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A Guide to the Tallgrass Prairies of Eastern Nebraska and Adjacent States

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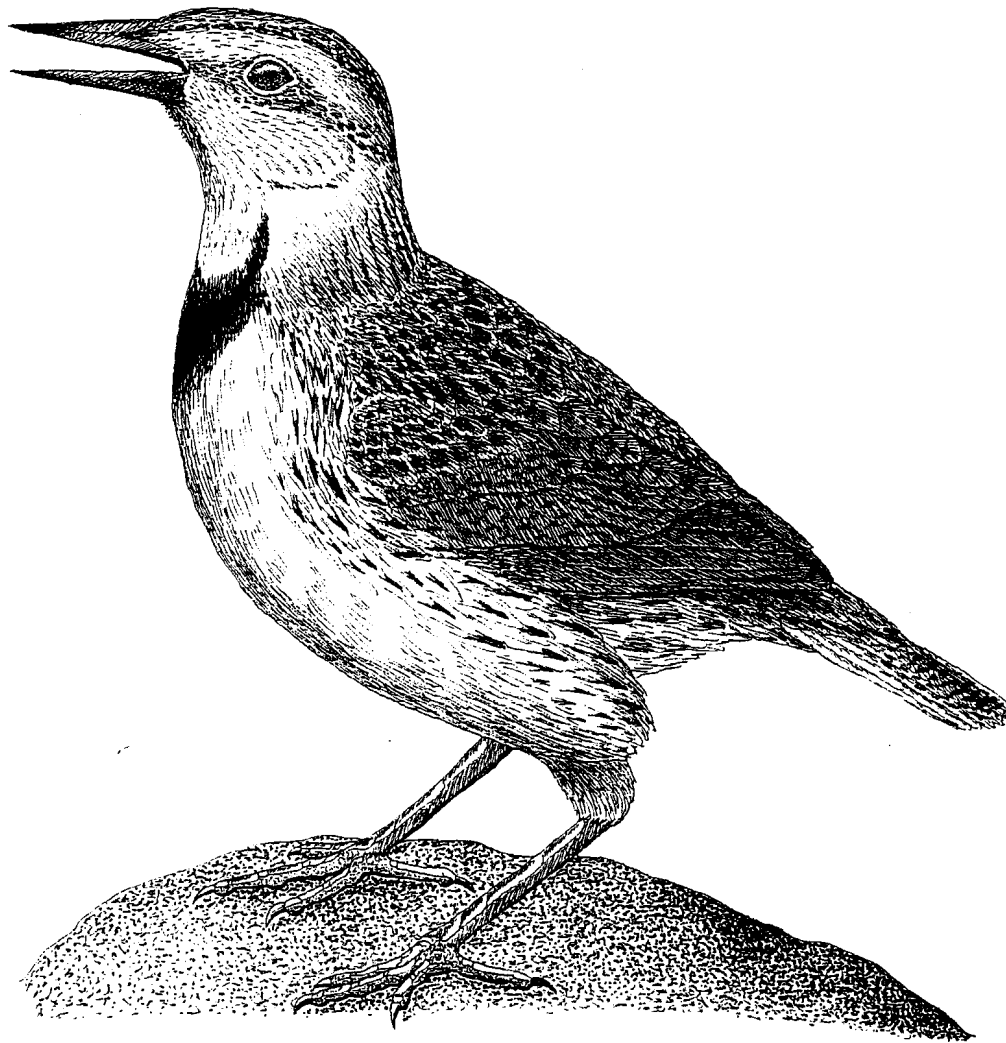
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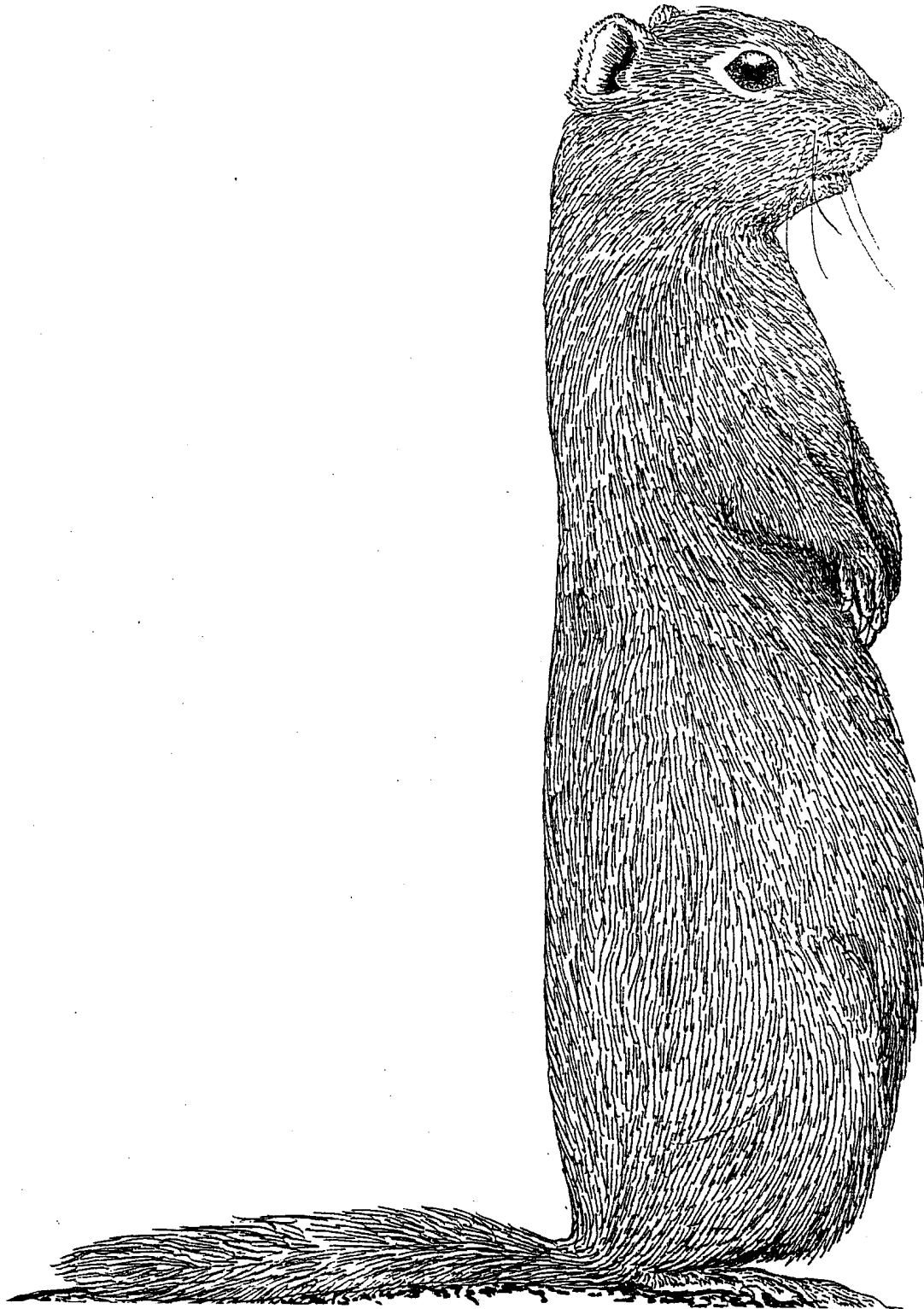
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**A Guide to the Tallgrass Prairies of Eastern Nebraska and
Adjacent States**



**Paul A. Johnsgard
School of Biological Sciences
University of Nebraska-Lincoln
2007**

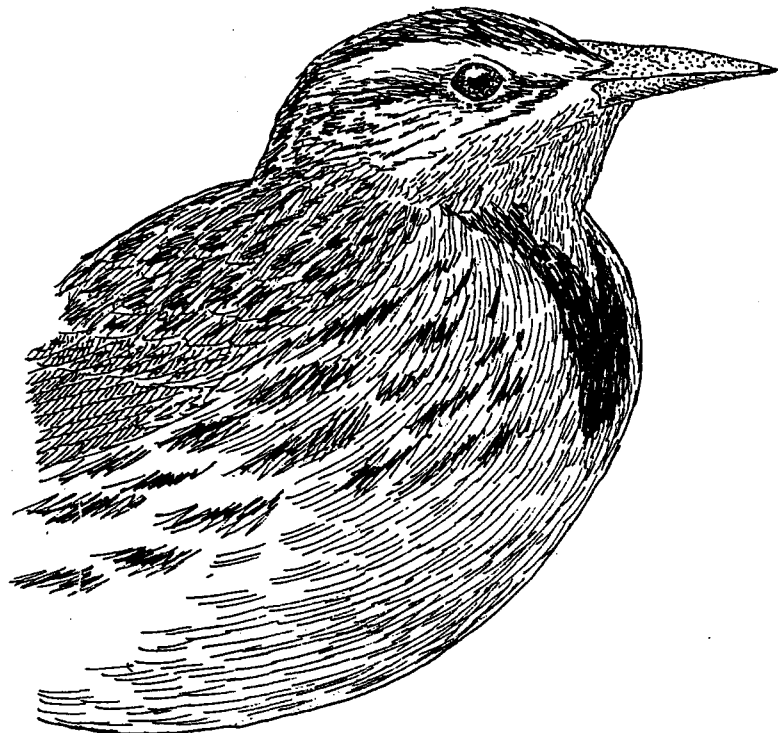


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Squirrel.

Introduction and Acknowledgments

This booklet represents an initial attempt at putting together some useful information on the locations, composition and ecology of tallgrass prairies of eastern Nebraska, one of the state's most valuable and most endangered ecosystems. Little of this information is directly based on my own work, and in particular I have relied on the studies of Kay Kottas, Robert Kaul and Steve Rolfsmeier for information on the plants of tallgrass prairies, as well as classic work on Nine-mile Prairie by John Weaver and T. L. Steiger. To help with field identification, I have also used public-domain plant drawings from A. B. Hitchcock's *Manual of the Grasses of the United States*, the U. S. Dept. of Agriculture's *Selected Weeds of the United States* and the Nebraska Dept. of Agriculture and Inspection's *Nebraska Weeds*. All other drawings my own. Rachel Simpson kindly looked at my lists of plants and corrected some spelling errors, and several other people have also offered suggestions on content.

