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A FLORISTIC STUDY OF DAWES COUNTY, NEBRASKA

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ABSTRACT: Physical features pertinent to the flora of Dawes County are summarized. A checklist of the known taxa with notes on ecology and origin of each form follows the Literature cited.

This study was undertaken because the need for a reasonably complete list of flowering plants and for a plant collection of the Chadron vicinity has been felt in the botany courses taught at Chadron State College.

The plants reported in this annotated list were collected from several sites throughout the county by the authors during the 1970 and 1971 growing seasons. However, in order to make the list more complete, plants which were already in the collection at Chadron State College are included, as are those reported from a nearby site in Sioux County.

Little floristic research has been published specifically on this area. Tolstead (1947) presented a general survey of the vegetation for the Pine Ridge, and Nixon (1967) did a vegetational study of a site in Sheridan County.

Dawes County is located in northwestern Nebraska. It borders South Dakota on the north and only Sioux County separates it from Wyoming on the west.

The climate is dry continental. The normal, annual amount of precipitation is about 19 inches. Seventy percent of this falls during the growing season. The winters are cold, with January having the lowest mean temperatures of about 25° F. The mean summer temperature is in the 70's. The warmest temperatures occur during late July when the mean highs range from 90 to 92° F. The growing season averages about 130 days in length. Normally, the latest "killing" frost in spring occurs during mid May, while the earliest in fall occurs during late September (Visher, 1954).

Dawes County lies, in part, in two different physiographic provinces. The Pine Ridge Escarpment, the county's most prominent geologic feature, marks the northern boundary of the Northern High Plains and the southern boundary of the unglaciated Missouri Plateau. The Pine Ridge is characterized by buttes, ridges, vertical slopes, and deep canyons. The Missouri Plateau is distinguished from the High Plains by deep erosion and has badlands developed at some sites (Fenneman, 1931). The White and Niobrara Rivers are the two major streams which cross the county (Fig. 1).

The soils of Dawes County have a tremendous range from "gumbo clays" to sands with an intermittance of badlands and fairly fertile soils. The gumbo

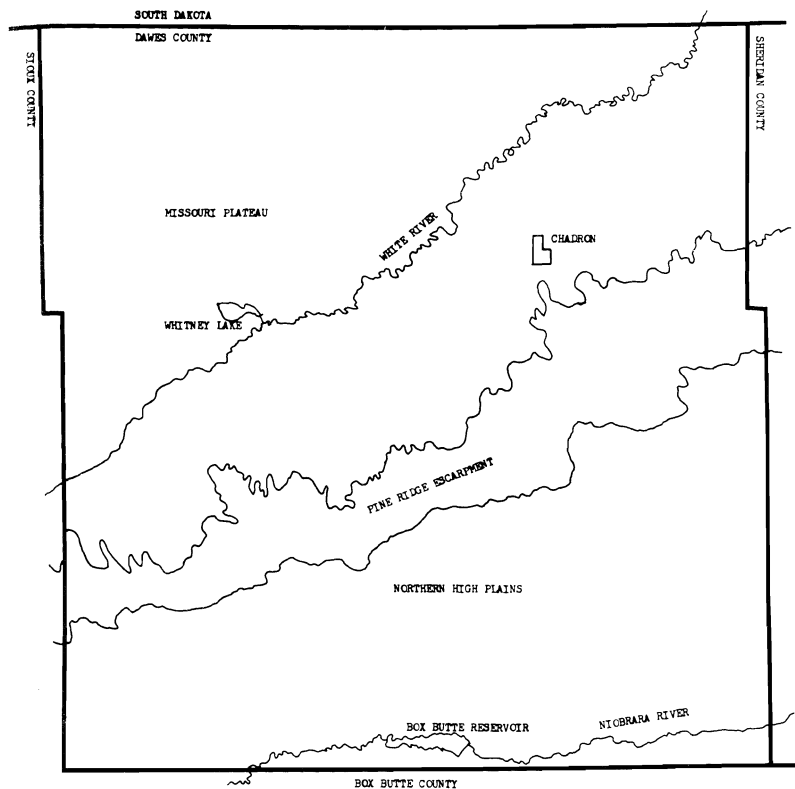


Fig. 1. Major physiographic features of Dawes County.

clays (Pierre Series) developed from shales in the northern part of the county where badlands, outcrops of tertiary sandstone, and alkaline "flats" also occur. Eppling soils which have a silty loam texture also occur on the long downslope north of the Pine Ridge. The soils south of the Pine Ridge on the Box Butte Table (the Dawes and Rosebud Series) are of sandstone and silt loam origin and are generally deep with a loamy texture. Much of this area is in cultivation. Laural type soils are developed from loamy and sandy alluvium at many sites along streams (Elder, 1969).

