus (Poir.) Merr. var. maceter – Head-Like Dropseed. CH [I, K], CRW [I, K, G]. Native. OC, CL. Crawford County Record (Pryer 3376, Pryer 5690, Pryer 6280).


Sporobolus neglectus Nash – Small Dropseed. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Sorbus pyramidalis (Lam.) A.S. Hitchc. – Target Dropseed. CRW [I, K], Native. OC, CL.

Sorbus vaginiflora (Torr. ex A. Gray) Wood – Poverty Dropseed. CH [K], CRW [I, K]. Native. CL.

Thinopyrum intermedium (Host) Barkworth & D.R. Dewey – Intermediate Quack Grass. CRW [I]. Non-native. CL. Crawford County Record (Pryer 1373).

Tridens flavus (L.) A.S. Hitchc. var. flavus – Tall Redtop. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Tridens strictus (Nutt.) Nash – Long-Spike Fluff Grass. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Trisetum viridum (L.) var. viridum – Green Bristle Grass. CH [I, K], CRW [I, K, G]. Non-native. OP, OC, CL. Gibson did not recognize varietes of this taxon. 

Sorghastrum nutans (L.) Nash – Yellow Indian Grass. CH [I, K], CRW [I, K, G]. Native. CL.

Sorghastrum nutans (L.) Nash – Yellow Indian Grass. CH [I, K], CRW [I, K, G]. Non-native. 

Sorghum bicolor (L.) Moench subsp. bicolor – Broom-Corn. CH [K], CRW [K, G]. Non-native.
Urocotis platyphylla (Munro ex Wright) R. Webster – Broad-Leaf Liverseed Grass. CH [!], Native. CL. **State Record** (Pryer 5536).

Pulvia myuros (L.) K.C. Gmel – Rat-Tail Six-Weeks Grass. CH [I, K], CRW [K], Non-native. OP.

Pulvia octoflora (Walt.) Rydb. var. octoflora – Eight-Flower Six-Weeks Grass. CH [I, K], CRW [I, K, G]. Native. OP. Gibson did not recognize varieties of this taxon.

**POLEMONIACEAE** (Phlox Family)

*Phlox divaricata* L. – Wild Blue Phlox. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

*Phlox paniculata* L. – Downy Phlox. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL. Gibson did not recognize subspecies of this taxon.


*Phlox pilosa* L. subsp. *pilosa* – Downy Phlox. CH [I, K], CRW [I, K]. Native. OP, OC.

**Polemonium reptans** L. – Greek-Valerian. CH [K]. Native.

*Polygonum aviculare* L. subsp. *depressum* (L.) K.C. Gmel. – Jumpseed. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL. Rare. Only reported in Cherokee County, Kansas; common in Missouri and Arkansas but rare in Oklahoma.

*Polygonum reptans* L. subsp. *pilosa* – Jumpseed. CH [!, K], CRW [!, K]. Native. OP, OC, CL. Gibson did not recognize subspecies of this taxon.


*Polygonum sanguineum* L. – Purple Milkwort. CH [!, K], CRW [!, K, G]. Native. OP, OC. Gibson did not recognize subspecies of this taxon.

*Polygala senega* L. – Yellow-Flower Knotweed. CH [K], CRW [!, K]. Native. OP, OC. Gibson did not recognize subspecies of this taxon.

*Polygala sanguinea* L. – Fringed Yellow-Loosestrife. CH [!, K], CRW [I, G]. Native. OP. Gibson did not recognize subspecies of this taxon.

*Polygala incarnata* L. – Procession-Flower. CH [K], CRW [K, G]. Native. OP, OC.

*Polemonium reptans* L. var. *reptans* – Greek-Valerian. CH [K]. Native. Rare. Reported in four counties in Kansas but common in surrounding states.

**POLLYONACEAE** (Milkwort Family)

*Polygala incarnata* L. – Procession-Milkwort. CH [K], CRW [K, G]. Native. OP, OC.

*Polygala sanguinea* L. – Purple Milkwort. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

*Polygala senega* L. – Seneca-Snakeroot. CH [I, K]. Native. Rare. Only reported in Cherokee County, Kansas; common in Missouri and Arkansas but rare in Oklahoma.


