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Vascular Flora of the Chouteau Wildlife Management Area Wagoner County, Oklahoma

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This article reports the results of a vascular plant inventory of the Chouteau Wildlife Management Area in eastern Oklahoma. One hundred eighty-one species of vascular plants were collected from 144 genera and 63 families. The families with the greatest number of species were the Asteraceae (25), Poaceae (22), and Fabaceae (18). Fifty-seven species were annuals, four biennials, and 120 were perennials. Thirty-nine woody plant species were present. Twenty-one species exotic to North America were collected representing 11.6% of the flora. ***Azolla caroliniana*** **was the only species tracked by the Oklahoma Natural Heritage Inventory found. This study reports 148 species previously not documented in Wagoner County.**

INTRODUCTION

The objectives of this study were twofold: to fill a gap in floristic data for eastern Oklahoma and provide resource managers at the Chouteau Wildlife Management Area (CHWMA) with a comprehensive species list. Prior to 1996, when collecting began for this study, 198 specific and infraspecific taxa were reported from Wagoner County (Hoagland 2004). The first collections made in Wagoner County were by Robert Bebb, namesake of the University of Oklahoma Herbarium, in 1903 (Hoagland 2004). No additional collections were recorded until 1913, when G. W. Stevens visited the county. The peak collecting year in Wagoner County was 1939 (51 specimens), with work completed by R. Bebb (Hoagland et al. 2004).

STUDY AREA

The CHWMA is located on U.S. Army Corp of Engineers land in Wagoner County (Figure 1) and has been managed by the Oklahoma Department of Wildlife Conservation since 1973. It encompasses 402 hectares, and elevation ranges from 167m to 158m. Latitudinal extent ranges from 35.86o N to 35.85o N and longitudinal extent from 95.34o W to 95.37o W. The CHWMA is located within the subtropical humid (Cf) climate zone (Trewartha 1968). Summers are warm (mean July temperature = 27.7o C) and humid, whereas winters are relatively short and mild (mean January temperature = 2.9o C). Mean annual precipitation is 114.5 cm, with periodic severe droughts (Oklahoma Climatological Survey 2004).

Physiographically, the study area is located in the Osage Plains section of the Central Lowlands province (Hunt 1974) and within the Claremore Cuesta Plains province of Oklahoma (Curtis and Ham 1979). The surface geology is primarily Quaternary silt, sand, and clays deposited along the Verdigris River (Branson and Johnson 1979). The primary soil association at CHWMA is the Sage-Radley, which is composed of deep, level to gently sloping, poorly drained soils (Polone 1976). The potential natural vegetation type at CHWMA is the bottomland Forest type (Duck and Fletcher 1943).

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METHODS

Three collection sites were established at CHWMA for intensive floristic sampling. Sites were selected following a review of US Geological Survey 1:24,000 topographic maps and field reconnaissance. The predominant vegetation associations at these sites were classified according to Hoagland (2000). Collections also were made randomly throughout the site. Collections were made on a monthly basis from March through October 1996. Vouchers for species exotic to North America were made from naturalized populations only, thus excluding cultivated and ornamental plants. Specimens were processed at the Robert Bebb Herbarium of the University of Oklahoma (OKL) following standard herbarium techniques. Specimens were identified using Waterfall (1969) and Diggs et al. (1999). Origin (whether native or introduced to North America) was determined using Taylor and Taylor (1991) and United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS 2004). Nomenclature follows USDA-NRCS (2004). Voucher specimens were deposited at OKL.

RESULTS AND DISCUSSION

A total of 181 vascular plants in 144 genera and 63 families were collected (Table 1). Among the angiosperms, 43 were monocots and 142 were dicots. The most species were collected from the families Poaceae (22), Asteraceae (25), Fabaceae (18). The genera *Polygonum* (6) and *Carex* (5) had the most species. Fifty-seven species were annual, four biennials, and 119 perennial. Thirty-nine woody plant species were present.