Dawes County is centrally located in the Mixed Prairie Grassland Formation. The dominant grasses on the plains are species of *Stipa* and *Bouteloua* (Gould, 1968). *Agropyron smithii*, *Koeleria cristata*, *Schizachyrium scoparium*, *Andropogon gerardii*, *Calamovilfa longifolia*, and the sedge *Carex filifolia* are other important elements of the prairie. Much of the area is still occupied by the native prairie, but wheat, grain sorghum, and

alfalfa are cultivated on more favorable sites. The dry slopes and ridges of the Pine Ridge Escarpment serve as a refugium for *Pinus ponderosa* and associated woody species, such as *Juniperus scopulorum*, *Prunus virginiana*, and *Shepherdia argentea*. Interspersed among the pine and woody shrubs are elements of the mixed-grass prairie (Nixon, 1967). The moist canyons of the Pine Ridge provide favorable habitats for *Ulmus americana*, *Fraxinus pensylvanica*, and *Populus sargentii*. Occasionally, *Celtis occidentalis* and *Populus tremuloides* are encountered. These moist, shady ecotones contain a number of herbs characteristic of the more mesic eastern flora.

The families, genera, and species of the checklist are arranged alphabetically for easier reference by students. An attempt was made to use the most current nomenclature for the included taxa by reference to recent monographs and regional floras. Synonyms are given only for recent nomenclatural changes for common plants. Voucher specimens for most taxa are deposited in the plant collection at Chadron State College. While the checklist is still incomplete, it is hoped that this effort will serve as a basis for still more intensive and complete studies of the Western Nebraska flora.

ACKNOWLEDGEMENTS

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A LIST OF THE FLOWERING PLANTS FOR DAWES COUNTY

ACERACEAE

+*Acer glabrum* Torr., canyons

+*A. negundo* L., occasional in moist areas near streams; also cultivated

LIFE SCIENCES

ALISMATACEAE

- Alisma gramineum* Gmel. var. *angustissimum* (DC.) Hendricks, shallow water around the edges of ponds
- A. plantago-aquatica* L., in shallow water and mud
- Sagittaria cuneata* Sheld., usually in shallow water

AMARANTHACEAE

- Amaranthus albus* L., fields and waste ground
- A. graecizans* L., disturbed areas, weedy; found in Europe, Asia, Africa and South America
- A. hybridus* L., disturbed areas, weedy; occurs throughout the world
- A. retroflexus* L., disturbed areas, weedy; occurs also in Eurasia

ANACARDIACEAE

- Rhus aromatica* Ait., hillsides and canyons
- R. glabra* L., moist valleys
- R. toxicodendron* L., open woods and hillsides
- R. trilobata* Nutt. ex T. & G., dry hillsides and plains

APOCYNACEAE

- Apocynum androsaemifolium* L., woods and fields
- A. sibiricum* Jacq., moist soil, near streams or in ditches

ASCLEPIADACEAE

- Asclepias pumila* (A. Gray) Vail, dry plains and hills
- A. speciosa* Torr., plains and valleys
- A. stenophylla* Gray, dry prairies and plains
- A. viridiflora* Raf., dry plains

BERBERIDACEAE

- Mahonia aquifolium* (Pursh.) Nutt., hills and slopes, often in partial shade

BORAGINACEAE

- Cryptantha jamesii* (Torr.) Payson, dry ground
- **Cynoglossum officinalis* L., weedy, fields and meadows
- Hackelia deflexa* (Wahl.) Opiz., moist, shady woods
- H. floribunda* (Lehm.) Johnston, open, moist woods
- Lappula echinata* Gilib., weedy in open ground; introduced from Europe
- L. redowskii* (Hornem.) Greene, dry or sandy ground; from Eurasia
- Lithospermum incisum* Lehm., dry plains and slopes
- Onosmodium molle* Michx., plains and slopes

CACTACEAE

- Mamillaria vivipara* (Nutt.) Haw., dry prairies and plains
- + *Opuntia fragilis* (Nutt.) Haw., dry prairies and plains
- O. humifusa* Raf., dry prairies and plains

CAMPANULACEAE

- Campanula rotundifolia* L., dry woods and meadows
- Lobelia siphilitica* L., along streams, wet ground

CAPPARIDACEAE

- Cleome serrulata* Pursh, open ground, plains, roadsides

CAPRIFOLIACEAE

- Sambucus canadensis* L., moist fields and woods
- Symphoricarpos occidentalis* Hook., dry prairies and low moist ground

TRANSACTIONS OF THE NEBRASKA ACADEMY OF SCIENCES

CARYOPHYLLIACEAE

- Arenaria hookeri* Nutt. ex T. & G., rocky habitats
- Cerastium arvense* L., rocky, gravelly areas
- C. vulgatum* L., weedy; native of Eurasia
- Holosteum umbellatum* L., lawn weed; from Eurasia
- Lychnis alba* Mill., waste places
- + *Paronychia jamesii* T. & G., dry plains and hills
- Stellaria media* (L.) Cyrill., weedy; from the Old World