Most importantly, the long-term work by Ernie Kousek and Tim Knott has been invaluable in locating and helping to obtain conservation easements on surviving tallgrass prairie remnants in southeastern Nebraska. Tim Knott provided me some maps and information on relict tallgrass prairie tracts in eastern Nebraska, and Ernie Rousek added some historic information on Nine-mile Prairie. The coordinated efforts of Wachiska Audubon of Lincoln, Nebraska in facilitated these easements and obtained money to purchase some prime examples of tallgrass prairies. Were it not for these efforts, the work of the National Audubon Society in preserving Spring Creek Prairie, and earlier efforts by botanists such as A. T. Harrison and Robert Kaul to preserve Nine-mile Prairie we would have very little means of studying and celebrating the biological complexities and special esthetic beauties of native tallgrass prairie in eastern Nebraska. – Paul A. Johnsgard





Communities Dominated by
Deciduous or Coniferous Trees

- Rocky Mountain Coniferous Forest
- Coniferous-Deciduous Transition Zone
- Eastern Deciduous Forest
- Floodplain Forest and Prairie

Communities Dominated by Grass

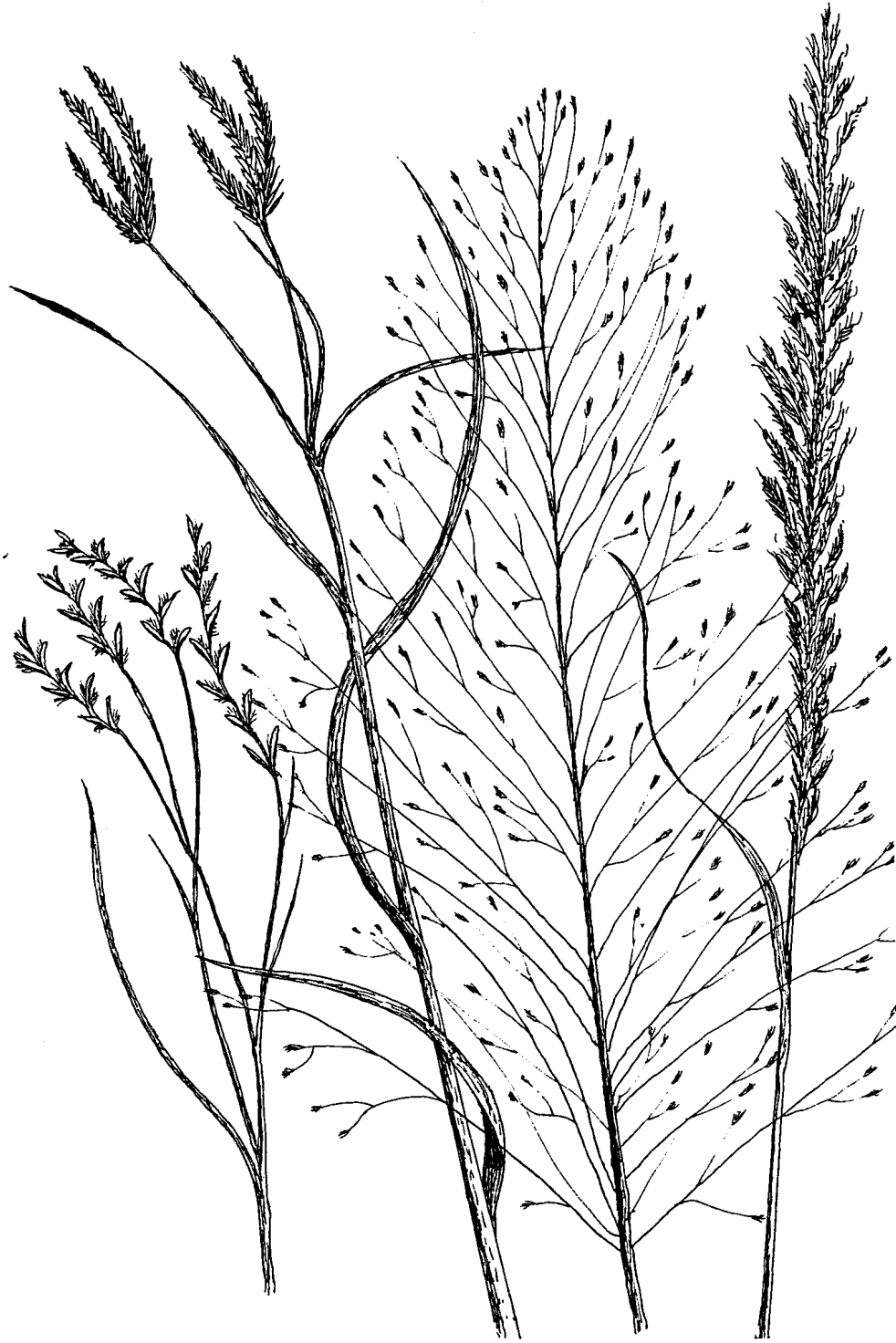
- Mixed-grass Prairie
- Mixed-Tallgrass Transition
- Tallgrass Bluestem Prairie
- Kansas Mixed Prairie
- Shortgrass Prairie
- Dakota Prairie
- Sandsage Prairie
- Sandhills Prairie

Adapted from a map of Nebraska's Native Vegetation by Kaul (1975)

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Part 1: Ecology of the Tallgrass Prairie



Drawing by P. Johnsgard: Little Bluestem, Big Bluestem, Switchgrass & Indiangrass

Part 2: Plants of the Tallgrass Prairies



Drawing by P. Johnsgard: Fire on the Mountain

Nebraska's Tallgrass Prairies

Of all of the grassland types in North America, the tallgrass prairie has been the most ravaged. One estimate of its original extent, based on a map published by A. W. Küchler, was 221,375 square miles (573,511 km), as compared with 218,543 square miles (566,174 km) for mixed-grass prairie and 237,476 square miles (615,223 km) for shortgrass prairie. At least 95 percent of the tallgrass prairie is now gone; if the Sandhills prairies were classified as tallgrass prairie (they are usually considered as mixed-grass prairie) they would certainly be the largest remaining remnant in all of North America. However the species diversity of Sandhills prairie plants is much lower than in true tallgrass prairie. T. L. Stieger reported that at least 237 species of vascular plants occurred on various tallgrass prairie sites totaling about ten square miles near Lincoln. One of the best-studied of all tallgrass prairies is Nine-mile Prairie, near Lincoln, where 392 species of plants (291 native) have been detected over a half-century of study by John Weaver and more recent botanists. It now comprises only some 230 acres, but was about 800 acres when originally studied. Similarly, Audubon's Spring Prairie near Denton, of slightly over 600 acres, was also found by Kay Kottas to support over 300 species. By comparison, a similar-sized mixed-grass prairie site in the Nebraska Loess Hills that was studied by Steven Rothenberger contained 239 species. These figures compare with a total of 194 plant species reported from the two-square-mile Arapahoe Prairie in the central Sandhills.

Besides big bluestem, Indiangrass, switchgrass and, in wetter sites, prairie cordgrass, are important high-stature grasses of tallgrass prairie. All are well above three feet tall at maturity, and have root systems that extend down 8-12 feet for switchgrass, 7-8 feet for prairie cordgrass, and 5-6 feet for Indiangrass. All of these are warm-season grasses that are strongly rhizomatous. Two of the three are also continuous sod-formers, but Indiangrass is a more bunchy species, mainly spreading from tillers that are produced from late summer rhizomes that overwinter and provide for early spring growth the following year. Seed production estimates for big bluestem, Indiangrass and switchgrass seem to average substantially less than that of little bluestem, but this statistic seems subject to considerable experimental variability. Additionally, all these species reproduce mainly by rhizomes rather than from seed dispersal.

Ecology of the Tallgrass Prairie

The tallgrass prairie is one of the most romantic concepts of the American West. The imagined view of endless bison herds plodding through grasses so tall that they half obscured them from sight is a powerful image, and one that today must remain more in the realm of fancy than of fact. Quite probably most bison occurred on prairies of shorter stature, and the taller grasses that were present were likely soon clipped by the hungry migrants, but at least the vision is a most attractive one. One image that can still be realized is the sight of tallgrass prairie in full bloom from June through September, when dozens of prairie forbs vie for the attention of bees, butterflies and moths.

Such famous plant ecologists as Frederick Clements and John Weaver studied this prairie and similar ones in eastern Nebraska for many decades. A study of several such tallgrass prairies established that about 200 species of upland forbs were typically present, and that 75 of these were present in 90 percent of the prairies they examined. The most abundant and most consistently occurring upland forb was lead plant, which has a root system that can be up to more than 16 feet in length and is provided with nitrogen-fixing nodules. The gayfeather or blazing star may have roots of a comparable length. Many species of goldenrods are also present, with roots up to eight feet long. John Weaver once calculated that a square foot of big bluestem sod might contain about 55 linear feet, and an acre about 400 miles of densely matted rhizomes, from the surface to a depth of only a few inches. The strong roots of big bluestem have individual tensile strengths of 55-64 pounds, making prairie sod one of the strongest of natural organic substances. It is indeed strong enough to construct

sod-built houses that have sometimes lasted a century or more in the face of Nebraska's relatively inhospitable climate.

John Weaver once calculated that the big bluestem has root systems up to about three feet in diameter, that penetrate to a depth of nearly seven feet. Some 43 percent of its underground biomass is concentrated in the top 2.5 inches (10 cm) of soil, and 78 percent in the top six inches (30 cm). The overall underground (root and rhizome) biomass of tallgrass prairies is usually 2-4 times greater than the aboveground biomass. The root component usually contributes about 30 percent of the annual primary production, or up to nearly 40 percent in the case of grazed prairie. Overall annual primary production of organic matter in tallgrass prairie average about 300 grams per square meter (or nearly 3,000 pounds per acre). Likewise, the total underground parts of tallgrass prairie may contribute more than a ton of new organic matter per acre annually. Annual turnover (decomposition) rates for the above-ground parts of tallgrass prairie average about 80 percent, resulting in an average turnover period for the aboveground component of about 1.25 years, whereas turnover periods for underground biomass averages about three or four years. As a result, prairie soils are constantly being re-fertilized by organic matter that has been produced during the past few growing seasons.

The soils of tallgrass prairie are among the deepest and most productive for grain crops of any on earth. They represent the breakdown products of thousands of generations of annual productivity of grass and other herbaceous organic matter. Because of these organic materials and the clays usually present in prairie soils, such soils have excellent water-holding capabilities. In addition to the humus and related organic matter thus produced, many prairie legumes have nitrogen-fixing root bacteria that enrich and fertilize the soil to a depth of at least 15 feet. Earthworms and various vertebrate animals such as gophers make subterranean burrows that mix and aerate prairie soils, in the case of earthworms to a depth of 13 feet or more.

Tallgrass Prairie Types

Tallgrass Prairie

The five dominant grasses of upland tallgrass prairie are actually those of medium stature, and consist of little bluestem, needlegrass, prairie drop-seed, Junegrass, and side-oats grama. All are bunchgrasses and, of all these perennial native grasses, little bluestem is easily the most important. It alone may comprise 60-90 percent of the total vegetational cover, and in very favorable sites it may lose its bunching form and produce a continuous sod of interlocking roots. However, in most cases the major upland grasses occur in clumps spaced about a foot or more apart, with roots extending downward at least 4-5 feet. John Weaver once calculated that a strip of prairie sod four inches wide, eight inches deep and 100 inches long held a tangled network of roots having a total length of more than 20 miles! In prairie the total weight of underground vegetation in the form of roots is likely to be as great as the aboveground parts, and much of this is recycled back into the soil on a yearly basis. In contrast, forests and woodlands store most of their productivity as woody above-ground parts, which recycle back into the soil only when the trees eventually die, or perhaps are burned.

Most of the important grasses of the tallgrass prairie are from 3-6 feet tall, with the higher slopes having a greater proportion of mid-stature species. One of the few large and bushy shrubs to be of significance on the uplands is wild plum, although the smaller lead plant is widely distributed, and both prairie rose and New Jersey tea are likely to exist as scattered plants.

Forbs of the tallgrass prairie are numerous, as mentioned earlier. In the uplands lead plant is usually the most important forb, although it has a woody base and might well be classified as a half-shrub. Other important prairie half-shrubs include prairie rose and New Jersey tea. The stiff sunflower is also one of the most widely distributed upland forbs, and also extends to many lowlands. Other regular forb participants are prairie goldenrod, prairie flax, wild alfalfa, heath aster, bastard toadflax, and daisy fleabane. Several sunflowers, such as the saw-toothed sunflower, Maximilian's sunflower, and Jerusalem artichoke are important prairie forbs,

especially in moister situations, and the Jerusalem artichoke has enlarged starchy tubers that can be eaten raw or cooked in various ways. A legume, prairie turnip, was an important food source for Native Americans.