**POLYGONACEAE** (Buckwheat Family)

*Fallopia convolvulus* (L.) A. Löve – Black-Bindweed. CH [K], CRW [I, K, G]. Non-native. Noxious. CL.

*Fallopia scandens* (L.) Holub – Climbing Black-Bindweed. CH [I, K], CRW [I, K, G]. Native. OP, CL.

*Persicaria amphiaba* (L.) S.F. Gray – Water Smartweed. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

*Persicaria bicornis* (Raf.) Nieuwl. – Pink Knotweed. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL. Rare. Reported in three counties in Kansas but common in Missouri and Arkansas where it is considered noxious, but rare in Oklahoma.


*Persicaria lapathifolia* Pers. – Long-Leaf Pondweed. CH [K], CRW [K, G]. Native. OP, CL.

*Persicaria hydropiperoides* (Michx.) Arcang. – Yard Knotweed. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL. Rare. Reported in four counties in Kansas but common in Missouri and Arkansas.

*Polygonum acuminatum* Michx. – Yellow-Flower Knotweed. CRW [G]. Gibson did not recognize subspecies of this taxon.


*Rumex hastatus* Baldw. – Heart-Wing Sorrel. CH [K]. Native. Extirpated. The most recent specimen was made on June 9, 2002 (Holland 101548) for Woodson County, Kansas. This specimen resides at Mcgregor Herbarium, University of Kansas. Rare. Reported in Cherokee County, Kansas; common in Missouri and Arkansas.

**PORTULACACEAE** (Purslane Family)

*Portulaca oleracea* L. – Little-Hogweed. CH [K], CRW [I, K, G]. Native. Adventive. OC.

*Portulaca pilosa* L. – Kiss-Me-Quick. CRW [I, K, G]. Native. CL. Rare. Reported in eight counties in Kansas; common in Missouri and Arkansas where it is considered noxious, but rare in Oklahoma.

*Potamogeton foliosus* Raf. – Leafy Pondweed. CH [K], CRW [K, G]. Native. CL.


*Zannichellia palustris* L. – Horned-Pondweed. CRW [!]. Native. OC.

*Stuckenia pectinata* (L.) Böerner – Sago False Pondweed. CRW [K, G]. Native. Rare. Reported in four counties in Kansas; common in Missouri and Arkansas but rare in Oklahoma.

**PONTEDERICAEE** (Pickerelweed Family)

*Heteranthera limosa* (Sw.) Willd. – Blue Mud-Plantain. CH [K]. Native. Extirpated. The most recent specimen was made on June 9, 2002 (Holland 101548) for Woodson County, Kansas. This specimen resides at Mcgregor Herbarium, University of Kansas. Rare. Reported in three counties in Kansas but common in Missouri and Arkansas.

**PORTULACACEAE** (Purslane Family)

*Portulaca oleracea* L. – Little-Hogweed. CH [K], CRW [I, K, G]. Native. Adventive. OC.

*Portulaca pilosa* L. – Kiss-Me-Quick. CRW [I, K, G]. Native. OC.

**POTAMOGETONACEAE** (Pondweed Family)

*Potamogenet crispus* L. – Curly Pondweed. CH [K], CRW [I, K, G]. Non-native. CL.

*Potamogenet diversifolius* Raf. – Waterthread. CH [K], CRW [I, K, G]. Native. CL.

*Potamogenet foliosus* Raf. – Leafy Pondweed. CH [K], CRW [K, G]. Native. CL.

*Potamogenet nodosus* Poir. – Long-Leaf Pondweed. CH [K], CRW [I, K, G]. Native. CL.

*Potamogenet pusillus* L. – Small Pondweed. CRW [I, K]. Native. CL. Rare. Reported in Cherokee County, Kansas; common in Missouri and Arkansas where it is considered noxious, but rare in Oklahoma.

*Zannichellia palustris* L. – Horned-Pondweed. CRW [I]. Native. OC. Rare. Reported in four counties in Kansas; common in Missouri and Arkansas.

**PRIMULACEAE** (Primrose Family)

*Androsace occidentalis* Pursh – Western Rock-Jasmine. CH [K], CRW [I, K, G]. Native. OC, CL.

*Lysimachia ciliata* L. – Fringed Yellow-Loosestrife. CH [I, K], CRW [K]. Native. CL.

*Lysimachia minima* (L.) U. Manns & A. Anderb. – Chaffweed. CH [I, K], CRW [I]. Native. OP, CL.