CELASTRACEAE

- Celastrus scandens* L., thickets, deeper soils

CHENOPODIACEAE

- Atriplex patula* L., alkaline soil
- Chenopodium album* L., weedy, disturbed habitats
- C. fremontii* S. Wats., canyons and slopes
- C. gigantospermum* Aellen, moist woods
- C. leptophyllum* (Mog.) Nutt. ex Wats. (*C. pratericola* Rydb.), prairies, barrens, and waste grounds
- Kochia scoparia* (L.) Schrad., weedy; from Europe
- Monolepis nuttalliana* (Schult.) Greene, dry, alkaline places
- Salsola kali* L., weedy, dry, disturbed areas; from Asia

COMMELINACEAE

- Tradescantia occidentalis* (Britt.) Smyth., dry prairies and plains

COMPOSITAE

- Achillea millefolium* L., weedy; from Europe
- Agoseris glauca* (Pursh) D. Dietr., prairie hillsides
- Ambrosia artemisifolia* L., widespread weed, wasteplaces
- A. psilostachya* DC., plains and hills
- A. trifida* L., wasteplaces and fields, moist ground
- + *Antennaria campestris* Rydb., prairies
- A. neglecta* Greene, fields and pastures
- A. neodivica* Greene, dry fields, pastures, and open woods
- A. obovata* E. Nels. plains and hills
- A. rosea* (D.C. Eat.) Greene, meadows and hills
- Arctium minus* (Hill) Bernh., wasteplaces, weedy; from Europe
- Artemisia frigida* Willd., dry plains and hills
- A. glauca* Pallas, plains
- A. ludoviciana* Nutt., plains and hills
- Aster ericoides* L., plains, roadsides
- A. hesperius* Gray, meadows and thickets
- A. occidentalis* (Nutt.) T. & G., plains and hills
- A. simplex* Willd. (*A. paniculatus* Lam.), moist soil
- Bahia oppositifolia* (Nutt.) DC., dry plains and hills
- Bidens cernua* L., wet ground
- + *B. frondosa* L., wasteplaces, usually wet soil
- Carduus nutans* L., weedy; native to Europe
- Chrysothamnus nauseosus* (Pallas) Britt., dry hills and plains
- Cirsium arvense* (L.) Scop., weedy; introduced from Europe
- * *C. lanceolatum* (L.) Hill, pastures and roadsides

LIFE SCIENCES

- C. plattense* (Rydb.) Fernald, plains
C. undulatum (Nutt.) Spreng., dry open soil
Conyza canadensis (L.) Cronquist, dry hills and plains, wasteplaces; Europe
Crepis runcinata T. & G., moist meadows
Echinacea angustifolia DC., plains and hills
Erigeron annuus (L.) Pers., weedy
E. flagellaris A. Gray, open banks and slopes
E. glabellus Nutt. var. *glabellus* Crönq., dry plains and hills
E. philadelphicus L., somewhat weedy, woods and fields
E. pumilus Nutt., dry hills
E. strigosus Muhl. ex Willd., fields and hillsides
Grindelia squarrosa (Pursh) Dunal, prairies, plains, roadsides
Gutierrezia sarothrae (Pursh) Britt. & Rusby, dry plains and hills
Haplopappus grindelioides (Nutt.) Shinnery, dry plains and hills
H. spinulosus (Pursh) DC., dry hills
Helianthus annuus L., weedy, prairies and dry places
H. laetiflorus Pers. (*H. rigidus* (Cass.) Desf.), dry prairies and plains
H. nuttallii T. & G., moist soil
H. petiolaris Nutt., prairies, plains, wasteplaces
H. tuberosus L., moist rich thickets
Heterotheca villosa (Pursh) Shinnery (*Chrysopsis villosa* (Pursh) Nutt.) dry ground
Hymenopappus filifolius Hook., dry hills and plains
Hymenoxys acaulis (Pursh) Parker, rocky slopes, plains
Iva xanthifolia Nutt., moist places, fields
Kuhnia eupatorioides L., dry prairies and hills
Lactuca canadensis L., waste ground, moist places
L. pulchella (Pursh) DC., meadows and roadsides, moist ground
L. serriola L., wasteplaces and fields, weedy
Liatris punctata Hook., dry soil and on dry hillsides
Lygodesmia juncea (Pursh) D. Don, dry ground, plains and hills
Machaeranthera sessiliflora (Nutt.) Greene, plains, usually near streams
Ratibida columnaris (Sims) D. Don, plains and hills
Rudbeckia hirta L., plains and hills
Senecio canus Hook., dry hills
S. integerrimus Nutt., meadows, moist slopes
Senecio pseudoaureus Rydb., meadows and valleys
S. riddellii T. & G., plains
Solidago altissima L., often along streams
S. gigantea Ait., meadows, valleys, and plains, moist
S. missouriensis Nutt., plains and hills
S. mollis Bartl., dry plains and hills
S. rigida L., prairies
Taraxacum officinale Wiggars, weedy, lawns and roadsides
Thelesperma megapotamicum (Spreng.) Kuntze, plains and hills
T. trifidum (Poir.) Britt., dry plains and hills
Townsendia exscapa (Rich.) Porter, plains and hills
Tragopogon dubius Scop., wasteplaces; from Europe
Xanthium strumarium L., fields, wasteplaces, flood plains
Ximenesia encelioides Cav. (*Verbesina encelioides* (Cav.) Benth. & Hook. ex Gray),
 plains