Wet Mesic Prairie

If the plants of upland tallgrass prairie are impressive, those of the lowland prairie are even more so. In this situation big bluestem may comprise 80-90 percent of the overall prairie vegetation, and together with little bluestem the two species represent at least 75 percent of all true prairie communities. Big bluestem is substantially taller than little bluestem and where both occur together the shorter species may be shaded out. On slopes and drier hilltops the smaller species has an advantage over the larger one. The roots of big bluestem are about 6-8 feet deep, and those of little bluestem are about five feet deep, so big bluestem has an advantage in moister sites. However, its roots tend to grow directly downwards, whereas those of little bluestem and other bunchgrasses tend to spread widely, intercepting a much broader area than the aboveground parts of the plant. Like many prairie perennials, both bluestem species are believed to be long-lived. Both species are warm-season grasses, and continue to grow through the summer. Big bluestem may rarely reach a height of 8-10 feet in some lowland sites by late summer, when it finally bursts into full flower. Other very tall grasses of lowland sites are prairie cordgrass, Canada wild rye, Indiangrass, and switchgrass. An additional 20 or more grass species are of importance in lowland prairie.

In typical lowland prairie big bluestem is dominant, but Indiangrass, switchgrass and Canada wildrye may also be abundant, and in wetter sites prairie cordgrass may take the place of big bluestem as the dominant species. Typical shrubs include wild plum, rough-leaved dogwood, and wolfberry. There are many summer- and fall-flowering composites, such as sunflowers, goldenrods and asters, and prairie fringed orchids are likely in slightly moister ravines. Many taller forbs are part of the low prairie flora. Among these is compass-plant, which grows to nearly 10 feet tall, and has leaves that may be nearly two feet long. Younger plants especially have their leaves twisted vertically, and the leaf axis is oriented almost perfectly north-south (thus the plant's common name). This trait allows them to take advantage of early morning and late afternoon sunlight, but not become too desiccated during mid-day hours. A related species, the cup-plant, has opposites leaves united at their bases in such a way that a small cup-like structure is formed that holds water after rains.

Sumac–Dogwood Shrubland

Over much of eastern Nebraska a shrubby community dominated by smooth sumac, rough-leaved dogwood, and sometimes also wild plum, wolfberry, and coralberry are fairly common. It occurs along the edges of woodlands, or in ravines of tallgrass prairies, over well-drained soils. The shrubs may be fairly open or quite dense, at times even restricting human passage, but in the more open stands an understory of typical prairie plants may be present. Recurrent prairie fires once restricted this community, but fire suppression in recent times has encouraged its growth. Fire reduction has also encouraged the proliferation of eastern red cedar, which in eastern Nebraska is a much more serious threat to prairie survival than are sumac and dogwood.

Bur Oak Woodland

This upland community type sometimes occurs near or is interspersed with tallgrass prairie, forming a savanna-like community, especially where recurrent burning or grazing helps to control the understory.

Profiles of Some Typical Tallgrass Species

Big Bluestem

Big bluestem is a warm-season grass, often growing six feet or more during the hot summer months, and finally bursting into blossom in September. By October it is starting to shed its seed crop, which in natural stands might reach 100 pounds per acre, and much more in planted stands. By then its stemmy and rather rank

foliage is not so attractive to large ungulates, but earlier in the season it is a highly preferred food for most grazing mammals.

Andropogon translates as “man’s beard,” a fair description of its flowering head, which includes an equal mix of somewhat hairy and sessile but fertile spikelets, and adjacent stalked but infertile ones. Although the undisputed dominant of moist tallgrass prairie, big bluestem has an overall range extending east to the Atlantic coast, north in eastern Canada almost to James Bay, and south well into Mexico. Other species of this genus have similar ranges and little bluestem, sometimes placed in the same genus, is also a warm-season grass with a range similar to that of big bluestem. Sand bluestem is an extremely close relative of big bluestem that is more sand- and arid-adapted, but is otherwise nearly identical, and sometimes the two forms hybridize where their ranges overlap in Nebraska.

Little Bluestem

This is the “shaggy” prairie grass of which Willa Cather wrote lovingly, whose English name refers to a bluish cast that is present on the lower leaves and stem nodes of growing plants. However, by midsummer much of the entire visible plant is starting to turn a rich Indian-red, and by fall one can easily recognize little bluestem by its combination of bunch-like or “shaggy” shape and its wonderful overall coppery red color, almost matching the colors of an autumnal prairie sunset. It and side-oats grama, whose equally distinctive florets that hang down one side of the plant stem like the feathers of a Lakota brave’s war-lance, and was thus called “Banner-waving-in-the-wind grass”, are two of the easily recognized and highly distinctive grasses of mixed-grass prairies.

Little bluestem is by far the most important plant of mixed-grass prairie, and it also extends eastward to share dominance with big bluestem in tallgrass prairie. It likewise penetrates the entire Sandhills region, and locally may even find opportunities for survival in moist depressions of short-grass prairie. Like big bluestem it is a warm-season species, obtaining much of its growth in the warmest summer months, and sending out graceful feathery flowering stalks in early fall, typically in late September and October. Its abundant seeds are soon dropped, but the upright stems and leaves persist over the winter. Cattle are not as fond of using little bluestem for winter forage as are bison. In good years little bluestem may produce 200 or more pounds of seeds per acre, or at least as much as big bluestem. This compares with about 100 pounds of seeds per acre produced by side-oats grama, and 100-180 pounds for blue grama.

Western Prairie Fringed Orchid

The western prairie fringed orchid is a lovely, all too ephemeral orchid that may remain hidden for years, suddenly appear in full bloom during late June or early July for a week or so, then disappear as quickly and quietly as it had materialized. Thus one must watch closely for it, usually in the wetter swales of tallgrass prairie. A farmer-photographer friend told me of once haying in a prairie meadow, and seeing its blooms just as the plant was about to be mowed down. Before he could stop the machine the flower had gone into the mower. Going back in following summers, he wasn’t able to find the plant again. The plants often remain unseen for several years, in a dormant, subterranean state, nourished by micorrhizae. They may then suddenly exhibit mass blooming, possibly stimulated by fire or by shifts in soil moisture that are associated with varied rainfall patterns.

There are many species of the genus *Plantathera*, most of which have whitish or greenish flowers, and are pollinated by nocturnal or crepuscular moths. The white blossoms of the fringed orchid show up well under low-light conditions, and no doubt help attract the moths. The enlarged and strongly fringed lower petal and sepals also might draw attention to the blossoms. Studies on the pollination biology by Charles J. Sheviak and Marlin L. Bowles have filled in the details for this species and a closely related but smaller one, the eastern prairie fringed orchid, which is fairly widespread in more eastern states. Both species have blossoms that are

creamy white to white, and in both the blossom fragrance is very sweet, intensifying after sunset. The blossoms of the western form are somewhat more creamy, and their fragrance more spicy, than in the eastern species. Their petal and sepal shapes also differ, and in the western species the blossom heads are shorter and denser, with fewer but larger individual blossoms.

Both species are specifically adapted to pollination by sphinx moths, being nocturnally fragrant, deeply fringed, with extruded reproductive columns, and extremely long nectar-bearing spurs. There is a very limited entrance access to the spur, and the pollinaria are situated in such a way that they will adhere either to the proboscis or eyes of the visiting moth. After the pollen bearing structures have deposited their pollen on a moth, the columns rotate, so that they now fully expose their stigmas, ready to receive pollen from the next moth that visits.

Sheviak and Bowles estimated that any pollinating moths of the western species must have a proboscis length between 35-45 mm, and must also have an across-the-eyes distance that approximates the distance between the pollen-bearing viscidia. Five prairie-ranging sphinx moths seem to meet these requirements, all of which are native to Nebraska (achemon sphinx, white-lined sphinx, wild cherry sphinx, laurel sphinx, and vashti sphinx). Of these, the head measurements of vashti sphinx does not quite “fit” the proper requirements, and it may only be a nectar thief, able to obtain nectar without carrying away pollen. The same is possibly true of the wild cherry sphinx.

Although it historically occurred all across eastern Nebraska, the current known distribution of the western prairie fringed orchid is limited to Lancaster County, eastern Seward County, Hall County, and east-central Cherry County. In 1989 the species was listed federally and concurrently by the State of Nebraska as a threatened species.

Small White Lady's-slipper

This beautiful little orchid once had a range similar to those of the eastern and western fringed prairie orchids combined. It extended west into eastern Nebraska, and east to the southern New England states. It favors damp soil but full sunlight, often occurring in wetter meadows than where the prairie fringed orchid might also occur.

This little lady's slipper blooms fairly early, in May and June, or about the same time as the yellow lady's slipper, and before the fringed white prairie orchid. The blossoms may open before the leaves are fully unfurled, the flowers being mostly yellowish green except for the lower lip, which is glossy white, with some flecks and narrow lines of purple. The conspicuous stamen-bearing structure is golden yellow, with conspicuous crimson spots, the colors probably serving as insect attractants. There is usually only a single blossom per stem, but sometimes two. However, the plants often grow in clumps, with stems up to 12 inches high, and with the long, oval leaves wrapping around the stem at their bases. The white slipper-shaped pouch is up to an inch in length, and the two lateral petal-like sepals are long, narrow and rather twisted, and the dorsal hood is formed by a sepal that is also elongated and somewhat twisted.

The pollination ecology of this species is still little known, but is probably much like that of a close European relative (*C. calceola*) that probably was separated from it during glacial periods. This species was one of the many orchids studied by Charles Darwin. He discovered that orchid flowers of this pouch-like type act as “conical traps, with the edges inwards, like the traps which are sold to catch beetles and cockroaches.” Insects are perhaps attracted by scent, or by the conspicuous white color of the pouch, with the crimson spots on the yellow staminode attracting further attention, and the purple lines leading inwards along the pouch perhaps acting as false nectar-guides. The plant produces a variety of fragrances, some of which are similar to sex-attractant pheromones used by bees for attracting females. Insects that crawl into the pouch become trapped, and can only escape by exiting through one of the two rear openings. In doing so they must first brush the surface of the stigma, and later one of the anthers. This sequence prevents self-pollination of the flower. Most of

the visitors are bees, especially solitary bees of various genera such as *Andrena*, a large and widespread group of bees that dig nesting burrows in soil and are thus called mining bees. Bumblebees may alight on the pouch, but cannot enter, and some small bees and flies that do enter are too small to effect pollination.

Once very common in the wet meadows of eastern Nebraska, this orchid is now rare, and is currently known only from Howard, Pierce, Platte and Sherman counties. It is on the list of Nebraska's threatened species.

Western and Eastern Meadowlarks

Nebraska is a bit unusual in that over much of our state both eastern and western meadowlarks can be seen and heard. Where they commonly occur together, as in the eastern fourth of the state, the eastern meadowlark is likely to be found in the lower, moister sites, and the western on uplands and drier habitats. But often both can be heard singing almost simultaneously, and it is the difference in the advertising songs of the males that make field identification easiest. The western has a complex, melodious and trumpet-like series of many short notes, uttered too rapidly to count them easily. The eastern has a more trombone-like series of a few more obviously sliding-scale notes. If one can see the singer, it may be apparent that the lower cheek ("malar") area of the western is more tinged with yellowish, like the chin, whereas in the eastern this area has little if any yellowish color present. Intermediate songs, as well as intermediate-looking birds, are sometimes present and may leave the observer in doubt as to their identity.

Individual male western meadowlarks sing a variety of unique song types, usually ranging from about three to 12. Some of these song types may be shared with other males in the local population, but no two males exhibit the exact same repertoire. A male may repeat one his song types several times, but will switch to a different type on hearing a rival, perhaps to reduce the likelihood of this other male becoming less responsive to a particular rival's song type. Song-switching may also be important both in territorial defense and in achieving mate attraction. Males having the largest song repertoires also tend to be among the first to obtain mates, and have greater reproductive success than do less gifted males, suggesting that song is one of the effective ways to attract a maiden, as humans have also more recently discovered.