Twenty-one exotic species were collected, representing 11.6% of the flora. The numbers of exotic species were greater in the families Poaceae (6) and Fabaceae (7). These numbers are comparable to recent floristic inventories from other areas in Oklahoma. For example, a flora of the Chickasaw National Recreation Area reported 12% exotic species (Hoagland and Johnson 2001), 9% at Oologah Wildlife Management Area (Hoagland and Wallick 2003), 15% at Keystone Wildlife Management Area (Hoagland and Buthod 2003), and 11% for an inventory of Tillman County (Hoagland et al. 2004). However, the percentage was lower, 6.6%, at Red Slough and Grassy Slough in southeastern Oklahoma (Hoagland and Johnson 2004). However, these studies report a higher number of exotic species in the Asteraceae. In addition, CHWMA is the first reported location for *Alternanthera philoxeroides* in Oklahoma, a noxious weed of the southeastern United States (Hoagland and McCarty 1998).

Azolla caroliniana (G5S2) was the only species tracked by the Oklahoma Natural Heritage Inventory found at CHWMA. Species are ranked according to level of imperilment at the state (S) and global (G) levels on a scale of 1•5; 1 representing a species that is imperiled and 5 representing one that is secure (Groves et al. 1995).

As a result of this study, 313 species are now known to occur in Wagoner County. Of the 181 species reported in this study, 33 had been previously collected in the county. There were 165 species reported in the Atlas of the Flora of Oklahoma database that were not reported in this study (Hoagland 2004). This study documented 148 species not previously reported from Wagoner County.

The three collection sites occurred within four vegetation associations. A brief description of each follows:

Aquatic and wetland vegetation

Several aquatic and wetland vegetation types were present at CHWMA. All intergraded with one another, making clear delineations difficult. The predominant emergent wetland vegetation types were *Jussiaea peploides - Polygonum hydropiperoides* herbaceous association, *Nelumbo lutea* herbaceous association, and *Juncus effusus* herbaceous association. *Cephalanthus occidentalis* shrubland association was the predominant woody wetland vegetation type. Associated

species included *Hibiscus laevis, Justicia americana, Potamogeton nodosus, Polygonum lapathifolium, P. pensylvanicum, Salix nigra*, and *Typha domingensis*.

Azolla caroliniana, a species tracked by the Oklahoma Natural Heritage Inventory (2004), was found in this habitat type.

Quercus palustris - Carya illinoensis/Ilex decidua forest association

This association was the predominant forest type at CHWMA. However, all stands were immature second growth. Associate species included *Amorpha fruticosa, Ampelopsis cordata, Arundinaria gigantea, Fraxinus pennsylvanica, Gleditsia triacanthos*, *Passiflora lutea* and *Ulmus rubra*. On natural levies along the Verdigris River this association intergraded with the *Acer saccharinum* • *Acer negundo* forest association.

Disturbed areas and old-field vegetation

This designation included areas which have been or are currently in cultivation, roadsides and areas visited by CHWMA visitors, and other areas exhibiting signs of physical disruption. Common plants in disturbed areas and old fields included: *Ambrosia trifida, Geranium carolinianum, Melilotus officinalis, Oenothera biennis*, *Solanum carolinense*, *Sorghum halepense,* and *Trifolium dubium*.