*Lysimachia nummularia* L. – Creeping-Jenny. CH [K]. Non-native. Rare. Reported in four counties in Kansas; common in Missouri and Arkansas.

*Primula meadia* L. – Fringed Yellow-Loosestrife. CH [I, K], CRW [I, K, G]. Native. CL.

*Samolus parviflorus* Raf. – Water-Pimpernel. CH [K]. Native.
**RANUNCULACEAE** (Buttercup Family)

*Anemonastrum canadense* (L.) Mosyakin – Round-Leaf Thimbleweed. CH [I], CRW [I]. Native. OP. CL. **Cherokee County Record** (Pryer 1173). **Crawford County Record** (Pryer 1357). In Kansas known from twelve counties, mostly in the northeast; more common mostly north.

*Anemone caroliniana* Walt. – Carolina Thimbleweed. CH [K], CRW [I, K]. Native. Anemone virginiana L. var. virginiana – Tall Thimbleweed. CH [I, K], CRW [I, K]. Native.

*Aquilegia canadensis* L. – Red Columbine. CH [I, K], CRW [I, K, G]. Native. OP. OC. *Achillea millefolium* Pursh – Satincurls. CH [K]. Native. Rare. Only reported in Cherokee County, Kansas; common in a small region in Missouri and Arkansas and considered extirpated in Oklahoma.

*Clematis pitcheri* Torr. & A. Gray var. pitcheri – Bluebill. CH [I, K], CRW [I, K, G]. Native. OP. CL. Gibson did not recognize varieties of this taxon.

*Clematis terniflora* DC. – Sweet Autumn Virgin’s-Bower. CH [I, K], CRW [I, K, G]. Non-native. OP. CL.

*Delphinium carolinum* Walt. – Carolina Larkspur. CH [K], CRW [I, K]. Native. CL. *Delphinium tricorne* Michx. – Dwarf Larkspur. CH [I, K], CRW [K, G]. Native. OP. *Enemion biternatum* Rchb. – Beaked Grooveburr. CH [I, K]. Native. OP. *Ficaria verna* Huds. subsp. *calthifolia* (Rchb.) Nyman – Eurasian-Buttercup. CH [I]. Non-native. CL. **State Record.** Cherokee county voucher (Pryer 6421). Abundant on a private property, including its wooded areas. This taxon has been reported in few counties nationwide and mostly in northern states with the exception of Alabama. The closest report is from St. Louis County, Missouri; not reported for Oklahoma or Arkansas.


*Ranunculus recurvatus* – Blisterwort. CH [I, K], CRW [I]. Native. CL. **Rare. Crawford county record** (Pryer 353). Reported in seven counties in Kansas, including this report, but common in surrounding states.

*Ranunculus repens* L. – Creeping Buttercup. CH [I], CRW [I]. Non-native. OP. OC. **Cherokee County Record** (Pryer 4525). **Crawford County Record** (Pryer 4215). **Ranunculus sardous** Crantz – Hairy Buttercup. CH [I, K], CRW [I, K]. Non-native. CRW [I, K], Cherokee County Record (Pryer 488, Pryer 929, Pryer 1710, Pryer 4202).

*Ranunculus seleratii* L. var. seleratii – Cursed Buttercup. CH [I, K], CRW [I, K]. Native. OC. CL. *Thalictrum dasycaurum* Fisch. & Avé-Lall. – Purple Meadow-Rue. CH [I, K], CRW [I, K, G]. Native. OP. *Thalictrum dioicum* L. – Early Meadow-Rue. CH [I]. Native. OP. **Cherokee County Record** (Pryer 4322). Was considered extirpated from the state.

*T. thalictroides* (L.) Eames & B. Boivin – Rue-Anemone. CH [I, K], CRW [G]. Native. OP. **RHAMNACEAE** (Buckthorn Family)

*Ceanothus americanus* L. – New-Jersey-Tea. CH [I, K], CRW [G]. Native. OP.