The nests of meadowlarks are always extremely well hidden; those I have found have been more the result of accident than design. When walking through prairies and looking for flowers or other things, I have at times been startled by the eruption of a meadowlark at my feet. A careful parting of the grasses will then reveal a roofed-over nest, with four or five speckled eggs. Such nests are best left alone and carefully covered over again, for in spite of their concealment they are often lost to egg predators.

Greater Prairie-chicken

Greater prairie-chickens are well named. They are indeed closely linked to true prairie, and they are "great" not only in terms of relative size (at least as compared to the lesser prairie-chicken) but also in their aesthetic appeal. There are few other places in North America where one is, within about a hundred miles of our state's largest cities, able to secrete oneself within a blind on a pre-dawn spring morning, and experience what is one of the most exciting avian shows imaginable. Some of the most pleasurable memories of my life have been formed in such locations. It is like being a first-row spectator at a play whose general plot one knows almost by heart. Yet, with every such experience there is enough uncertainty as to its outcome as to make each such viewing like attending an opening-day performance, where the performers' roles may be unexpectedly altered, and the morning's outcome uncertain. Add to this the sight of a golden sunrise on the eastern horizon, the sounds of meadowlarks and distant coyotes greeting the dawn, and the scene is complete. Or, with the approach of a thunderstorm, sudden strong winds, or the unexpected visit of a coyote or prairie falcon, the whole performance may suddenly disappear before one's eyes. They are truly 'such things as dreams are made on.'

Like the sharp-tailed grouse, prairie-chickens display sexually on traditional sites called arenas or leks, in which the social status of each male is the sole factor influencing his opportunity for mating successfully. This is Darwinian sexual selection in its clearest form; even a minor setback in status relative to that of neighboring males, such as repeated loss in fights over territorial boundaries, might be enough to exclude a male from hierarchical advancement toward the status of “master cock.” The master cock is the factor that holds the “glue” of the entire social structure into a working, coherent group. Should he be suddenly removed from a stable lek, the resulting fights over new territorial boundaries, and associated disruptions over who might replace the dominant male will result in reduced fertilization rates among the females, and a possible disintegration of the entire lek structure.

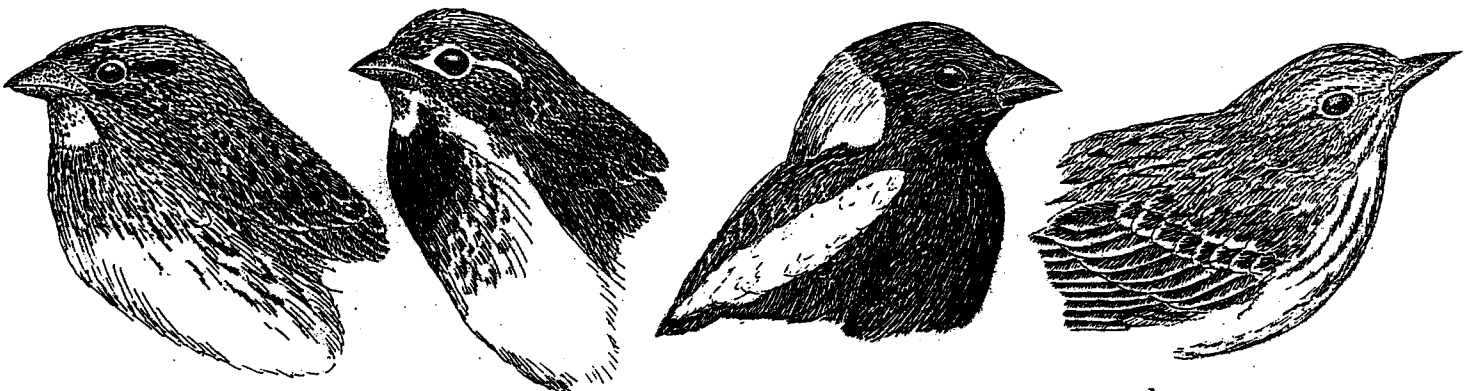
The sounds and postures of the greater prairie-chicken in display are quite different from those of the sharp-tailed grouse. A low-pitched, dove-like “booming” replaces the sharptail’s “cooing,” and a stately erect posture, with two ear-like pinnae erected vertically and the lowered wingtips brushing the ground, replaces the frenzied dances and outstretched wings of the sharptail. Yet, hybrids sometimes occur in areas where both species coexist. This is most likely to happen when females visit mixed lek and, for whatever reason, allow themselves to be mated by a master cock of the wrong species. Once the females have been mated, the males play no further role in assuring the species’ successful reproduction. The females make their nests, lay their eggs, and tend their broods all alone, probably not encountering the adult males again until fall flocks begin to assemble.

Massasauga Rattlesnake

Rattlesnakes of any type are not particularly appealing animals for most people, although their danger to humans is considerably over-rated. I knew of only two students who were bitten by prairie rattlesnakes, a larger species than the massasauga, while I taught nearly 20 summers at our biological field station. One was grazed when a student picked up a snake that had been run over and that the student thought was dead. The other was bit during a show of foolhardy machismo by another young man whose hormones had seemingly drowned any good sense that might have otherwise been there. Both victims recovered rapidly; fewer people are killed by snake bites each year in the U.S. (about a dozen, out of 6-7 thousand bit each year)) than are killed as a result of being stung by bees, wasps or ants.

In part because of the universal human persecution of rattlesnakes, and partly because of habitat loss in this species’ original prairie range, this little rattlesnake has nearly disappeared from the Nebraska scene. One of its very few remaining haunts is around Burchard Lake State Recreation Area in Pawnee County of southeastern Nebraska, where greater prairie-chickens also survive in small numbers. When George Hudson did a survey of Nebraska’s reptiles and amphibians during the 1950s, he was aware of records from Lancaster, Fillmore, Gage and Nemaha counties. There were five records from Lancaster County, including one from the prairie remnant near Lincoln called Nine-mile Prairie. A more recent survey by John Lynch produced a few more locations, but only in Pawnee County (Pawnee Prairie and Burchard Lake) is the species likely to be still present and receiving some degree of protection. It was recently added to the list of Nebraska’s threatened species.

(Derived from *The Nature of Nebraska*, by P. A. Johnsgard (2001))



Henslow's Sparrow, Dickcissel, Bobolink & Sprague's Pipit. Drawing by P. Johnsgard

Part 2: Plants of the Tallgrass Prairies



Drawing by P. Johnsgard: Fire on the Mountain

Checklist of Prairie and Grassland Plants of Nebraska

Taxa (families, genera, species) in the following lists are arranged alphabetically by Latin names. "Eastern half," "Southeastern" etc. refer to the entire state. Listing is mostly limited to widespread species illustrated in the field guides cited. Kaul et al. (2006) provided keys to all species. Abbreviations are as follows:

9-mile = species that were reported from Nine-mile Prairie (Lancaster County) by Kaul & Rolfsmeier (1987).

SCP = species reported from Spring Creek Prairie (Lancaster County) by Kottas (2000).

Iowa = species reported from Iowa prairies and illustrated by Christiansen & Muller (1999).

Platte = species reported from Platte Valley and/or Bader Memorial Park by Whitney & Whitney (1987).

Common Prairie Grasses and Sedges

This list includes nearly 100 of Nebraska's grasses and sedges, especially those of eastern Nebraska. All of Nebraska's grasses were illustrated and described by Hitchcock (1935); page references refer to this source. Drawings from this source or from the U.S. Dept. of Agriculture (1970) and reproduced in part in Part 4 are marked as "(Illustration --)".

Symbol meanings are as follows:

= species that were described and illustrated photographically by Johnson and Larson (1999).

\$ = species described and illustrated photographically by Larson and Johnson (1999).

* = "weedy," often introduced, species illustrated photographically and described by Stubbendieck *et al.* (1995).

+ = species that were illustrated and described (line drawings) by Stubbendieck *et al.* (1997).

++ = species described and illustrated photographically by Ratzlaff & Barth (2007)

@ = species described and illustrated (line drawings) by Brown (1979).

= species described and illustrated photographically by Haddock (2005)

\$\$ = species described & illustrated (paintings) by Phillips Petroleum Co. (1963)

Grass Family – POACEAE (ca. 200 species in Nebraska)

Slender wheatgrass. *Agropyron caninum (trachycaulum)*. #+ Widespread. Platte, p. 238

Crested wheatgrass. *Agropyron cristatum*. #+\$ Widespread, p. 240

Quackgrass. *Agropyron repens*. *#@\$\$++. Introduced, weedy. Platte, p. 232 (Illustration 1)

Western wheatgrass. *Agropyron smithii*. #+\$\$ Widespread. 9-mile, Iowa, SCP, p. 234, ++

Redtop bent. *Agrostis stolonifera*. *#+\$++ Widespread introduced weed. 9-mile, SCP, Platte, p. 338,

Big bluestem *Andropogon gerardii*. #+ @\$ ## \$\$++ Mostly eastern. 9-mile, Iowa, SCP, Platte, p. 757 (Illustration 2),

Sandhills bluestem. *Andropogon hallii*. #+ \$\$ Sandhills prairie, p. 759

Prairie threeawn. *Aristida oligantha*. *+ @ \$\$ Mostly eastern. 9-mile, SCP, Platte, p. 463 (Illustration 4)

Red (Purple) threeawn *Aristida purpurea longiseta*. #+\$ Widespread, p. 474

Wild oats. *Avena fatua*. *+ Widespread, introduced weed. Platte, p. 300 (Illustration 5)

Side-oats grama. *Bouteloua curtipendula*. #+ @ ##\$, \$\$++ Widespread. 9-mile, Iowa, SCP, Platte, p. 535 (Illustration 6).