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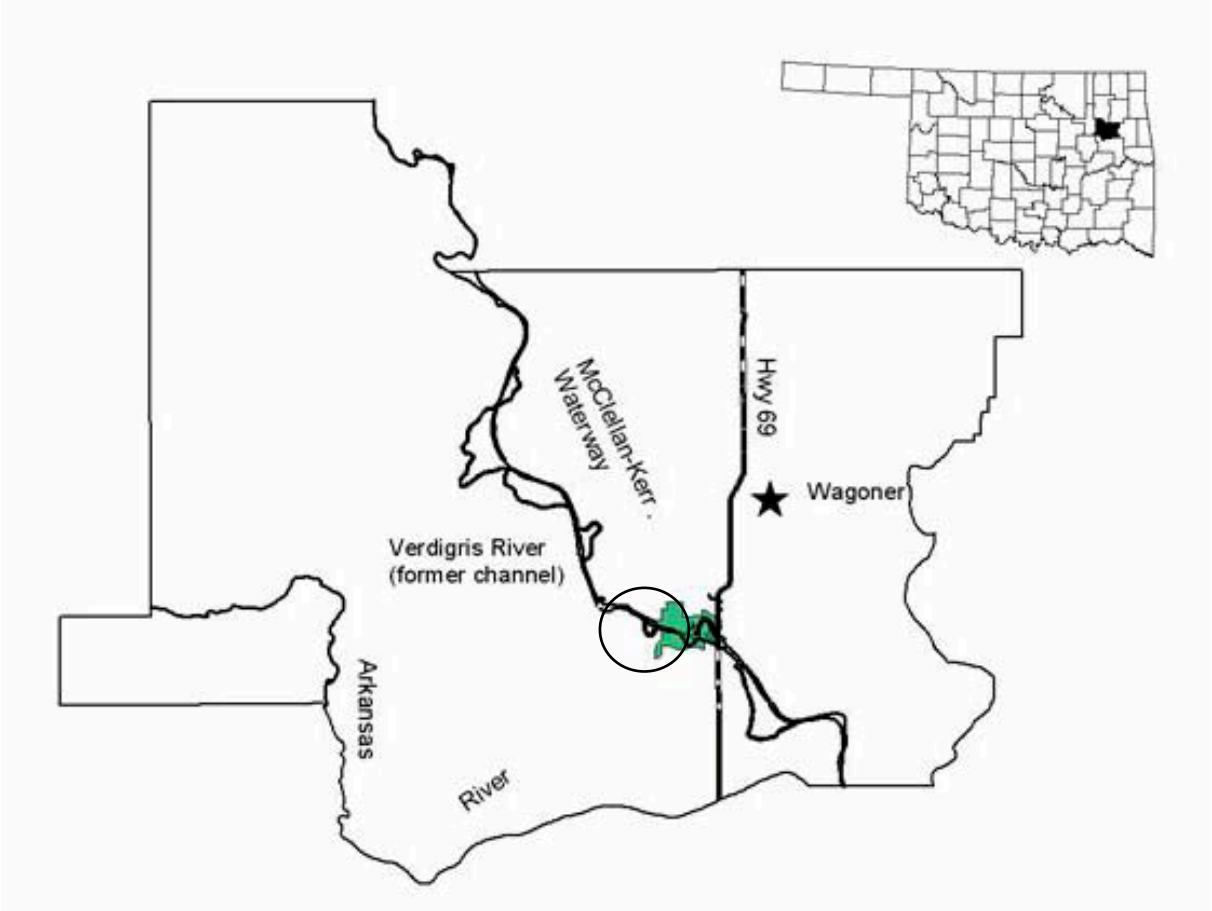

Figure Location of Chouteau Wildlife Management Area, Wagoner County, Oklahoma, site of the floristic collection.

Annotated Species List for the Chouteau Wildlife Management Area

The first entry is life history (A=annual, B=biennial, P=perennial); followed by abundance (1=least 5=dominant or codominant, Palmer et al. 1995); species not native to North America designated with an asterisk (*); habitat (AQ=Aquatic and wetland vegetation, BF = *Quercus palustris* • *Carya illinoensis*/*Ilex decidua* forest association, and DAOF=disturbed area/old-field); and collection number. Voucher specimens were deposited at the Robert Bebb Herbarium at the University of Oklahoma (OKL).

PTERIDOPHYTA

Azollaceae

Azolla caroliniana Willd. (mosquito fern)
A; 2; AQ; CH096

MAGNOLIOPHYTA
MAGNOLIOPSIDA

Acanthaceae

Justicia americana (L.) Vahl (water willow)
P; 2; AQ; CH037

Ruellia strepens L. (wild petunia)
P; 2; BF; CH0173

Aceraceae

Acer negundo L. (boxelder)
P; 3; BF; CH079

A. saccharinum L. (silver maple)
P; 2; BF; CH078

Amaranthaceae

Alternanthera philoxeroides (Mart.) Griseb.* (alligator weed)
P; 3; AQ; CH094

Amaranthus palmeri S. Wats. (Palmer's pigweed)
A; 2; DAOF; CH0144

Apiaceae

Limnosciadium pinnatum (DC.) Mathias & Constance (tansy dog shade)
A; 3; AQ; CH065

Ptilimnium capillaceum (Michx.) Raf. (threadleaf mockbishopweed)
A; 2; DAOF; CH0134

Sanicula canadensis L. (snakeroot)
B; 2; BF; CH0143

Torilis arvensis (Huds.) Link.* (hedge parsley)
A; 2; DAOF; CH063

Apocynaceae

Apocynum cannabinum L. (Indian hemp)
P; 3; DAOF; CH085

Aquifoliaceae

Ilex decidua Walt. (deciduous holly)
P; 3; BF; CH0114

Aristolochiaceae

Aristolochia tomentosa Sims (wooly pipe vine)
P; 2; BF; CH0101

Asclepiadaceae

Asclepias incarnata L. (swamp milkweed)
P; 2; AQ; CH0160

A. viridis Walt. (green milkweed)
P; 2; DAOF; CH072

Asteraceae

Ageratina altissima (L.) King & H.E. Robins. (white snakeroot)
P; 2; DAOF; CH0194