TRANSACTIONS OF THE NEBRASKA ACADEMY OF SCIENCES

CONVOLVULACEAE

- Convolvulus arvensis* L., common weed; from Europe
C. sepium L., thickets along streams

CORNACEAE

- Cornus stolonifera* Michx., slopes, woods, moist areas, near streams

CRASSULACEAE

- + *Sedum stenopetalum* Pursh, rocky slopes and ridges

CRUCIFERAE

- Alyssum alyssoides* L., weedy; from Europe
Arabis holboellii Hornem., dry hillsides
Berteroa incana (L.) DC., along stream; native to Europe
Brassica kaber (DC.) L. Wheeler, weedy
Camelina microcarpa Andrz., weedy; from Europe
Capsella bursa-pastoris (L.) Medic., common weed in gardens and lawns; naturalized from Europe
Cardaria draba (L.) Desv., weedy, roadsides
Chorispora tennela DC., weed in disturbed lawns and fields; from Asia
Conringia orientalis (L.) Andrz., weedy; from Europe
Descurainia pinnata (Walt.) Britt., weedy, lawns, roadsides, and fields
D. sophia (L.) Webb ex Prantl., weedy; from Europe
Draba reptans (Lam.) Fernald, dry sandy soil, hills and ridges
Erysium asperum (Nutt.) DC., roadsides and plains
E. cheiranthoides L., moist shady valleys
E. repandum L., wasteplaces and roadsides
Lepidium virginicum L., banks, weedy
Lesquerella ludoviciana (Nutt.) S. Wats., rocky slopes, hills and plains
Nasturtium officinale R. Br., aquatic, clear water; from Eurasia
Rorippa amoracia (L.) A.S. Hitchc., moist ground; naturalized from Europe
R. sinuata (Nutt.) A.S. Hitchc., wasteplaces, moist
Sisymbrium altissimum L., weedy; from Europe
 ⊕ *Stanleya pinnata* (Pursh) Britt., dry, rocky soil
Thlaspi arvense L., weedy; from Europe

CUCURBITACEAE

- Echinocystis lobata* (Michx.) T. & G., banks, wasteplaces

CYPERACEAE

- Carex aquatilis* Wahl. var. *altior* (Rydb.) Fern., stream & pond margins
C. brevior (Dewey) Mack., dry open soil
C. filifolia Nutt., hillsides and plains
C. hystericina Muhl., swales and swamps
C. lanuginosa Michx., rich meadows and swales
C. molesta Mack., moist open grounds, borders of woods
C. nebraskensis Dewey, moist ground
C. praegracilis W. Boott., low open ground and prairies
C. spengelii Dewey, thickets and woods
Cyperus aristatus Rottb., damp silts and alluvium
C. rivulavis Knuth., wet muddy places
Eleocharis palustris (L.) R. & S. (*E. macrostachya* Britt.), wet ground, near ponds and in wet roadside ditches
Scirpus americanus Pers., wet ground, edges of ponds and streams

LIFE SCIENCES

- S. atrovirens* Willd., wet ground, edges of ponds and streams
- S. maritimus* var. *paludosus* (A. Nels.) Kukenth., fresh water of alkaline marshes
- S. validus* Vahl., wet ground, shallow water

ELAEAGNACEAE

- Elaeagnus angustifolia* L., mostly cultivated; native to Europe
- Shepherdia argentea* (Pursh) Nutt., banks and valleys along streams

ELATINACEAE

- Bergia texana* (Hook.) Seubert., muddy shores of ponds

EUPHORBIACEAE

- Croton texensis* (Klotzsch) Muell., dry prairies
- Euphorbia esula* L., moist disturbed habitats, weedy; from Eurasia
- * *E. geyeri* Engelm., sandy soils
- E. glyptosperma* Engelm., dry, sandy soil
- E. hexagona* Nutt., prairies, plains, usually sandy soils
- E. marginata* Pursh, prairies and plains
- E. missurica* Raf., rocky or sandy soil
- E. robusta* (Engelm.) Small, very dry hillsides
- E. serphyllifolia* Pers., weedy