Blue grama. *Bouteloua gracilis*. #+ ##\$, \$\$++ Widespread. 9-mile, Iowa, SCP, Platte, p. 540 (Illustration 7),

Hairy grama. *Bouteloua hirsuta*. #+ ##\$\$ Mostly western. Iowa, SCP, Platte, p. 540 (Illustration 7)

Smooth brome. *Bromus inermis*. *#+##\$, \$\$++ Widespread, introduced weed. 9-mile, SCP, Platte, p. 38

Japanese brome. *Bromus japonica*. #\$, \$\$++ Widespread, introduced weed. 9-mile, SCP, Platte, p. 42 (Illustration 8)

Downy brome. *Bromus tectorum* *#+ ##\$ Widespread, introduced weed. 9-mile, SCP, p. 51

Buffalo grass. *Buchloe dactyloides*. #+ ##\$, \$\$ Mostly western. 9-mile, SCP, p. 545 (Illustration 9)

Bluejoint. *Calamagrostis canadensis*. + @ Widespread. Iowa, p. 323 (Illustration 10)

Northern reedgrass *Calamagrostis inexpansa*. Widespread. Platte, p. 326

Prairie sandreed. *Calamovilfa longifolia*. #+ \$, \$\$ Widespread. Iowa, Platte, p. 331 (Illustration 11)

Longspine sandbur. *Cenchrus longispinus* *#@ ##\$ Widespread, weedy. SCP, Platte, p. 52 (Illustration 12)

Orchardgrass. *Dactylis glomerata* *#+ @ ## \$, \$\$ Widespread, introduced weed. SCP, p. 182

Dichanthelium, *Dichanthelium acuminatum*. Upland disturbed areas. 9-mile, SCP, p. 220

Scribner's dichanthelium, *Dichanthelium oligosanthes scribnerianum*. ##\$++ Disturbed areas. 9-mile, SCP, Platte, p. 672

Smooth crabgrass. *Digitaria ischaemum* * ++ Eastern half, introduced weed. P. 576

Large crabgrass. *Digitaria sanguinalis* * @ \$\$++ Widespread, introduced weed. 9-mile, SCP, Platte, p. 58 (Illustration 13)

Saltgrass. *Distichlis spicata* *#+@ Widespread, saline soils, weedy. P. 175

Barnyardgrass. *Echinochloa crusgalli* *#@\$ \$++ Widespread, introduced weed. 9-mile, Platte, p. 712 (Illustration 14)

Goosegrass. *Eleusine indica* *@++ Southeastern, introduced weed. 9-mile, Platte, p. 499 (Illustration 15)

Canada wildrye. *Elymus canadensis*. #+ @##\$, \$ \$++ Widespread. 9-mile, Iowa, Platte, p. 261 (Illustration 16)

Stinkgrass. *Eragrostis cilianensis*. #, ## \$ \$++ Weedy annual. 9-mile, SCP, Platte, p. 155

Purple lovegrass. *Eragrostis spectabilis* *# @## Eastern half, weedy. 9-mile, SCP, Platte, p. 164 (Illustration 17)

Sand lovegrass. *Eragrostis trichodes*. #+ Widespread. p. 63

Sixweeks fescue. *Festuca (Vulpia) octoflora* *#+ \$ \$ Widespread, weedy. 9-mile, Platte, p. 59

Fowl mannagrass. *Glyceria striata*. # @++ Widespread, moist soils. 9-mile, SCP, p. 89 (Illustration 19)

Foxtail barley. *Hordeum jubatum* *#+ @## \$ \$++ Widespread, weedy. SCP, Platte, p. 268 (Illustration 20)

Little barley. *Hordeum pusillum* *#+ @ ## \$ \$++ Widespread, weedy. 9-mile, SCP. p. 269 (Illustration 21)

Prairie junegrass. *Koeleria pyramidata*. #+ Widespread. 9-mile, SCP, 281

Bearded sprangletop. *Leptochloa fascicularis* *++ Widespread, weedy. 9-mile, p. 493

Plains muhly, *Muhlenbergia cuspidata*. # Widespread, dry soils. 9-mile, Iowa, p. 386

Marsh muhly. *Muhlenbergia racemosa* *# \$ ++ Widespread, weedy. 9-mile, Iowa, SCP, Platte

Nimblewill. *Muhlenbergia schreiberi* * @ \$ \$++ Eastern third, weedy. 9-mile, p. 397 (Illustration 22)

False buffalo grass. *Munroa squarrosa*. # Western half, dry plains, p. 545

Indian ricegrass. *Oryzopsis hymenoides*. #+ \$ Western half. p. 443

Witchgrass. *Panicum capillare* *# @## \$ \$ Widespread, weedy. 9-mile, SCP, Platte, p. 689 (Illustration 23)

Fall panicum. *Panicum dichotomiflorum* * @ ++ Eastern half, weedy. 9-mile, p. 652 (Illustration 24)

Small (Scribner) panicgrass. *Panicum oligosanthes* #++ Widespread, mostly east, p. 672

Switchgrass. *Panicum virgatum*. #+ @ ## \$ ++ Widespread, tallgrass prairies. 9-mile, Iowa, SCP, p. 697 (Illustration 25)

Paspalum. *Paspalum setaceum*. Disturbed upland areas. 9-mile, SCP, Platte, p. 607

Reed canarygrass. *Phalaris arundinacea*. #+ @++ Widespread, weedy, 9-mile, Iowa, SCP, Platte, p. 555 (Illustration 26)

Timothy *Phleum pratense*. #+ @ \$ \$ \$ ++ Widespread. 9-mile, Platte, p. 367

Annual bluegrass. *Poa annua* * @++ Eastern fourth, introduced weed, p. 106

Canada bluegrass. *Poa compressa*. # @ \$++ Widespread, introduced. 9-mile, SCP, p. 106

Kentucky bluegrass. *Poa pratensis* *#+ @## \$, \$ \$++ Widespread, introduced weed. 9-mile, SCP, Platte, p. 115 (Illustration 27)

Tumblegrass. *Schedonnardus paniculatus* *#+ \$ \$ Widespread, weedy. 9-mile, p. 508

Little bluestem. *Schizachyrium (Andropogon) scoparium*. #+ @ \$, \$ \$++ Widespread. 9-mile, Iowa, SCP, Platte, p. 753

Giant foxtail. *Setaria faberi* *++ Eastern half, introduced weed. SCP, p. 725 (Illustration 28)

Yellow foxtail. *Setaria glauca* *# @++ Widespread, introduced weed. 9-mile, SCP, Platte, p. 84 (Illustration 28)

Bristly foxtail. *Setaria verticillata* * Widespread, introduced weed, p/ 719

Green foxtail. *Setaria viridis* *# @##++ Widespread, introduced weed. 9-mile, SCP, p. 724 (Illustration 28)

Indiangrass. *Sorghastrum nutans*. #+ @ ## \$, \$ \$++ Widespread. 9-mile, Iowa, SCP, Platte, p. 777 (Illustration 29)

Johnsongrass. *Sorghum halepense* * \$ \$++ Widespread, weedy, p. 773 (Illustration 30)

Alkali cordgrass. *Spartina gracilis*. #+ Western half, 513

Prairie cordgrass. *Spartina pectinata*. #+ ## \$, \$ \$++ Widespread. 9-mile, Iowa, SCP, Platte, p. 509 (Illustration 31)

Prairie wedgetail grass, *Sphenopholis obtusata*. ++ Upland disturbed areas, 9-mile, SCP, Platte, p. 283

Tall dropseed. *Sporobolus asper*. #+ @ \$ Widespread. 9-mile, SCP, Platte, p. 417 (Illustration 32)

Sand dropseed. *Sporobolus cryptandrus* *#+ ## \$ Sandhills, also widespread, weedy. Platte, p. 425 (Illustration 33)

Prairie dropseed, *Sporobolus heterolepis*. # @ \$ Widespread, native prairie. 9-mile, Iowa, SCP, p. 428 (Illustration 33)

Poverty dropseed. *Sporobolus vaginiflorus* * @ Eastern half, weedy. SCP, p. 416

Needle-and-thread *Stipa comata*. #+ \$ Mostly central and western, Platte, p. 452

Porcupine grass. *Stipa spartea*. # \$, \$ \$++ Widespread, native prairies. 9-mile, Iowa, SCP, p. 450 (Illustration 34)

Green needlegrass. *Stipa viridula*. # \$ Mostly western. Iowa, p. 457

Eastern gamagrass. *Tripsacum dactyloides*. + @## \$ \$++ Southeastern. p. 790

Sedge Family – Cyperaceae (At least species in Nebraska)

Fescue sedge. *Carex brevior*. #, ## \$ ++ Widespread. 9-mile, Iowa, SCP, Platte

Needleleaf sedge. *Carex eleocharis*. #. Widespread, Platte

Threadleaf sedge. *Carex filifolia*. #+ \$ Western half, upland prairies.

Sun sedge *Carex heliophila*. # Widespread. 9-mile, SCP
 Woolly sedge. *Carex languinosa* #@\$ Widespread, low prairies. 9-mile, Platte
 Meade's sedge. *Carex meadii*. ## ++Upland prairie. 9-mile, SCP, Platte
 Fox sedge. *Carex vulpinoidea*. #@@\$++ Widespread. 9-mile, Platte
 Schweinitz's flatsedge *Cyperus schweinitzii*. Widespread. SCP, Platte

Common Terrestrial Forbs (Wildflowers & Weedy Broad-leaved Herbs)

The following list of more than 400 broad-leaved herbaceous species is mostly limited to those described and illustrated in regional identification guides. Familial, generic and specific names are sequentially organized alphabetically. Species illustrated in Part 4 are identified as "(Illustration. --)". A few species that are variably woody are also included in the list of shrubs. Symbol meanings are as follows:

- * = invasive or "weedy" forbs that are described and illustrated by Stubbendieck *et al.* (1995)
- # = wildflowers that are described and illustrated by Farrar (1990)
- ## = wildflowers described and illustrated by Haddock (2005)
- + = wildflowers described and illustrated by Lommasson (1973)
- ++ = weedy species described and illustrated by U. S. Dept. of Agriculture (1970)
- @ = species described and illustrated by Johnson and Larson (1999). See also Larson and Johnson (1999)
- @@ = wildflowers described and illustrated by Ladd (1995)
- ** = wildflowers described and illustrated by Ratzlaff & Barth (2004)
-

Pigweed Family – AMARANTHACEAE (17 species in Nebraska)

Tumble pigweed. *Amaranthus albus*. * ++ Widespread, weedy. 9-mile
 Prostrate pigweed. *Amaranthus graecizans*. * Widespread, weedy.
 Redroot pigweed. *Amaranthus retroflexus*. * ++ Widespread, weedy. 9-mile, SCP
 Common water hemp. *Amaranthus rudis*. * Mostly eastern, weedy. SCP
 Field snakecotton. *Froelichia floridana*. # Widespread, sand dunes, rocky open woods.
 Slender froelichia. *Froelichia gracilis*. + ## Mostly eastern, sandy areas, rocky open woods.

Cashew Family – ANACARDIACEAE (5 species in Nebraska)

Poison ivy. *Toxicodendron (Rhus) spp.* @ Statewide; often a variably woody shrub or vine. 9-mile, SCP

Parsley Family – APIACEAE (= Umbelliferae) (31 species in Nebraska)

Spotted waterhemlock. *Cicuta maculata*. * # + @ ## @ @ ++ Widespread, near streams, poisonous. 9-mile
 Poison hemlock. *Conium maculatum*. * # + @ ++ ** Widespread, weedy; poisonous. 9-mile. Iowa, SCP
 Queen Ann's lace (Wild carrot). *Daucus carota*. # +, ++ ** Mostly eastern, weedy. (Illustration 35)
 Cow parsnip. *Heracleum sphondylium*. # + ** Eastern and northern, shaded woods. 9-mile
 Wild parsley (desert biscuitroot). *Lomatium foeniculaceum*. # + @ ## Eastern and Panhandle, dry prairies. SCP
 Leafy musineon. *Musineon divaricatum*. # @ Western half, rocky prairies, open woods.
 Narrow-leaved musineon. *Musineon tenuifolium*. # Panhandle, dry prairies, open woods.
 Sweet cicely. *Osmorhiza claytonii*. # ** Missouri Valley, wooded hillsides.
 Prairie parsley. *Polytaenia nuttallii*. #, ## Eastern third, low, moist prairies.
 Black snake-root. *Sanicula canadensis*. ** Widespread. 9-mile, SCP.
 Heartleaf alexander *Zizia aptera*. @ Moist meadows. Iowa,
 Golden alexander. *Zizia aurea*. * ## ** Missouri Valley, low prairies, ditch margins. Iowa,

Dogbane Family – APOCYNACEAE (4 species in Nebraska)

Hemp (Prairie) dogbane. *Apocynum cannabinum*. + * # Widespread, prairies, open woods, weed. Iowa, SCP, Platte

Milkweed Family – ASCLEPIADACEAE (17 species in Nebraska)

Sand milkweed. *Asclepias arenaria*. # + Widespread, sandy upland prairies.
 Swamp milkweed. *Asclepias incarnata*. * # + @ @ ** Widespread, wet prairies, moist banks. 9-mile, Iowa, SCP, Platte
 Woolly milkweed. *Asclepias lanuginosa*. @ @ Mostly central, sandy prairies.
 Plains milkweed. *Asclepias pumila*. # Widespread.
 Showy milkweed. *Asclepias speciosa*. # + @, @ @ Mostly western, moist prairies, near water, Platte

Narrow-leaved milkweed. *Asclepias stenophylla*. #+ ##@@ Widespread, sandy or rocky prairies. 9-mile, SCP, Platte
 Smooth milkweed. *Asclepias sullivantii*. #+ ##@@ Eastern third, sandy, loamy or rocky prairies. 9-mile, Iowa,
 Common milkweed. *Asclepias syriaca*.*#+@,@@ ++ Banks, floodplains, waste areas. 9-mile, Iowa, SCP (Illustration 36)
 Butterfly milkweed. *Asclepias tuberosa*. #@ ##@** Eastern half, sandy or rocky prairies. 9-mile, Iowa, SCP
 Whorled milkweed. *Asclepias verticillata*.*#+@ ##@** Widespread, sandy soils. 9-mile, Iowa, SCP, Platte (Illustration 37)
 Spider milkweed. *Asclepias viridis*. #+ ##@@ Southeastern corner, sandy or rocky prairies. 9-mile, SCP
 Green milkweed. *Asclepias viridiflora*.#@ ##@ Widespread, sandy or rocky prairies. Iowa, Platte
 Honeyvine (Sand vine) milkweed. *Cynanchum laeve*.*,** Eastern; weedy and spreading.