Ambrosia artemisiifolia L. (common ragweed)
A; 3; DAOF; CH0174

A. trifida L. (giant ragweed)
A; 4; DAOF; CH0157

Bidens aristosa (Michx.) Britt. (bearded beggarticks)
A; 2; AQ; CH0206

Boltonia asteroides (L.) L'Her. var. *latisquamata* (Gray) Cronq. (white doll's daisy)
P; 2; AQ; CH0208

Cirsium altissimum (L.) Hill (tall thistle)
B; 2; DAOF; CH0185

Conoclinium coelestinum (L.) DC. (blue mistflower)
P; 2; AQ; CH0199

Conyza canadensis (L.) Cronq. (horseweed)
A; 3; DAOF; CH0162

Coreopsis tinctoria Nutt. (plains coreopsis)
A; 3; DAOF; CH0123

Dracopis amplexicaulis (Vahl.) Cass. (clasping coneflower)
A; 4; AQ, DAOF; CH073

Eclipta prostrata (L.) L. (yerba de tajo)
P; 3; AQ; CH0108

Elephantopus carolinianus Raeusch. (elephant's foot)
P; 2; BF; CH0150

Erigeron strigosus Muhl. ex Willd.
(daisy fleabane)
B; 2; DAOF; CH090
Grindelia papposa Nesom & Suh (goldenweed)
A; 2; DAOF; CH0111
Helianthus annuus L. (common sunflower)
A; 2; DAOF; CH0164
Iva annua L. (marsh elder)
A; 3; DAOF; CH0158
Lactuca serriola L.* (prickly lettuce)
A; 2; DAOF; CH0145
Pyrrhopappus multicaulis (D. Don) DC.
(Geiser's false dandelion)
P; 2; DAOF; CH060
Solidago canadensis L. (Canada goldenrod)
P; 2; DAOF; CH0197
Symphyotrichum ericoides (L.) Nesom
(white heath aster)
P; 2; DAOF; CH0189
S. ontarione (Wieg.) Nesom (bottomland aster)
P; 2; DAOF; CH0200
S. subulatum (Michx.) Nesom (eastern
saltmarsh aster)
A; 4; AQ; CH0165
Verbesina virginica L. (frostweed)
P; 2; BF; CH0184
Vernonia baldwinii Torr. (western ironweed)
P; 2; DAOF; CH0163
Xanthium strumarium L. (cocklebur)
A; 2; AQ; CH0209

Balsaminaceae

Impatiens capensis Meerb. (jewelweed)
A; 2; BF; CH0109

Bignoniaceae

Campsis radicans (L.) Seem. ex Bureau
(trumpetvine)
P; 2; BF; CH083

Brassicaceae

Lepidium densiflorum Schrad. (peppergrass)
A; 2; DAOF; CH051
Rorippa palustris (L.) Bess (bog yellow cress)
A; 2; AQ; CH088
Thlaspi arvense L.* (field pennycress)
A; 1; DAOF; CH053

Campanulaceae

Triodanis perfoliata (L.) Nieuw.
(clasping Venus' looking glass)
A; 2; DAOF; CH082

Caprifoliaceae

Sambucus nigra L. ssp. *canadensis* (L.) R. Bolli
(elderberry) P; 2; BF; CH084
Viburnum rufidulum Raf. (rusty blackhaw)
P; 2; BF; CH074

Celastraceae

Euonymus atropurpurea Jacq. (wahoo)
P; 2; BF; CH0187

Chenopodiaceae

Chenopodium standleyanum Aellen
(Standley's goosefoot)
A; 3; DAOF; CH0159

Convolvulaceae

Ipomoea lacunosa L. (white morning glory)
A; 2; DAOF; CH0203
I. pandurata (L.) G.F.W. Mey.
(bigroot morning glory)
P; 3; DAOF; CH0129