FUMARIACEAE

- Corydalis aurea* Willd., along banks

GRAMINEAE

- Agropyron cristatum* (L.) Gaertn., prairies; introduced from Europe
- A. dasystachym* (Hook.) Scribn., roadsides and in fields
- A. elongatum* (Host.) Beauv., moist soil along streams
- A. inerme* (Scribn. & Smith) Rydb., low prairie
- A. repens* (L.) Beauv., roadsides and along fences; from Europe
- A. smithii* Rydb., hills and plains
- A. trachycaulum* (Link) Malte., various habitats
- Agrostis alba* L., moist meadows, escaped from cultivation
- Alopecurus aequalis* Sobol., in water and wet banks along streams
- Andropogon gerardi* Vitman, prairies and meadows
- A. hallii* Hack., sandy soil
- Aristida longiseta* Steud., dry rocky slopes
- + *A. oligantha* Michx., dry soil
- Beckmannia syzigachne* (Steud.) Fern., marshes and wet ditches
- Bouteloua curtipendula* (Michx.) Torr., plains and hillsides
- B. gracilis* (HBK.) Lag., plains and sand hills
- B. hirsuta* Lag., plains, rocky hills, and open ground
- Bromus inermis* Leyss., roadside ditches, escaped from cultivation
- B. kalmii* A. Gray, open soil or thickets
- B. japonicus* Thunb., fields and wastepieces, weedy
- B. racemosus* L., disturbed sites; native to Europe
- B. squarrosus* L., waste places; introduced from Europe
- B. tectorum* L., waste places and disturbed areas, weedy
- Buchloe dactyloides* (Nutt.) Engelm., dry plains, prairies
- Calamagrostis inexpansa* A. Gray, along streams
- C. neglecta* (Enrh.) Gartn., marshes
- Calamovilfa longifolia* (Hook.) Scribn., sandy prairies
- Cenchrus longispinus* (Hack.) Fern., open and disturbed ground, weedy

TRANSACTIONS OF THE NEBRASKA ACADEMY OF SCIENCES

- ⊕ *Dactylis glomerata* L., prairies, escaping from cultivation; from Europe
Digitaria sanguinalis (L.) Scop., gardens, lawns, and fields, weedy; native of Europe
Distichlis stricta (Torr.) Rydb., alkaline soil
Echinochloa crusgalli (L.) Beauv., moist open places and waste ground, weedy; native of Europe
Elymus canadensis L., river banks and in woods
Eragrostis cilianensis (All.) Link., cultivated ground, waste places; gardens and fields; naturalized from Europe
E. pilosa (L.) Beauv., weed in waste places; naturalized from Europe
Glyceria stricata (Lam.) Hitch., moist ground; naturalized from Europe
+ *Hesperochloa kingii* (S. Wats.) Rydb., dry hillsides
Hordeum jabatum L., moist, open prairies, and waste grounds
Koleria cristata (L.) Pers., prairies, open woods, and rocky hillsides
+ *Leersia oryzoides* (L.) Swartz., edges of ponds and creeks
⊕ *Muhlenbergia cuspidata* (Torr.) Rydb., prairies and plains, often on stony soil
M. racemosa (Michx.) B.S.P., moist, low ground along streams
Oryzopsis hymenoides (R. & S.) Ricker, hillsides and in open woods
O. micrantha (Trin. & Rupr.) Thurb., open dry woods and rocky slopes
+ *Panicum capillare* L., open ground, fields, gardens and waste places
P. scribnerianum Nash, meadows, dry prairies, rocky slopes
P. virgatum L., prairies and meadows
P. wilcoxianum Vasey, dry prairies
+ *Paspalum stramineum* Nash, open woods, mainly in sandy soil
+ *Phalaris arundinacea* L., marshes, wet river banks, and wet meadows
Phleum pratense L., along roadsides and in fields, escaped from cultivation
Poa compressa L., open ground and in thin woods; from Europe
P. nemoralis L., various habitats; from Eurasia
P. pratensis L., meadows and fields; from Europe
P. scabrella (Thurb.) Benth., pastures
Puccinellia distans (L.) Parl., moist soils near streams; naturalized from Europe
Schizachyrium scoparium (Michx.) Nash (*Andropogon scoparius* Michx.), prairies, hills, and open woods
Setaria lutescens (Weigel) Hubb., weedy, disturbed habitats
S. verticillata (L.) Beauv., cultivated ground, gardens and waste places
S. viridis (L.) Beauv., cultivated ground of fields and gardens, weedy
Sorghastrum nutans (L.) Nash, meadows and bottom lands
Spartina pectinata Link, marshes, sloughs, and wet meadows
Sphenopholis obtusata (Michx.) Scribn., in meadows or damp woods
* *Sporobolus cryptandrus* (Torr.) A. Gray, sandy, open ground of prairies and plains
Stipa comata Trin. & Rupr., prairies and plains
S. viridula Trin., plains, dry slopes and hills
Triticum aestivum L., waif from cultivation
Vulpia octoflora (Walt.) Rydb. (*Festuca octoflora* Walt.), dry, sandy soil