Sunflower Family – ASTERACEAE (= COMPOSITAE)(243 species in Nebraska)

Common yarrow. *Achillea millefolium*.*#+@ ##@** Widespread, weedy. 9-mile, Iowa, SCP, Platte (Illustration 38)
 Common ragweed. *Ambrosia artemisiifolia*.*@ ++ Mostly eastern, disturbed sites, weedy. 9-mile, SCP, Platte
 Western ragweed. *Ambrosia psilostachya*.*@ ++ Widespread, open prairie, waste sites. 9-mile, Iowa, SCP, Platte
 Giant ragweed, *Ambrosia trifida*. Widespread, weedy. 9-mile, SCP
 Pussy-toes. *Antennaria neglecta*. +@ ##@** Widespread, prairies, open woodlands, pastures. 9-mile, Iowa, SCP
 Rocky Mountain pussy-toes. *Antennaria parviflora*.#@ Mostly western, prairies, open woods, roadsides, Platte
 Common burdock. *Arctium minus*.*** Eastern half, weedy.
 Absinth wormwood. *Artemisia absinthium*.@ Weedy, induced.
 Biennial wormwood. *Artemisia biennis*.* Widespread, damp, sandy soil, streambanks.
 Western sagewort. *Artemisia campestris*.@ Widespread, upland grasslands. Iowa,
 Silky wormwood (Tarragon). *Artemisia dracunculus*.*@ Widespread, dry, open sites. 9-mile, Iowa,
 Fringed sagewort. *Artemisia frigida*.@ Western half, shortgrass prairies. Iowa,
 Cudweed sagewort. *Artemisia ludoviciana*.#@ Widespread, dry plains. 9-mile, Iowa, SCP, Platte
 White (Heath) aster. *Aster ericoides*.*#+@ ##@** Widespread, open, upland prairies. 9-mile, Iowa, SCP, Platte
 White prairie aster. *Aster falcatus*. # Mostly western, dry places.
 Fendler's aster. *Aster fendleri*. Local along Kansas border in central Nebraska.
 New England aster. *Aster novae-angliae*. #+@##@** Eastern half, moist, sandy areas. Iowa, Platte
 Aromatic aster. *Aster oblongifolius*. #, ##@** Widespread, rocky or sandy open sites. Iowa,
 Azure aster. *Aster oolentangiensis (azureus)*. # Missouri Valley, prairie, open woods.
 Willowleaf aster. *Aster praealtus*.#@ Eastern half, damp or drying sites. Iowa, Platte
 Silky aster. *Aster sericeus*. + ##@** Eastern third, dry, upland sites, open woods. 9-mile, Iowa, SCP
 Panicked aster. *Aster simplex*.## ** Widespread, 9-mile, SCP, Platte
 Slender aster. *Aster subulatus*.* Southeastern, damp, saline sites, weedy.
 Spanish needles. *Bidens bipinnata*.* ++ ** Eastern half, damp, disturbed sites, weedy.
 Nodding beggarticks. *Bidens cernuus*.*#+** Widespread, muddy, disturbed sites, weedy. 9-mile, SCP, Platte
 Tickseed sunflower. *Bidens coronata*. #+ Eastern half, damp, drying sandy sites. SCP
 Devils beggarticks. *Bidens frondosa*.*,** Widespread, moist wooded sites. 9-mile, SCP, Platte
 Tall beggar- ticks. *Bidens vulgata*. ++ Widespread, weedy. 9-mile, SCP.
 Tuberous Indian plantain. *Cacalia plantaginea (tuberosa)*.+# Widespread, rocky prairies. 9-mile, Iowa, SCP
 Musk thistle. *Carduus nutans*.*#+@** Widespread, pastures, prairies, weedy. 9-mile, SCP, Platte
 Russian knapweed. *Centaurea repens*.@ ++ Scattered records, introduced weed.
 Oxeye daisy. *Chrysanthemum leucanthemum*. +, ++ Widespread, Fields, waste places, weedy (Illustration 39)
 Golden aster. *Chrysopsis villosa*. #+@ Widespread, open, sandy uplands, Platte
 Chicory. *Cichorium intybus*.*#+ Widespread, weedy, introduced species. SCP
 Tall thistle. *Cirsium altissimum*.*+ ## ** Mostly eastern, waste sites, weedy. 9-mile, Iowa, SCP
 Canada thistle. *Cirsium arvense*.*#+@ ++** Widespread, waste sites, weedy.
 Platte thistle. *Cirsium canescens*.*#+ Mostly western, sandy upland prairies.
 Flodman's thistle. *Cirsium flodmanii*.*#@ Widespread, moist, open pastures, weedy. 9-mile, Iowa, SCP, Platte
 Yellowspine thistle. *Cirsium ochrocentrum*.* Mostly southwestern, dry, sandy prairies.
 Wavyleaf thistle. *Cirsium undulatum*.*@ Widespread. Widespread, dry prairies, weedy. SCP
 Bull thistle. *Cirsium vulgare*.*#+@++ ** Widespread, waste sites, weedy, introduced species. SCP (Illustration 40)
 Horseweed. *Conyza canadensis*.*@ ++** Widespread, disturbed sites, weedy. 9-mile, Platte

Plains coreopsis. *Coreopsis tinctoria*. *#+@ ##** Widespread, sandy ground, disturbed site Platte
Hawk's-beard. *Crepis runcinata*. +@ Mostly western, open, often damp, meadows.
Fetid marigold. *Dyssodia papposa*. *@ ##** Widespread, open fields, disturbed sites. 9-mile, SCP
Purple coneflower. *Echinacea angustifolia*. #+@## Widespread, open, rocky prairies. 9-mile, Iowa, SCP
Western fleabane. *Erigeron bellidiastrum*. #@ Mostly western, open, damp, sandy sites.
Low fleabane. *Erigeron pumilus*. #+ Western half, open, dry prairies.
Daisy fleabane *Erigeron strigosus*. *#+@##@** Widespread in eastern half. 9-mile, Iowa, SCP, Platte
Tall Joe-pye weed. *Eupatorium altissimum*. * ##@** Southeastern, pastures, disturbed sites, Platte
Spotted Joe-pye weed. *Eupatorium maculatum*. #@@ Mostly northern, moist, wooded sites, Platte
Boneset. *Eupatorium perfoliatum*. #+@** Widespread, damp, low ground. 9-mile
White snakeroot. *Eupatorium rugosum*. *# ++** Eastern half, open woods, disturbed sites. 9-mile, SCP
Blanket flower. *Gaillardia aristata*. @ Western half (local)
Fragrant cudweed. *Gnaphalium obtusifolium*. #, ## @@ Southeastern, prairies, open woods.
Curly-top gumweed. *Grindelia squarrosa*. *#+@ ## Widespread, waste places, weedy. 9-mile, SCP, Platte (Illustration 41)
Broom snakeweed. *Gutierrezia sarothrae*. *#@## Mostly western, dry, open plains.
Cutleaf ironplant. *Haplopappus spinulosus*. *#+@ Widespread, open prairies.
Common sneezeweed. *Helenium autumnale*. *#+@ Widespread, moist, open sites. Iowa, Platte
Common sunflower. *Helianthus annuus*. *#+@, @@ ++** Widespread, open sites. 9-mile, SCP, Platte (Illustration 42)
Sawtooth sunflower. *Helianthus grosseserratus*. *#+@ ##@** Eastern, prairies, bottomlands. 9-mile, Iowa, SCP, Platte
Maximilian sunflower. *Helianthus maximiliani*. #+@##@** Widespread, prairies, sandy areas. 9-mile, Iowa, Platte
Nuttall's sunflower. *Helianthus nuttallii*. @ Scattered records.
Plains sunflower. *Helianthus petiolaris*. #+@##** Widespread, open sandy sites, Platte
Stiff sunflower. *Helianthus rigidus*. +@** Eastern half, dry or damp prairies. 9-mile, Iowa, SCP
Jerusalem artichoke. *Helianthus tuberosus*. *#+ ##@@ Widespread, open or shaded, moist sites. 9-mile, Iowa, SCP, Platte
False sunflower (Oxeye). *Heliopsis helianthoides*. *#+@** ##@@ Eastern, dry, open woods, weedy. 9-mile. Iowa, SCP, Platte
Camphorweed. *Heterotheca latifolia*. * Extreme southern, open, sandy, disturbed sites.
Hawkweed. *Hieracium longipilum*. ##@@ Upland prairie. 9-mile, SCP.
Stemless hymenoxys. *Hymenoxys acaulis*. #+@ Western third, rocky breaks, calcareous soils.
Poverty sumpweed. *Iva axillaris*. * Western half, dry, often alkaline soils, prairies.
Marshelder. *Iva xanthifolia*. * Widespread, borders of streams and local drying sites, Platte
Falseboneset. *Kuhnia eupatorioides*. *#+@** Widespread, open prairies. 9-mile, SCP
Blue lettuce. *Lactuca oblongifolia*. *#+** Widespread, low, moist meadows. 9-mile, SCP
Prickly lettuce. *Lactuca serriola*. #,## ++ **Widespread, disturbed sites, weedy. 9-mile, SCP, Platte (Illustration 43)
Rough gayfeather. *Liatris aspera*. #+@##@** Eastern half, open woods on sandy sites. 9-mile, Iowa, SCP
Dotted gayfeather. *Liatris punctata*. #+@##@@ Widespread, dry, sandy upland prairies. 9-mile, Iowa, SCP, Platte
Blazing star (scaly gayfeather) *Liatris glabrata*. @## Widespread, especially Sandhills.
Thick-spike gayfeather. *Liatris pycnostachya*. #+@@ Eastern half, open damp prairies. Iowa, Platte,
Skeletonweed. *Lygodesmia juncea*. *#+@## Widespread, open high prairies. Iowa,
Viscid aster. *Machaeranthera linearis*. #+ Western half, open, dry, sandy sites. 9-mile
Pineappleweed. *Matricaria matricarioides*. *## Eastern and northern, waste sites, weedy. SCP
False dandelion. *Microseris cuspidata*. #+ ## Widespread, dry or drying open prairie. 9-mile, SCP
Snakeroot. *Prenanthes racemosa* #. Scattered records, varied habitats. Iowa, SCP
Prairie coneflower. *Ratibida columnifera*. #@##** Widespread, disturbed sites, weedy. 9-mile, Iowa,
Gray-headed coneflower. *Ratibida pinnata*. +@##@** Eastern, disturbed prairies, open woods. 9-mile, Iowa, SCP
Black-eyed susan. *Rudbeckia hirta*. #+ ##@** Widespread, disturbed prairies, waste sites. 9-mile, Iowa, SCP, Platte
Golden glow. *Rudbeckia laciniata*. *## Eastern half, moist places. 9-mile, SCP, Platte
Lambstongue groundsel. *Senecio integerrinus*. @ Mostly northern, sometimes poisonous. 9-mile
Prairie ragwort. *Senecio plattensis*. #+@##@** Widespread, open prairies, may be poisonous. 9-mile, Iowa, SCP, Platte
Riddle groundsel. *Senecio riddellii*. *@ Western half, open sites, sandy areas; poisonous to livestock.
Threetooth ragwort. *Senecio tridenticulatus*. # Mostly western, sandy plains.
Rosinweed. *Silphium integrifolium*. #+##@** Eastern third, open, disturbed sites. Iowa, SCP