*Ceanothus herbaceus* Raf. – Prairie Redroot. CH [K], CRW [K, G]. Native. *Rhynchosia japonica* Maxim. – Japanese Buckthorn. CRW [G]. Non-native. Gibson (1963) collected a specimen (Gibson s.n., 22 Sep 1962 (KSP14101)) at Pittsburg State University's Natural History Reserve but identified it as *Rhamnus lanceolata* Pursh. The Reserve is a large area of reclaimed surface mining, and the one specimen almost assuredly was planted. Only reported in three counties nationwide, including two in Missouri and one in Illinois; the closest reports are from Jackson and Boone counties Missouri. Information provided here for local botanists, but not included among numerical tallies.

*Rhamnus lanceolata* Pursh subsp. *glabrata* (Gleason) Kartesz & Gandhi – Lance-Leaf Buckthorn. CH [K], CRW [I, K, G]. Native. OC. **ROSACEAE** (Rose Family)

*Agrimonia gypsophila* Walr. – Tall Hairy Grooveburr. CH [I]. Native.

*Rare. OP. Cherokee County Record* (Pryer 1733). Reported in two counties in Kansas and rare in Missouri and Arkansas. This taxon has not been reported in the state of Oklahoma.


Cra taegus crus-galli L. – Cock-Spur Hawthorn. CH [!], CRW [!, K, G]. Native. OC, CL.

Clys em a mollis (Torr. & A. Gray) Scheele – Downy Hawthorn. CH [K], CRW [!, K, G]. Native. OC.

Cra taegus pruinosa (Wendel. f.) K. Koch – Waxy-Fruit Hawthorn. CH [K], CRW [!, K, G]. Native. Rare. CR. Reported in six counties in Kansas but common in surrounding states.

Cra taegus punctata Jacq. – Dotted Hawthorn. CH [K], CRW [!, K, G]. Native. Rare. Reported in four counties in Kansas but common in surrounding states.

Cr a taegus suculenta Schrad. ex Link – Fleshy Hawthorn. CH [K]. Rare. Reported in three counties in Kansas; common in Missouri but not reported from Oklahoma or Arkansas.

Cra taegus viridis L. var. viridis – Green Hawthorn. CH [!, K], CRW [!, K, G]. Native. OC. CL. Gibson did not recognize varities of this taxon.

Fra garia virginiana Duchesne subsp. virginiana – Virginia Strawberry. CH [!, K], CRW [!, K, G]. Native. OP. CL.

Ge um canadense Jacq. var. canadense – White Avens. CH [!, K], CRW [!, K, G]. Native. OP. CL.

Ge um vernum (Raf.) Torr. & A. Gray – Spring Avens. CH [!, K], CRW [!, K, G]. Native. OP. CL.

Ge um virginianum L. – Cream Avens. CH [!, K], CRW [!, K, G]. Native. Rare. OP. CL. Reported from three counties in Kansas; common in Missouri but unusual in all of these counties (Kartesz 2017).

G il lenia stipulata (Muhl. ex Willd.) Baill. – Indian-Physic. CH [!, K], CRW [!, K, G]. Non-native. OP.

G illienia stipulata var. erecta (Muhl.) Arrhenather – Pearl-Buttonweed. CH [!, K], CRW [!, K, G]. Non-native. OP.

G ili enia stipulata var. viridissima (Raf.) Torr. & A. Gray – Fleshly Buttonweed. CH [!, K], CRW [!, K, G]. Non-native. OP. CL.

Prunus mahaleb Bailey – Hortulan Plum. CH [!, K], CRW [!, K, G]. Native. OC, CL. Gibson did not recognize subspecies.

Prunus hortulana Marshall – American Plum. CH [!, K], CRW [!, K, G]. Native. OP. CL. Reported in two counties in Kansas; rare in Missouri and Arkansas but common in Oklahoma.

Prunus rivularis Scheele – Creek Plum. CH [!, K], CRW [!, K, G]. Native. OP. CL. Reported from eighteen eastern counties in Kansas; more common east and especially south.

Prunus serotina Ehrh. var. serotina – Black Cherry. CH [!, K], CRW [!, K, G]. Native. OP. CL. Reported from three counties in Kansas but common in surrounding states.

Prunus virginiana L. var. virginiana – Black Cherry. CH [!, K], CRW [!, K, G]. Native. OP. Cherokee County Records (Pryer 139, Pryer 175, Pryer 182).

Prunus calleryana Decne. – Bradford Pear. CH [!], CRW [!]. Non-native.
Galium triflorum Michx. – Fragrant Bedstraw. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Galium virgatum Nutt. – Southwestern Bedstraw. CH [K], CRW [I, K, G]. Native. OC.