HYDROPHYLLIACEAE

Ellisia nyctelea L., moist, richer soils

IRIDACEAE

Sisyrinchium montanum Greene, sandy, open ground and meadows

JUNCAGINACEAE

Triglochin maritima L., marshes and moist meadows

LIFE SCIENCES

JUNCACEAE

- Juncus balticus* Willd., moist meadows and in marshes
- J. bufonius* L., shallow water at the edges of ponds
- J. torreyi* Coville., low, wet usually sandy places

LABIATAE

- Glechoma hederacea* L., moist areas around gardens
- Lamium amplexicaule* L., wasteplaces and open ground, lawns, weedy; from Eurasia
- Leonurus cardiaca* L., disturbed areas in moist woods; native of Asia
- Lycopus americanus* Muhl., along weedy stream banks
- Mentha arvensis* L., moist places, along streams
- M. gentilis* L. var. *cardiaca* (Baker) Biovin, rich damp soil; from Europe
- Monarda fistulosa* L., upland woods, thickets, and prairies
- + *M. pectinata* Nutt., dry prairies
- Nepeta cataria* L., moist disturbed habitats; native of Eurasia
- Salvia reflexa* Hornem., dry, gravelly soil along roadsides
- * *Teucrium canadense* L., moist ground of swamps and thickets

LEGUMINOSAE

- Amorpha fruticosa* L., banks of streams
- Astragalus adsurgens* Pall. var. *robusta*, dry areas
- A. bisulcatus* (Hook.) Gray, dry, rocky soil
- A. crassicaulus* Nutt., prairies and plains
- A. drummondii* Dougl., dry hills and roadsides
- A. gilviflorus* Sheld., prairie hillsides
- A. gracilis* Nutt., dry hillsides
- + *A. missouriensis* Nutt., dry areas
- A. plattensis* Nutt., plains and prairies
- A. sericoleucus* Gray, dry, open soil
- A. spatulatus* Sheld., dry, rocky soil
- Dalea aurea* Nutt., pastures
- D. enneandra* Nutt., plains and hills
- Gleditsia triacanthos* L., cultivated
- Glycyrrhiza lepidota* Pursh, meadows and roadsides
- Lathyrus ochroleucus* Hook., dry woods and thickets
- L. polymorphus* Nutt., plains and hills
- Lupinus argenteus* Pursh, hills and plains
- L. plattensis* S. Wats., plains and hills
- * *L. pusillus* Pursh, sandy plains
- Medicago lupulina* L., lawns and wasteplaces
- M. sativa* L., waif from cultivation
- Melilotus alba* Desr., roadsides and disturbed areas, weedy, escaping from cultivation
- M. officinalis* (L.) Lam., roadsides and disturbed areas, weedy, escaping from cultivation
- Oxytropis lambertii* Pursh, dry prairies and hills
- O. sericea* Nutt. var. *sericea*, dry, rocky hillsides
- Petalostemon candidus* Michx., plains and hills
- P. purpureum* (Vent.) Rydb., plains and hills
- Psoralea argophylla* Pursh, plains and hills
- P. cuspidata* Pursh, plains and hills
- P. esculenta* Pursh, plains and hills

TRANSACTIONS OF THE NEBRASKA ACADEMY OF SCIENCES

- P. lanceolata* Pursh, plains and hills
P. tenuiflora Pursh, plains and hills
Thermopsis rhombifolia Nutt. ex Rich., dry hills and plains
Trifolium repens L., escaping from cultivation
Vicia americana Muhl. ex Willd., plains and thickets, valleys, roadsides

LEMNACEAE

- Lemna minor* L., aquatic, ponds and creeks

LILIACEAE

- Allium textile* Nels. & Macbr., dry plains and prairies
Asparagus officinalis L., wasteplaces; from Europe
Calochortus gunnisonii Watson, meadows and open slopes
C. nuttallii Torrey, dry plains and hillsides
Fritillaria atropurpurea Nutt., grassy hillsides
Leucocrinum montanum Nutt., sandy, prairie hillsides
Polygonatum biflorum (Walt.) Ell., moist woods
Smilacina stellata (L.) Desf., moist, shaded or open ground
Smilax herbacea L., woods and edges of clearings
Yucca glauca Nutt., dry prairies and plains
Zigadenus venenosus S. Wats., plains and prairies

LINACEAE

- Linum lewisii* Pursh, dry, rocky soil
L. rigidum Pursh, prairies and plains

LOASACEAE

- Mentzelia decapetala* (Pursh) Urb. & Gilg., plains and canyons
M. nuda (Pursh) T. & G., plains and hills, usually sandy soil

MALVACEAE

- Althaea rosea* L., waif from cultivation
Malva neglecta Wallr., wasteplaces, gardens and fields
⊕ *M. rotundifolia* L., weedy; native of Europe
M. sylvestris L., in disturbed habitats; native of Eurasia
Sphaeralcea coccinea (Pursh) Rydb., dry plains and hills