Compass plant. *Silphium laciniatum*. #, ##@** Eastern third, open prairies. 9-mile, Iowa,
 Cup plant. *Silphium perfoliatum*. #@@@** Eastern third, moist, low ground. 9-mile, SCP
 Canada goldenrod. *Solidago canadensis*. #@@#++** Widespread, dry or drying open sites. 9-mile, SCP, Platte (Illustration 44)
 Giant goldenrod. *Solidago gigantea*. #**Widespread, damp soils. 9-mile, Platte
 Prairie goldenrod. *Solidago missouriensis*. *#@** Widespread, open prairies, sparse woods. 9-mile, Iowa, SCP, Platte
 Soft goldenrod. *Solidago mollis*.@ Widespread, dry plains.
 Rigid goldenrod. *Solidago rigida*. #+@##@** Widespread, sandy or rocky prairies, drying sites. 9-mile, Iowa, SCP, Platte
 Showy-wand goldenrod. *Solidago speciosa*. #@@ Eastern and northern, prairies, dry, open woods. 9-mile, Iowa,
 Field sow thistle. *Sonchus arvensis*. *@++ Eastern edge, disturbed sites, weedy, introduced
 Common dandelion. *Taraxacum officinale*.@** Widespread introduced weed. 9-mile, SCP, Platte
 Greenthread. *Thelesperma filifolium*. #+## Widespread, open, weedy sites.
 Large-flowered Townsendia. *Townsendia grandiflora*. #+ Panhandle, dry plains and hillsides.
 Goat's beard (Western salsify). *Tragopogon dubius*. *#+@##** Disturbed sites, introduced. 9-mile, SCP
 Baldwin's ironweed. *Vernonia baldwinii*. *#@@ Southeastern, dry pastures. Iowa, 9-mile, SCP, Platte (Illustration 47)
 Western ironweed. *Vernonia fasciculata*. #+@,@@ ++ Eastern half, damp prairies. Iowa, Platte
 Common cocklebur. *Xanthium strumarium*. *@** Widespread, waste sites, weedy. 9-mile, Platte

Borage Family – BORAGINACEAE (29 species in Nebraska)

Miner's candle. *Cryptantha thrysiflora*. #+ Western third, rocky outcrops, open pine forests.
 Blueweed. *Echium vulgare*. + Southeastern, waste sites, weedy.
 Western sticktight. *Lappula redoweskii*. * Widespread, open, often sandy, waste sites.
 Hoary puccoon. *Lithospermum canescens*. #@,@@ Eastern third, dry prairies, open woods. 9-mile, Iowa,
 Hairy puccoon. *Lithospermum carolinense*. #+@## ** Widespread, sandy prairies, open woods. Iowa,
 Narrow-leaved puccoon. *Lithospermum incisum*.#+ ##@@ Widespread, dry prairies, open woods. 9-mile, Iowa, SCP, Platte
 False gromwell. *Onosmodium molle*. #+@##** Widespread, prairies, meadows, open woods. 9-mile, Iowa, Platte

Mustard Family – BRASSICACEAE (74 species in Nebraska)

Hoary false alyssum. *Berteroa incana*. #+ Northern half, waste sites, weedy.
 Indian mustard. *Brassica juncea*. + Eastern and northern, waste sites, introduced weed.
 Hoary cress. *Cardaria draba*.@ ++Introduced weed, widespread. 9-mile, SCP (Illustration 48)
 Tansy-mustard. *Descurainia pinnata*. * ++Widespread, dry prairie, open woods. SCP, Platte
 Whitlow grass. *Draba reptans*. Upland disturbed areas. 9-mile, SCP.
 Western wallflower. *Erysimum aspersum*. #+@## Widespread, prairies, sandhills, open woods.
 Bushy wallflower. *Erysimum repandum*. * Widespread, waste places, weedy. SCP
 Dame's rocket. *Hesperis matronalis*. +##** Widespread, roadsides, waste sites, introduced weed.
 Greenflower pepperweed. *Lepidium densiflorum*. *,** Widespread, waste places, weedy. SCP, Platte
 Silvery bladderpod. *Lesquerella ludoviciana*. + Mostly western, sandy and gravelly soils. 9-mile
 Spreading yellowcress. *Rorippa sinuata*. * Widespread, dry and wet sites, ditches.
 Prince's plume. *Stanleya pinnata*.@## Western half, selenium indicator species.
 Tall hedge mustard. *Sisymbrium loeselii*. #+** Widespread, waste sites, introduced weed. SCP, Platte
 Pennycress. *Thlaspi arvense*. +@+** Widespread, waste sites, weedy. 9-mile, SCP, Platte

Cactus Family –CACTACEAE (6 species in Nebraska)

Pincushion cactus. *Corypantha vivipara*. #+@ Western half, dry sandy or rocky prairie
 Missouri pincushion. *Corypantha missouriensis*.@ Scattered records. dry soils.
 Little (Brittle) prickly pear. *Opuntia fragilis*. *#+@ Western half, sandy or rocky prairie.
 Bigroot prickly pear. *Opuntia macrohiza*. *#@ Widespread, sandy gravelly or rocky prairie.
 Plains prickly pear. *Opuntia polyacantha*. #+@## Mostly western, dry, sandy prairie.

Caesalpinia Family –CAESALPINIACEAE (6 species in Nebraska)

Partridge-pea. *Cassia fasciculata*. *#+@** Eastern half, rocky or sandy prairies. 9-mile, SCP

Bellflower Family -CAMPANULACEAE (12 species in Nebraska)

American bellflower. *Campanula americana*. #+##** Eastern third, open woods, wet sites. 9-mile
 Harebell. *Campanula rotundifolia*. #+@@ Dry woods, meadows.
 Blue lobelia. *Lobelia siphilitica*. #+##@** Widespread, moist soil, woods and meadows. 9-mile, Iowa, SCP

Palespike lobelia. *Lobelia spicata*. #@@ Widespread, prairies, meadows, open woods. Iowa,
Western looking-glass. *Triodanis leptocarpa*. + Southeastern, prairies, pastures, disturbed sites. 9-mile
Venus' looking glass. *Triodanis perfoliata*. *#+#@ Widespread, sandy prairies, disturbed sites. 9-mile, SCP

Hemp Family – CANNABACEAE (3 species in Nebraska)

Hemp. *Cannabis sativa*. ++** Upland disturbed areas, 9-mile, SCP.

Caper Family – CAPPARACEAE (Cleomaceae) (4 species in Nebraska)

Rocky Mountain beeplant. *Cleome serrulata*. *#+@ Widespread, prairies, open woods.

Pink Family – CARYOPHYLLACEAE (35 species in Nebraska)

Grove sandwort *Arenaria lateriflora*. Northern counties.

Prairie chickweed. *Cerastium arvense*. # ++Western half, disturbed areas.

Deptford pink. *Dianthus armeria*. ** Southeastern, disturbed sites, introduced, weedy. SCP

Bouncing bet. *Saponaria officinalis*. #+ Widespread, disturbed sites, introduced, weedy.

Sleepy catchfy. *Silene antirrhina*. Upland disturbed areas. 9-mile, SCP.

Catchfly. *Silene noctiflora*. +, ++Widespread, disturbed sites, introduced weed. (Illustration 50)

Chickweed. *Stellaria media*. +, ++ Mostly eastern, disturbed sites, introduced weed.

Goosefoot Family – CHENOPODIACEAE (42 species in Nebraska)

Silverscale saltbush. *Atriplex argentea*.@ Mostly western, alkaline soils.

Lamb's quarters. *Chenopodium berlandieri*. Upland disturbed areas. 9-mile, SCP.

Mapleleaf goosefoot. *Chenopodium gigantospermum**,** Widespread, disturbed sites.

Winged pigweed. *Cycloloma atriplicifolium*. + Widespread, sandy sites, weedy. Platte

Kochia. *Kochia scoparia*.@ ++Widespread, introduced weed. 9-mile

Nuttall povertyweed. *Monolepis nuttalliana*.* Widespread, disturbed sites, weedy.

St. John's Wort Family – CLUSIACEAE (=HYPERICACEAE)(8 species in Nebraska)

Common St. John's wort. *Hypericum perforatum*. *#, ##@** Widespread, open sites, introduced. SCP

Spiderwort Family – COMMELINACEAE (5 species in Nebraska)

Erect dayflower. *Commelina erecta*. #+## Scattered records, sandy or rocky soils.

Long-bracted spiderwort. *Tradescantia bracteata*. #+@###** Widespread, disturbed sites. 9-mile, Iowa, SCP, Platte

Prairie spiderwort. *Tradescantia occidentalis*. #@ Widespread, prairies, disturbed sites, Platte

Ohio spiderwort. *Tradescantia ohiensis*. ### Southeastern, disturbed sites, prairies. Iowa,

Morning-glory Family – CONVULVACEAE (19 species in Nebraska)

Hedge bindweed. *Calystegia sepium*.@@ ++** Upland disturbed areas. 9-mile, SCP, Platte (Illustration 51)

Field bindweed. *Convolvulus arvensis*.#+@ ++**Widespread, introduced weed. 9-mile. SCP, Platte (Illustration 52)

Ivyleaf morning-glory. *Ipomoea hederacea*.* ## Southeastern, open ground, weedy.

Bush morning-glory. *Ipomoea leptophylla*. #+@## Widespread, plains and prairies.

Stoncrop Family – CRASSULACEAE (2 species in Nebraska)

Virginia stoncrop. *Penthorum sedoides*. +** Mostly eastern, ditches, streambanks. 9-mile, SCP

Stoncrop. *Sedum lanceolatum*. # Panhandle, open, rocky sites.

Cucumber Family – CUCURBITACEAE (4 species in Nebraska)

Buffalo gourd. *Cucurbita foetidissima*.* ## Southern half, sandy waste sites.

Wild cucumber. *Echinocystis lobata*.*+ Widespread, moist and open woods. 9-mile

Bur cucumber. *Sicyos angulatus**,** Southeastern, damp river soils, waste sites. 9-mile, SCP

Dodder Family – CUSCUTACEAE (12 species in Nebraska).

Field dodder. *Cuscuta pentagona*.* Scattered records, parasitic. 9-mile

Horsetail Family– EQUISETACEAE (6 species in Nebraska)

Field horsetail. *Equisetum arvense**,** Widespread, disturbed sites. 9-mile

Spurge Family – EUPHORBIACEAE (28 species in Nebraska)

Flowering spurge. *Euphorbia corollata*.#@@+** Eastern fourth, rocky prairies, waste sites. Iowa,

Toothed spurge. *Euphorbia dentata*.* Widespread, prairies, waste sites. 9-mile, Iowa, SCP

Leafy spurge. *Euphorbia esula*.@ ++. Introduced noxious weed.