Hexasepalum teres (Walt.) J.H. Kirkbr. – Poor Joe. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Houstonia longifolia Gaertn. – Long-Leaf Summer Bluete. CH [K], CRW [I, K, G]. Native. Crawford County Record (Fish s.n. [KSP02100]) and Rare. OC. In Kansas previously reported only in Cherokee County; common in surrounding states. The cited voucher was collected in 1949 from Farlington State Park from a limestone cliff. The specimen was labeled with this taxonomic name so it is uncertain why Gibson (1963) overlooked it.

Houstonia pusilla Schoepf – Tiny Bluete. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Spermacoce glabra Michx. – Smooth False Buttonweed. CH [I, K], CRW [K]. Native. Rare. CRW. Reported in eight counties in Kansas but common in surrounding states.

Stenaria nigricans (Lam.) Terrell var. nigricans – Diamond-Flowers. CH [K], CRW [K, G]. Native.

RUSCACEAE (Butcher’s-Broom Family)

Maianthemum racemosum (Lam.) Link subsp. racemosum – Featherly False Solomon’s-Seal. CH [K], Native.

Polygonatum biflorum (Walt.) Elliott var. biflorum – King Solomon’s-Seal. CH [K], CRW [I, K, G]. Native. CL.

RUTACEAE (Rue Family)

Ptelea trifoliata L. subsp. trifoliata – Common Hoptree. CH [I, K], CRW [I, K, G]. Native. CL.

Zanthoxylum americanum P. Mill. – Toothachetree. CH [I, K], CRW [I, K, G]. Native. CL.

SALICACEAE (Willow Family)

Populus alba L. – White Poplar. CH [K], CRW [I, K, G]. Non-native. CL.

Cherokee County Record (Pryer 5471).

Populus deltoides W. Bartram ex Marshall – Eastern Cottonwood. CRW [G]. Gibson did not recognize subspecies of this taxon at the time of his publication. Only the taxon with infraspecific designations are included in the overall tallies for the counties.

Populus deltoides W. Bartram ex Marshall subsp. deltoides – Eastern Cottonwood. CRW [I]. Native. CL. State Record. Crawford County voucher (Pryer 781). Reported throughout the eastern United States, including the 4-state region, and occurring in several counties bordering Kansas in Oklahoma and Missouri.


Salix amygaloideus Anderss. – Peach-Leaf Willow. CH [K], CRW [K, G]. Native.

Salix caroliniana Michx. – Carolina Willow. CH [K], CRW [K, G]. Native. Cherokee County Record (Pryer 479, Pryer 1199, Pryer 5777).

Salix eriocephala Michx. – Missouri Willow. CH [I]. Native. CL.

Cherokee County Record (Pryer 479). Reported throughout the eastern United States, including the 4-state region, and occurring in several counties bordering Kansas in Oklahoma and Missouri.


Salix interior Rowlee – Sandbar Willow. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Salix nigra Marshall – Black Willow. CH [I, K], CRW [I, K, G]. Native. OC, CL.

SALVINIACEAE (Water Fern Family)

Azolla microphylla Kaulfuss – Mexican Mosquito Fern. CH [I, K]. Native. OP.

SANTALACEAE (Sandalwood Family)

Comandra umbellata (L.) Nutt. subsp. umbellata – Bastard-Toadflax. CH [K]. Native.

Journal of the Botanical Research Institute of Texas 13(2)

Phoradendron leucarpum (Raf.) Reveel & M.C. Johnst. subsp. leucarpum – Oak Mistletoe. CH [K], CRW [K]. Native. Rare. Reported in six counties in Kansas; common in surrounding states. In Missouri this taxon has a southern distribution.

SAPINDACEAE (Soapberry Family)

Aesculus glabra Willd. var. arguta (Buckl.) B.L. Rob. – Ohio Buckeye. CH [K], CRW [K, G]. Native.

Aesculus glabra Willd. var. glabra – Ohio Buckeye. CRW [I]. Native. Rare. OC, CL. Crawford County Record (Pryer 2052, Pryer 2726, Pryer 2727, Pryer 2728, Pryer 2729, Pryer 2789, Pryer 4354). Reported in two counties in Kansas but common in surrounding states.