MORACEAE

- Cannabis sativa* L., probably cultivated; native of Asia
Humulus lupulus Nutt. (*H. americanus* Nutt.), shaded canyon
Morus rubra L., cultivated

NYCTAGINACEAE

- Mirabilis hirsuta* (Pursh) Macm., dry, sandy ground
M. linearis (Pursh) Heimerl., dry ground
M. nyctaginea (Michx.) Macm., usually moist, open ground

OLEACEAE

- Fraxinus pensylvanica* Marsh., moist woods

ONAGRACEAE

- Circaea quadrisulcata* (Maxim.) Franch. & Sav., moist woods
+ *Epilobium adenocaulon* Hausskn., along stream banks
E. glandulosum Lehm., wet places along streams
Gaura coccinea Nutt. ex Pursh, plains and prairies, often in disturbed ground
G. parviflora Dougl. ex Hooker, roadsides and open ground

LIFE SCIENCES

- * *Oenothera albicaulis* Pursh, plains and hills
- O. biennis* L., wasteplaces in fields and prairies
- O. caespitosa* Nutt. ex Fraser, dry ground
- O. lavendulaefolia* T. & G., plains and hills
- O. nuttallii* Sweet., plains and slopes, often sandy soil
- O. serrulata* Nutt., dry plains and hills

OXALIDACEAE

- Oxalis stricta* L., woods and cultivated ground

PAPAVERACEAE

- Argemone intermedia* Sweet, plains and slopes

PHRYMACEAE

- Phryma leptostachya* L., moist woods

PLANTAGINACEAE

- Plantago elongata* Pursh, usually moist ground
- P. eriopoda* Torr., meadows and plains
- P. major* L., wasteplaces, lawns and gardens; naturalized from Europe
- P. purshii* Roem. & Schult., plains and slopes often sandy soil

POLEMONIACEAE

- Collomia linearis* Nutt., open ground in sandy soil
- Microsteris humilis* (Dougl.) Greene, pine wooded hillsides
- Phlox austromontona* Coville., dry plains and hills

POLYGALACEAE

- Polygala alba* Nutt., dry hills and plains

POLYGONACEAE

- Eriogonum annuum* Nutt., sandy hills and plains
- E. flavum* Nutt., dry hills and plains
- E. multiceps* Nees., dry ground, badlands
- Polygonum aviculare* L., waste ground, around gardens and in lawns
- P. coccineum* Muhl. ex Willd., shallow water at edge of ponds
- P. convolvulus* L., wasteplaces around gardens and lawns
- P. erectum* L., wasteplaces
- P. lapathifolium* L., wet ground along streams
- P. persicaria* L., moist ground along streams
- + *P. punctatum* Ell., wet soil and shallow water
- P. ramosissimum* Michx., roadsides
- Rumex altissimus* Wood, moist, open ground
- R. crispus* L., moist, waste ground
- R. maritimus* L., stream banks and wet ground
- * *R. obtusifolius* L., moist, waste ground
- R. venosus* Pursh, wasteplaces, dry ground

PRIMULACEAE

- Androsace occidentalis* Pursh, dry, usually sandy soil

RANUNCULACEAE

- Actaea rubra* (Ait.) Willd. f. *neglecta* (Gillman) Robins, moist woods
- Anemone cylindrica* A. Gray, meadows and slopes
- A. patens* (L.) Mill., pine wooded hillsides
- Aquilegia canadensis* L., moist woods
- Clematis ligusticifolia* Nutt. ex T. & G., roadsides and thickets

TRANSACTIONS OF THE NEBRASKA ACADEMY OF SCIENCES

- ⊕ *Delphinium nelsoni* Greene, prairies
- D. virescens* Nutt., prairies
- Ranunculus abortivus* L., moist woods
- R. macounii* Britt., marshes and wet meadows
- R. pennsylvanicus* L., marshes and wet ditch banks
- R. testiculatus* Crantz., weedy; from the Old World
- Thalictrum dasycarpum* Fisch. and Lall. ex Fisch., moist woods

ROSACEAE

- Agrimonia striata* Michx., moist woods
- Amelanchier alnifolia* Nutt., dry hillsides
- ⊕ *Cercocarpus montanus* Raf., on dry hills
- Crataegus succulenta* Link., dry open woods
- Fragaria vesca* L., wooded hillsides
- Geum canadense* Jacq., dry or moist woods
- Potentilla arguta* Pursh, dry woods and prairies
- P. norvegica* L., moist meadows and woods
- ⊕ *P. paradoxa* Nutt. ex T. & G., moist or wet soil
- P. pennsylvanica* L., dry hillsides
- Prunus americana* Marsh., slopes and valleys
- P. virginiana* L., hills, valleys, and banks
- * *Rosa woodsii* Lindl., plains and hills
- Rubus occidentalis* L., wooded slopes