Cornaceae

Cornus drummondii C.A. Mey.
(rough leaved dogwood)
P; 3; DAOF; CH069

Crassulaceae

Penthorum sedoides L. (ditch stonecrop)
P; 3; AQ; CH0176

Ebenaceae

Diospyros virginiana L. (persimmon)
P; 2; DAOF; CH025

Euphorbiaceae

Chamaesyce maculata (L.) Small
(spotted spurge)
A; 3; DAOF; CH0151
Euphorbia spathulata Lam. (warty spurge)
A; 2; DAOF; CH049

Fabaceae

Amorpha fruticosa L. (false indigo)
P; 2; AQ; CH052
Cercis canadensis L. (redbud)
P; 3; BF; CH0170
Desmanthus illinoensis (Michx.) MacM. ex B.L.
Robins. & Fern. (bundleflower)
P; 2; DAOF; CH0125
Desmodium paniculatum (L.) DC.
(panicled tickclover)
P; 3; BF; CH0106
Gleditsia triacanthos L. (honey locust)
P; 3; BF; CH044
Gymnocladus dioicus (L.) K. Koch.

(Kentucky coffee tree)
P; 2; BF; CH092
Lathyrus pusillus Ell. (low peavine)
A; 2; DAOF; CH002
Lespedeza cuneata (Dum.-Cours.) G. Don*
(sericea lespedeza)
P; 2; DAOF; CH0167
Melilotus alba Medikus* (white sweet clover)
A; 2; DAOF; CH071
M. officinalis (L.) Lam.* (yellow sweet clover)
A; 3; DAOF; CH041
Senna marilandica (L.) Link (wild senna)
P; 2; BF; CH0124
Sesbania herbacea (P. Mill.) McVaugh (bequilla)
A; 5; AQ; CH0166
Strophostyles helvola (L.) Ell.
(fuzzy trailing bean)
A; 2; DAOF; CH0191
Trifolium arvense L.* (rabbit foot clover)
A; 2; DAOF; CH040
T. dubium Sibthrop* (small hop clover)
A; 2; DAOF; CH026
T. pratense L.* (red clover)
P; 2; DAOF; CH0140
Vicia caroliniana Walt. (pole vetch)
P; 3; DAOF; CH0128
V. villosa Roth* (hairy vetch)
A; 3; DAOF; CH035

Fagaceae

Quercus macrocarpa Michx. (bur oak)
P; 2; BF; CH0135
Q. palustris Muenchh. (pin oak)
P; 3; BF; CH034
Q. velutina Lam. (black oak)
P; 2; BF; CH042

Geraniaceae

Geranium carolinianum L. (Carolina cranesbill)
A; 2; DAOF; CH027

Juglandaceae

Carya illinoensis (Wangenh.) K. Koch (Pecan)
P; 2; BF; CH087

Lamiaceae

Prunella vulgaris L. (Common self heal)
P; 2; BF; CH020

Lauraceae

Sassafras albidum (Nutt.) Nees (sassafras)
P; 2; BF; CH0120

Lythraceae

Ammannia coccinea Rottb. (redstem loosestrife)
A; 2; AQ; CH0141
Lythrum alatum Pursh (winged loosestrife)
P; 2; AQ; CH0121

Malvaceae

Hibiscus laevis All. (halberd leaved rose
mallow) P; 2; AQ; CH0153
Sida spinosa L. (prickly sida)
A; 1; DAOF; CH0152

Menispermaceae

Calycocarpum lyonii (Pursh) Gray (cupseed)
P; 2; BF; CH093
Cocculus carolinus (L.) DC. (Carolina snailseed)
P; 2; BF; CH0103

Moraceae

Morus rubra L. (red mulberry)
P; 2; BF; CH0180

Nelumbonaceae

Nelumbo lutea Willd. (Lotus)
P; 2; AQ; CH0179

Oleaceae

Fraxinus pennsylvanica Marsh. (green ash)
P; 3; BF; CH043

Onagraceae

Ludwigia palustris (L.) Ell. (marsh seedbox)
P; 4; AQ; CH055
L. repens Forst. (water primrose)
P; 2; AQ; CH0131
Oenothera biennis L.
(common evening primrose)
B; 3; DAOF; CH0161
O. laciniata Hill (cutleaf evening primrose)
A; 2; DAOF; CH061

Oxalidaceae

Oxalis stricta L. (yellow wood sorrel)
P; 2; DAOF; CH081

Passifloraceae

Passiflora lutea L. (yellow passionflower)
P; 2; BF; CH058

Phytolaccaceae

Phytolacca americana L. (pokeweed)
P; 2; DAOF; CH0116

Polygonaceae

Polygonum hydropiper L.* (water pepper)
A; 2; AQ; CH0115
P. hydropiperoides Michx.* (mild water pepper)
P; 4; AQ; CH0113