Sapindus saponaria L. var. drummondii (Hook. & Am.) L. Benson – Wing-Leaf Soapberry. CRW [I, G]. Native. CL.

SAPOTACEAE (Sapodilla Family)

Sideroxylon lanuginosum Michx. subsp. oblongifolium (Nutt.) T.D. Pennington – Gum Bully. CH [I, K], CRW [I, K, G]. Native. OC, CL.

SAURURACEAE (Lizard’s-Tail Family)

Saururus cernuus L. – Lizard’s-Tail. CH [K], Native.

SAVIGNYACEAE (Saxifrage Family)


Heuchera richardsonii R. Br. – Richardson’s Alumroot. CH [I, K]. Native. OP.

SCROPHULARIACEAE (Figwort Family)

Scrophularia lanceolata Pursh – Lance-Leaf Figwort. CH [I, K]. Native. OP.

Scrophularia marilandica L. – Carpenter’s-Square. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.


Verbascum thapsus L. – Great Mullein. CH [I, K], CRW [I, K, G]. Non-native. OP, OC, CL.

SIMAROBACEAE (Quassia-Wood Family)


SMILACACEAE (Greenbrier Family)

Smilax bona-nox L. var. bona-nox – Fringed Greenbrier. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Smilax ecirrata (Engelm. ex Kunth) S. Wats. – Upright Carrion-Flower. CH [K]. Native.

Smilax glauca Walt. – Sawbrier. CRW [I, G]. Native. OC, CL. State Record (Pryer S218).

Smilax hispida Muhl. ex Torr. – Chinaroot. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Smilax lasioneuron Hook. – Blue Ridge Carrion-Flower. CH [K], CRW [K]. Native.

Smilax pulverulenta Michx. – Downy Carrion-Flower. CH [K]. Native. Rare.

SOLANACEAE (Potato Family)

Datura stramonium L. – Jimsonweed. CH [I, K], CRW [I, K, G]. Non-native. CL.

Lycium barbarum L. – Matrimony-Vine. CRW [I]. Non-native. OC.

Crawford County Record (Pryer 2781).


Physalis heterophylla Nees – Clammy Ground-Cherry. CH [K], CRW [I, K, G]. Native. CL.
Physalis longifolia Nutt. – Long-Leaf Ground-Cherry. CRW [!, K, G]. Native. Gibson did not recognize varieties of this taxon. Only one specimen was found and reidentified as *P. longifolia var. subglabrata*. It is expected that specimens reported by Gibson probably represented both varieties. Only the taxon including varieties are used in tallies for each county.

Physalis longifolia Nutt. var. longifolia – Long-Leaf Ground-Cherry. CH [I, K], CRW [I, G]. Native. OP, CL.

Physalis subperpusa L. – Narrow-Leaf Cat-Tail. CH [!, K], CRW [!, K, G]. Native. OP, CL. Gibson did not recognize varieties of this taxon.

Physalis virginiana P. Mill. var. virginiana – Virginia Ground-Cherry. CH [I, K], CRW [I]. Native. CL. Crawford County Record (Pryer 322, Pryer 278, Pryer 2546).

Solomon americanum P. Mill. – American Black Nightshade. CRW [I, G], CRW [I]. State Record (Pryer 6150).

Solomon carolinensis L. var. carolinensis – Carolina Horse-Nettle. CH [I, K], CRW [I, K, G]. Native. Noxious. OP, OC, CL. Gibson did not recognize varieties of this taxon.


Solomon psycanthum Dunal – Eastern Black Nightshade. CH [I, K], CRW [I, K]. Native. Noxious. OC, CL.

Solomon rostratum Dunal – Horned Nightshade. CH [I, K], CRW [I, K, G]. Native. OC, CL. Crawford County Record (Pryer 1947, Pryer 2397, Pryer 3587, Pryer 6013).

STAPHYLACEAE (Bladdernut Family)

Staphylea trifolia (Bladdernut Family)

Staphylea trifolia L. – Toadshade. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

TRILLIACEAE (Trillium Family)

Trillium sessile L. – Toadshade. CH [K], CRW [I, K, G]. Native. OP, OC, CL.

Trillium visidescens Nutt. – Taper-Tip Trillium. CH [I, K], CRW [K]. Native. Rare. OP. Only reported in Cherokee County, Kansas, but common in surrounding states.