RUBIACEAE

- Galium aparine* L., moist, shady habitats
- G. boreale* L., slopes and valleys along streams

SALICACEAE

- Populus sargentii* Dode, along streams
- P. tremuloides* Michx., canyons
- Salix amygdaloides* Anderss., moist, alluvial soil
- S. exigera* Nutt. var. interior (Rowlee)
- * *S. interior* Rowlee, moist, alluvial soil
- S. lucida* Muhl. low ground

SANTALACEAE

- Comandra pallida* A. DC., dry hills and plains

SAXIFRAGACEAE

- Huechera richardsonii* R. Br., sandy soil, in woods
- Ribes americanum* Mill., woods and thickets
- R. aureum* Pursh, hills and plains usually near streams
- ⊕ *R. cereum* Dougl., dry slopes
- R. missouriense* Nutt., upland woods near streams
- R. odoratum* Wendl., rocky hillsides
- R. setosum* Lindl., woods and thickets

SCROPHULARIACEAE

- Besseyia cinerea* (Raf.) Pennell, dry pine wooded hillsides
- Castilleja sessiliflora* Pursh, dry, rocky, or sandy hills and plains
- + *Collinsia parviflora* Dougl., dry soil, introduced
- Linaria vulgaris* Mill., roadsides, escaped; from Europe
- Orthocarpus luteus* Nutt., plains and hills

LIFE SCIENCES

- Penstemon albidus* Nutt., dry, sandy hills and plains
- P. angustifolius* Nutt., dry, sandy hillsides
- P. eriantherus* Pursh, plains
- P. glaber* Pursh, dry, sandy habitats near streams
- P. gracilis* Nutt., meadows and plains
- P. grandiflorus* Nutt., sandy plains
- Schrophularia lanceolata* Pursh, open woods
- Verbascum thapsus* L., fields, roadsides, and wastelands; naturalized from Europe
- Veronica americana* Schwein. ex Benth., edges of streams
- V. polita* Fries, weed around lawns and gardens

SOLANACEAE

- Hyoscyamus niger* L., along roadsides; from Europe
- + *Physalis heterophylla* Nees., dry, sandy prairies
- P. virginiana* Mill., prairies and woodsides
- Solanum nigrum* L., disturbed habitats, weedy, gardens
- S. rostratum* Punal., dry prairies and plains

TAMARICACEAE

- Tamarix gallica* L., marshy areas, also cultivated; European

TYPHACEAE

- Typha angustifolia* L., wet soil, edges of ponds
- T. latifolia* L., wet soil, edges of ponds

ULMACEAE

- + *Celtis occidentalis* L., along streams; also cultivated
- Ulmus americana* L., along streams, also cultivated
- U. pumila* L., cultivated, sometimes escaping

UMBELLIFERAE

- Berula erecta* (Huds.) Cov., wet ground along streams
- Cicuta maculata* L., moist roadside ditches
- Conium maculatum* L., moist meadows and ditches
- Cymopterus acaulis* (Pursh) Raf., dry open ground
- + *Lomatium nuttallii* (A. Gray) Macbr., plains
- L. orientale* Coult. & Rose, dry hillsides
- Musineon divaricatum* (Pursh) Nutt., dry hills and plains
- Osmorhiza longistylis* (Torr.) DC., moist woods
- Sanicula canadensis* L., moist woods
- S. marilandica* L., woods and thickets

URTICACEAE

- Parietaria pensylvanica* Muhl., disturbed, shady areas
- Urtica dioica procera* (Muhl.) Wedd., moist open ground and in thickets

VERBENACEAE

- Verbena bracteata* Lag. & Rodr., roadsides, fields, and wastelands
- V. hastata* L., moist pastures and meadows
- V. stricta* Vent., dry hills and plains
- V. urticifolia* L., moist, sandy soil

VIOLACEAE

- Viola cucullata* Ait., wet meadows and swamps
- V. nuttallii* Pursh, valleys and slopes
- V. papilionacea* Pursh, damp woods, meadows, and lawns

TRANSACTIONS OF THE NEBRASKA ACADEMY OF SCIENCES

V. rugulosa Greene, moist woods

V. tricolor L., persisting from cultivation

VITACEAE

Parthenocissus vitacea (Knerr) Hitchc., banks and woods

Vitis riparia Michx., moist woods, along roadsides

V. vulpina L., banks, roadsides, and edges of woods

ZYGOPHYLLACEAE

Tribulus terrestris L., wasteplaces and fields

Taxa reported by other persons:

- * Montz, R. L. 1967. Vegetative study of a river bottom in Northwest Nebraska. Unpublished Masters thesis. Chadron State College.
- + LeMaire, Robert. 1966. Preliminary checklist of the plants of Rimrock Ranch (Sioux County). Unpublished. Specimens cited were not examined by the authors.
- ⊕ Plants collected by or under the direction of Miss Doris Gates, Chadron State College.