P. lapathifolium L. (pale smartweed)
A; 3; AQ; CH0190
P. pensylvanicum L. (Pennsylvania smartweed)
A; 2; AQ; CH0204
P. ramosissimum Michx. (knotweed)
A; 2; AQ; CH014
P. scandens L. (false buckwheat)
P; 2; AQ; CH0193
Rumex altissimus Wood (pale dock)
P; 2; DAOF; CH089
R. crispus L.* (curly dock)
P; 3; DAOF; CH091
R. verticillatus L. (Water dock)
P; 2; DAOF; CH07

Ranunculaceae

Clematis pitcheri Torr. & Gray (Pitcher's clematis) P; 2; BF; CH046
Ranunculus sceleratus L. (cursed buttercup)
A; 2; AQ; CH031

Rosaceae

Crataegus viridis L. (green hawthorn)
P; 3; BF; CH06
Geum canadense Jacq. (white avens)
P; 2; BF; CH0112
Rosa multiflora Thunb. ex Murr.* (Japanese rose)
P; 2; DAOF; CH033
R. setigera Michx. (climbing prairie rose)
P; 2; DAOF; CH056
Rubus trivialis Michx. (southern blackberry)
P; 3; BF; CH0105

Rubiaceae

Cephalanthus occidentalis L. (buttonbush)
P; 2; AQ; CH0138
Galium aparine L. (catchweed bedstraw)
A; 2; BF; CH036
Spermacoce glabra Michx. (smooth buttonweed)
P; 2; AQ; CH0155

Salicaceae

Salix nigra Marsh. (black willow)
P; 2; AQ; CH0192

Sapindaceae

Sapindus saponaria L. var. *drummondii* (Hook. & Arn.) L. Benson (soapberry)
P; 2; BF; CH077

Sapotaceae

Sideroxylon lanuginosum Michx. (chittamwood)
P; 2; BF; CH0110

Scrophulariaceae

Lindernia dubia (L.) Pennell (false pimpernel)
A; 2; AQ; CH0136
Penstemon digitalis Nutt. ex Sims (smooth penstemon)
P; 2; DAOF; CH045
Veronica peregrina L. (purslane speedwell)
A; 2; DAOF; CH024

Solanaceae

Physalis angulata L. (cutleaf ground cherry)
A; 2; DAOF; CH015
Solanum carolinense L. (Carolina horsenettle)
P; 2; DAOF; CH062

Ulmaceae

Celtis laevigata Willd. (sugarberry)
P; 4; BF; CH01
Ulmus alata Michx. (winged elm)
P; 3; BF; CH032
U. rubra Muhl. (slippery elm)
P; 4; BF; CH038

Urticaceae

Boehmeria cylindrica (L.) Sw. (false nettle)
P; 2; BF; CH0175

Valerianaceae

Valerianella radiata (L.) Dufr. (common beaked cornsalad)
A; 2; AQ; CH08

Verbenaceae

Phyla lanceolata (Michx.) Greene (northern fogfruit)
P; 2; AQ; CH0139

Viscaceae

Phoradendron leucarpum (Raf.) Reveal & M.C. Johnston (eastern mistletoe)
P; 2; BF; CH086

Vitaceae

Ampelopsis arborea (L.) Koehne (peppervine)
P; 2; BF; CH0100
A. cordata Michx. (racoon grape)
P; 2; BF; CH0147
Parthenocissus quinquefolia (L.) Planch. (Virginia creeper)
P; 3; BF; CH098
Vitis aestivalis Michx. (pigeon grape)
P; 3; BF; CH0102
V. cinerea (Engelm.) Millard (sweet grape)
P; 2; BF; CH0107