TYPHACEAE (Cat-Tail Family)

Typha angustifolia L. – Narrow-Leaf Cat-Tail. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Typha domingensis Pers. – Southern Cat-Tail. CH [I, K], Native. CL.

Typha latifolia L. – Broad-Leaf Cat-Tail. CH [I, K], CRW [I, K, G]. Native. CL.

ULMACEAE (Elm Family)

Ulmus alata Michx. – Winged Elm. CH [I, K]. Native. Rare. Only reported in Cherokee County, Kansas, but common in surrounding states.

Ulmus americana L. – American Elm. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Ulmus × intermedia Elowy – CH [K].

Ulmus parvifolia Jacq. – Chinese Elm. CRW [I, K]. Non-native. CL.

Ulmus pumila L. – Siberian Elm. CH [K], CRW [I, K, G]. Native. OC.

Ulmus rubra Muhl. – Slippery Elm. CH [I, K], CRW [I, K, G]. Native. OC, CL.

URTICACEAE (Nettle Family)

Boehmeria cylindrica (L.) Sw. – Small-Spike False Nettle. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Laportea canadensis (L.) Wedd. – Canadian Wood-Nettle. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Parietaria pensylvanica Muhl. ex Willd. – Pennsylvania Pellitory. CH [I], CRW [I, K, G], Native. OP, OC, CL.

Pilea pumila (L.) A. Gray – Canadian Clearweed. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Urtica chamaeaeoides Pursh – Heart-Leaf Nettle. CH [K]. Native. Rare. Reported in three counties in Kansas; common in the surrounding areas. Rare in Missouri and Oklahoma but common in Arkansas.


VALERIANACEAE (Valerian Family)

Valeriana radiata (L.) Dufr. – Beaked Cornsalad. CH [I, K], CRW [I, K, G]. Native. OP, CL.

VERBENACEAE (Verbena Family)

Glandularia bipinnatifida (Nutt.) Nutt. – Dakota Mock Vervain. CH [I], CRW [I, K, G]. Native. OC, CL. Cherokee County Record (Pryer 4399, Pryer 4409).

Glandularia canadensis (L.) Nutt. – Rose Mock Vervain. CH [I, K, G]. Native. OP, OC, CL.


Phyla lanceolata (Michx.) Greene – Northern Frogfruit. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Verbena × blandachii Moldenke – CH [K]. Native.

Verbena bracteata Cav. ex Lag. & Rodr. – Carpet Vervain. CH [K], CRW [I, K, G]. Native. OC, CL.

Verbena × engelmannii Moldenke – CRW [K]. Native.

Verbena hastata L. – Simsper’s-Joy. CH [I, K], CRW [I, K, G]. Native. OP, CL.

Verbena × liliconta Moldenke – CH [K]. Native.

Verbena × radbergii Moldenke – CH [K]. Native.

Verbena simplex Lehman. – Narrow-Leaf Vervain. CH [I, K], CRW [I, K, G]. Native. OC, CL.

Verbena stricta Vent. – Hoary Vervain. CH [K], CRW [I, K, G]. Native. OC. VERBENA ursicifolia L. – White Vervain. CH [I, K], CRW [I, K, G]. Native. OC, CL.

VIOLACEAE (Violet Family)

Cubelium concolor (T.F. Forst.) Raf. ex. Britt. & A. Br. – Green-Violet. CH [K]. Native. Rare. In Kansas known from seven eastern counties; more common eastwards.

Viola affinis vel. af. Le Conte – Sand Violet. CRW [I]. Native. CL. Potential State Record (Pryer 17, Pryer 96). Rare in Missouri and occasional but common in Arkansas; mostly in the eastern United States.

Viola bicolor Pursh – Field Pansy. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Viola missouriensis Greene – Missouri Violet. CH [I, K], CRW [I, K, G]. Native. OP, OC, CL.

Viola nephrophylla Greene – Northern Bog Violet. CH [I, K], CRW [I, K, G]. Native. OP, CL.

Viola palustris var. palustris – Three-Lobe Violet. CH [I, K], CRW [K]. Native. Rare. OP, OC. Crawford County Record (Pryer 4437, Pryer 4442, Pryer 4485). Reported in four counties in Kansas, including this report; common in Arkansas and Missouri but rare in Oklahoma.