LILIOPSIDA

Alismataceae

Echinodorus cordifolius (L.) Griesb. (creeping burhead)
P; 2; AQ; CH0177

Sagittaria latifolia Willd. (duck potato)
P; 2; AQ; CH0186

Araceae

Arisaema dracontium (L.) Schott (green dragon)
P; 2; BF; CH0114

Cyperaceae

Carex crus-corvi Shuttlw. ex Kunze (ravenfoot sedge)
P; 2; AQ; CH070

C. granularis Muhl. ex Willd. var. *haleana* (Olney) Porter (Limestone meadow sedge)
P; 2 BF; CH0032

C. hyalinolepis Steudel (shoreline sedge)
P; 2; AQ; CH0089

C. tribuloides Wahlenberg (blunt broom sedge)
P; 2 BF; CH0103

C. vulpinoidea Michx. (fox sedge)
P; 2 BF; CH0230

Cyperus pseudovegetus Stued. (marsh flatsedge)
P; 2; AQ; CH0114

C. strigosus L. (strawcolored flatsedge)
P; 2; AQ; CH097

Eleocharis compressa Sullivant (flatstem spikesedge)
P; 4; AQ; CH052

E. obtusa (Willd.) J.A. Schultes (blunt spikesedge)
P; 2; AQ; CH0039

Iridaceae

Sisyrinchium angustifolium P. Mill. (blue eyed grass)
P; 2; DAOF; CH0029

Juncaceae

Juncus acuminatus Michx. (tapertip rush)
P; 2; AQ; CH063

J. effusus L. (soft rush)
P; 2; AQ; CH024

J. interior Wieg. (inland rush)
P; 2; AQ; CH041

Liliaceae

Allium canadense L. (wild onion)
P; 2; DAOF; CH030

Poaceae

Agrostis hyemalis (Walt.) B. S. P. (ticklegrass)
P; 2; AQ; CH0017

Alopecurus carolinianus Walt. (Carolina foxtail)
A; 2; AQ; CH0019

Andropogon glomeratus (Walt.) B. S. P. (broomsedge)
P; 3; DAOF; CH0182

Arundinaria gigantea (Walt.) Mulh. (giant cane)
P; 2; BF; CH076

Bromus japonicus Thunb. ex Murr*. (Japanese brome)
P; 3; DAOF; CH047

Digitaria sanguinalis (L.) Scop. (hairy crabgrass)
A; 3; DAOF; CH0169

Echinochloa colona (L.) Link* (barnyard grass)
A; 2; AQ; CH0205

E. crus-galli (L.) Beauv.* (barnyard grass)
A; 3; AQ; CH0104

E. muricata (Beauv.) Fern.* (barnyard grass)
A; 2; AQ; CH0130

Elymus virginicus L. (Virginia wild rye)
P; 2; BF; CH075

Eragrostis spectabilis (Pursh.) Steud. (purple lovegrass)
P; 2; BF; CH0196

Hordeum pusillum Nutt. (little barley)
A; 3; DAOF; CH050

Leersia oryzoides (L.) Sw. (rice cutgrass)
P; 2; AQ; CH0181

Leptochloa panicea (Retz.) Ohwi ssp. *brachiata* (Steudl.) N. Snow (red sprangletop)
A; 2; AQ; CH0201

Lolium perenne L.* (perennial ryegrass)
P; 2; DAOF; CH048

Panicum dichotomiflorum Michx. (fall panicum)
A; 2; BF; CH0198

Paspalum pubiflorum Rupr. ex Fourn. (hairyseed paspalum)
P; 2; DAOF; CH0202

Setaria parviflora (Poir.) Kerguélen. (knotroot bristlegrass)
P; 2; DAOF; CH0207

S. viridis (L.) Beauv.* (green foxtail)
A; 2; DAOF; CH0127

Sorghum halepense (L.) Pers.* (Johnson grass)

P; 3; DAOF; CH021
Sphenopholis obtusata (Michx) Scribn. (wedgegrass)
P; 2; AQ; CH010
Tridens flavus (L.) A.S. Hitchc. (redtop)
P; 3; DAOF; CH0183

Potamogetonaceae

Potamogeton nodosus Poir. (long leaved pondweed)
P; 2; AQ; CH095

Smilacaceae

Smilax bona-nox L. (greenbriar)
P; 2; BF; CH097
S. glauca Walt. (pale greenbriar)
P; 2; BF; CH0119

Typhaceae

Typha domingensis Pers. (southern cattail)
P; 2; AQ; CH0178

Table Summary of floristic collections at the Chouteau Wildlife Management Area, Wagoner County, Oklahoma. Table format follows Palmer et al. (1995).

Taxonomic Group	Species	Native spp.	Introduced spp.
Pteridophyta	1	1	0
Magnoliophyta			
Magnoliopsida	137	122	15
Liliopsida	43	37	6
Total	181	160	21

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