Viola pedata L. – Bird-Foot Violet. CH [I, K], CRW [G]. Native. OP.

Viola pedatifida G. Don – Crow-Foot Violet. CH [K], CRW [K, G]. Native. OP.

Viola pubescens Aiton – Downy Violet. CH [I, K], CRW [I, K, G]. Native. OC, CL.
Viola sagittata Aiton var. sagittata – Arrow-Leaf Violet. CH [I, K], CRW [I, K, G]. Native. OP, OC. Gibson did not recognize varieties of this taxon.

Viola sororia Willd. – Hooded Blue Violet. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Viola striata Aiton – Striped Cream Violet. CRW [G]. Native. Reported by Gibson (1963) as “Sperry 1962, established.” The only specimen at KSP is Sperry P-252 ([KSP014237]), which is from Sperry’s residence in 1963, and which indicated “escaped.” Many hundreds of specimens at KSP originate from Sperry’s “Paradocs” (the name of his small acreage in Pittsburg), but the nativity of all must be considered suspect. Thus while noted here, this species is not included in numerical summaries.

Viola subsinuata Greene – Early Blue Violet. CH [K]. Native.

Viola × viarum Pollard – CH [K]. Native.

VITACEAE (Grape Family)

Ampelopsis cordata Michx. – Heart-Leaf Peppervine. CH [!, K], CRW [!, K, G]. Native. OC, CL.

Cissus trifoliata (L.) L. – Sorrelvine. CH [K]. Native. Rare. Reported in three counties in Kansas and also rare in Missouri; common in Oklahoma and Arkansas.

Parthenocissus inserta (Kerner) Fritsch – Thicket-Creeper. CRW [!]. Native. OC. Crawford County Record (Pryer 2771).

Parthenocissus quinquefolia (L.) Planch. – Virginia-Creeper. CH [!, K], CRW [!, K, G]. Native. OP, CL.

Vitis aestivalis Michx. var. aestivalis – Summer Grape. CH [!, K], CRW [!, G]. Native. OP, CL.

Vitis cinerea (Engelm.) Engelm. ex Millard var. cinerea – Gray-Bark Grape. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL. Gibson did not recognize varieties of this taxon.

Vitis cinerea (Engelm.) Engelm. ex Millard var. cinerea – Gray-Bark Grape. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

Vitis riparia Michx. – River-Bank Grape. CH [!, K], CRW [!, K, G]. Native. OC, CL.

Vitis vulpina L. – Frost Grape. CH [!, K], CRW [!, K, G]. Native. OP, OC, CL.

ZYGOPHYLLACEAE (Creosote-Bush Family)

Tribulus terrestris L. – Puncturevine. CH [K], CRW [K, G]. Non-native.

DEDICATION

We dedicate this study to the memory of Dr. Ronald L. Hartman (1945–2018), MS advisor to the second author and long-time Director of the Rocky Mountain Herbarium at the University of Wyoming. His 93,000+ collections and mentorship of over fifty graduate students in floristics spanning nearly forty years significantly increased knowledge of plant distributions in the Rocky Mountains and neighboring regions.

ACKNOWLEDGMENTS

Many thanks to the landowners who allowed access to their properties and those who facilitated contact with local landowners, in particular Janice Harryman. Special thanks to Cindy and John Epler, John Foster, Glenn Salsbury, and Bill Reid who helped the first author locate properties for research. Without these individuals, this study would never have been possible. Thanks to the Missouri Botanical Garden for use of their Missouri and Illinois Reference Collection as well as the space and tools to help confirm identifications, in particular Jim Solomon and Mary McNamara for facilitating the visits. John Pruski and Ron Leisner at MO helped identify specimens. At KANU we appreciate Craig Freeman and Caleb Morse for allowing us to report their state record specimens and for providing access to the McGregor Herbarium; Caleb also compiled a list of specimens located in McGregor Herbarium for Crawford and Cherokee counties. Thanks to Chance Curran for sharing data on a grass specimen. Jiawei Xu (KSP) kindly translated the abstract into Chinese. We appreciate the numerous constructive comments of Mark Mayfield (KSC), who also kindly annotated Euphorbiaceae at KSP, and those of an anonymous reviewer. A final thank you to American Society of Plant Taxonomists for a student scholarship to the first author for helping to fund this study.

REFERENCES