Spotted spurge. *Euphorbia maculata*.* ++** Eastern half. prairies, waste sites. 9-mile

Snow-on-the-mountain. *Euphorbia marginata*.*#+@##@** Widespread, prairies, waste sites. 9-mile, Iowa, SCP, Platte

Eyebane. *Euphorbia nutans*.** Upland disturbed areas. 9-mile, SCP.

Bean Family – FABACEAE (= LEGUMINOCEAE)(ca. 100 species in Nebraska)

Standing milk-vetch. *Astragalus adsurgens*. #+@ Mostly western, dry prairie, open woods.

Canada milk-vetch. *Astragalus canadensis*. #+ **Widespread, moist prairies, open woods. 9-mile, Iowa, Platte

Painted milk-vetch. *Astragalus ceramicus*. #+@@ Mostly western, sandy prairies.

Ground-plum. *Astragalus crassicaarpus*. #+@##@** Widespread, prairies, rocky soils. 9-mile, Iowa, SCP, Platte

Drummond milk-vetch. *Astragalus drummondii*. Western.

Lotus milk vetch, *Astragalus lotiflorus*. Widespread. Iowa,

Missouri milk-vetch. *Astragalus missouriensis*.*@## Mostly western, prairies, bluffs, ravines.

Woolly locoweed. *Astragalus mollissimus*.*+@##++ Mostly western; poisonous to livestock.

Alkali (creamy) milk-vetch. *Astragalus racemosus*. #+@## Scattered records; poisonous to livestock.

Large wild indigo. *Baptisia lactea*. + Southeastern, rocky prairies, hillsides, poisonous. Iowa,

Plains wild indigo. *Baptisia (leucophea) bracteata*. +#,##@** Southeastern, prairies, pastures. 9-mile, SCP

Golden prairie clover. *Dalea aurea*.@##. Mostly west, loamy prairies.

Slender (Nineanther) dalea. *Dalea enneandra*.@ Widespread.

Canada tickclover. *Desmodium canadense*. #@@** Widespread, rocky or sandy prairies. 9-mile, Iowa, SCP, Platte

Tick trefoil. *Desmodium illinoensis*. +##@** Widespread, prairie ravines, hillsides. 9-mile, Iowa, SCP, Platte

Wild licorice. *Glycyrrhiza lepidota*.*#+@## Widespread, prairie ravines, moist areas. 9-mile, Iowa, SCP, Platte

Hoary vetchling. *Lathyrus polymorphus*. #+@ Widespread, dry, sandy to rocky prairies, woods, Platte

Bush-clover. *Lespedeza capitata*. ##@** Upland prairie. 9-mile, SCP, Platte

Bird's-foot trefoil. *Lotus corniculatus*. #+@## Scattered records, waste sites, introduced weed.

American deervetch. *Lotus purshianus*.@ Widespread. SCP

Silvery lupine. *Lupinus argenteus*. # Western half, rocky prairies, open woods.

Low lupine. *Lupinus pusillus*.* Western half, sandy prairies.

Alfalfa. *Medicago falcata*.@ Introduced forage crop.

Sweet-clover. *Melilotis officinalis* & *M. alba* +@##** Widespread, waste places, forage crop, SCP, Platte

Purple (Lambert) locoweed. *Oxytropis lambertii*.*#@##@++Widespread; poisonous. Iowa, (Illustration 53)

White prairie-clover. *Petalostemon (Dalea) candida*. #+@##@** Widespread, weedy. 9-mile, Iowa, SCP, Platte

Round-headed prairie-clover *Petalostemon (Dalea) multiflora* ##. Southeastern corner of state. SCP

Purple prairie-clover. *Petalostemon (Dalea) purpurea*. #+@##@** Widespread, rocky prairies. 9-mile, Iowa, SCP, Platte

Silky prairie-clover. *Petalostemon(Dalea) villosa* #@@ Widespread, sandy prairies, open woods, SCP

Silver-leaf scurf-pea. *Psoralea(Pediomelum) argophylla*. #+@ ##@** Widespread, prairies. 9-mile, Iowa, SCP, Platte

Tall breadroot scurfpea. *Psoralea cuspidata*.@ Widespread.

Palmleaf scurfpea. *Psoralea digitata*.@ Widespread.

Broad-leaf scurf-pea (Prairie-turnip). *Psoralea (Pediomelum) esculenta*. #@@#@ Widespread, prairies 9-mile, Iowa, SCP

Wild alfalfa. *Psoralea tenuiflora*. #+@## Widespread, prairies, roadsides. 9-mile, SCP, Platte

Prairie buck-bean. *Thermopsis rhombifolia*. #+@ Western half, prairies, open woods.

Clovers. *Trifolium* spp.@## ** Mostly introduced and cultivated forage plants. 9-mile, SCP, Platte

American vetch. *Vicia americana*.@##@ Widespread, mostly sandy soils. 9-mile, Iowa,

Gentian Family – GENTIANACEAE (6 species in Nebraska)

Prairie gentian. *Eustoma grandiflorum*. #+ Mostly western, moist meadows and prairies. Platte

Closed gentian. *Gentiana andrewsii*. #+@,@** Northeastern, wet meadows, prairies or woods. Iowa,

Downy gentian. *Gentiana puberulenta*. #+@##@** Eastern half, dry woods and prairies. 9-mile, Iowa,

Geranium Family – GERANIACEAE (5 species in Nebraska)

Carolina geranium. *Geranium carolinianum*. + Southeastern, open woods, prairie ravines. Iowa,

Wild cranesbill. *Geranium maculatum*. # Southeastern, rich or rocky woods.

Waterleaf Family – HYDROPHYLLACEAE (4 species in Nebraska)

Waterpod. *Ellisia nyctelea*.*,** Widespread, sandy prairies, open woods. 9-mile, SCP

Scorpionweed. *Phacelia hastata*. # Panhandle, sandy to rocky soils, disturbed sites.

Iris Family – IRIDACEAE (7 species in Nebraska)

White-eyed grass. *Sisyrinchium campestre*. #,##@** Eastern half, prairies, open woods. 9-mile, Iowa, SCP, Platte

Blue-eyed grass. *Sisyrhynchium montanum*. #+@ Western half, prairies, open woods.

Mint Family – LAMIACEAE (= LABITAE) (49 species in Nebraska)

Rough false pennyroyal. *Hedeoma hispidum*. * Widespread, waste sites, open ground. 9-mile, Platte

Motherwort. *Leonurus cardiaca*. +** Mostly eastern, waste sites, weedy. SCP

American bugleweed. *Lycopus americanus*. *, ** Widespread, moist, exposed sites. 9-mile, Iowa, SCP, Platte

Field mint. *Mentha arvensis*. *, ** Widespread, moist sites. SCP, Platte

Wild bergamot. *Monarda fistulosa*. #+@ ##@** Widespread, prairies, open woods. 9-mile, Iowa, SCP, Platte

Plains (Spotted) beebalm. *Monarda (Alonarda) pectinata*. *#+ Mostly western, upland prairies.

Catnip. *Nepeta cataria*. #+ #** Widespread, waste sites, introduced weed, Platte

Virginia mountain mint. *Pycnanthemum virginianum*. #** Eastern half, moist woods, wetlands. Iowa,

Healall. *Prunella vulgaris*. * #+ ## Widespread, waste sites, streambanks. Iowa, Platte

Pitcher's (Blue) sage. *Salvia azurea (pitcheri)* #+##@** Southeastern, rocky to sandy prairies. 9-mile, SCP

Lanceleaf sage. *Salvia reflexa*. * Widespread, disturbed sites. 9-mile

Marsh scullcap. *Scutellaria galericulata*. # Mostly western, wet sites.

Leonard small scullcap. *Scutellaria parvula*. #@@ Eastern, upland prairies, open woods. 9-mile, Iowa, SCP, Platte

Marsh hedge-nettle. *Stachys palustris*. #@@ Mostly eastern, dry to wet prairies, Platte

American germander. *Teucrium canadense*. *#+ ##@** Widespread, streambanks, pastures. 9-mile, SCP, Platte

Lily Family – LILIACEAE (32 species in Nebraska)

Wild onion. *Allium canadense*. *#+#** Widespread, prairies, open woods. 9-mile, Iowa, Platte

Pink wild onion. *Allium stellatum*. @##@** Eastern half. Iowa,

Wild white onion. *Allium textile*. #@ Western half, prairies, coniferous woods, Platte

Asparagus. *Asparagus officinalis*. Upland prairie. 9-mile, SCP, Platte

Prairie fawn lily. *Erythronium mesochoreum*. # Eastern, prairies, open woods

Yellow stargrass. *Hypoxis hirsuta*. #+@@ Mostly eastern, prairies, open woods. Iowa, Platte

Mountain lily. *Leucocrinum montanum*. #+@ Western half, shortgrass prairies, coniferous woods.

Turk's cap (Canada) lily. *Lilium canadense*. #** Missouri Valley, moist prairies and woods.

Western red lily. *Lilium philadelphicum*. #+@, @@ Northern half, open woods, prairies. Iowa,

Solomon's seal. *Polygonatum biflorum*. *#+ Widespread, moist deciduous woods. 9-mile

False Solomon's seal. *Smilacina stellata*. #+** Widespread, moist to dry woods. 9-mile, Platte

Flax Family – LINACEAE (8 species in Nebraska)

Stiffstem flax. *Linum rigidum*. Widespread. Sandy prairies and hillsides. Iowa,

Grooved (prairie) flax. *Linum sulcatum*. #+##@ Eastern half, prairies, open woods. 9-mile, Iowa, SCP

Loosestrife Family – LYTHRACEAE (7 species in Nebraska)

Winged loosestrife. *Lythrum alatum (decotatum)* #+ Widespread, wet soils. Iowa, Platte

Purple loosestrife. *Lythrum salicaria*. #* @ ** Widespread, moist sites, introduced weed. 9-mile, Platte

Mallow Family – MALVACEAE (15 species in Nebraska)

Velvet leaf. *Abutilon theophrasti*. ** Upland disturbed areas, 9-mile, SCP.

Pink poppy mallow. *Callirhoe alcaeoides*. #, ## Eastern half, dry, sandy prairies. 9-mile, Platte

Purple poppy mallow. *Callirhoe involucrata*. *#+##@** Widespread, dry, sandy prairies. 9-mile, SCP, Platte

Flower-of-an-hour. *Hibiscus (Malviscus) trionum*. #+ Eastern half, waste sites; introduced weed. SCP

Running mallow. *Malva rotundifolia*. + Widespread, waste sites, introduced weed.

Red false (Scarlet globe) mallow. *Sphaeralcea coccinea*. *#+@## Widespread, dry prairies, hillsides.

Mimosa Family – MIMOSACEAE (2 species in Nebraska)

Illinois bundleflower. *Desmanthus illinoensis*. #** Widespread, rocky or sandy prairies. 9-mile

Sensitive brier. *Schrankia nuttallii*. #@ Mostly eastern, rocky or sandy soils.

Four-O'Clock Family – NYCTAGINACEAE (9 species in Nebraska)

Hairy four-o'clock. *Mirabilis hirsuta*. #+ Widespread, prairies, open woods. 9-mile, Iowa, Platte

Wild four-o'clock. *Mirabilis nyctaginea*. *#+##@** Widespread, waste places, weedy. 9-mile, Iowa, SCP, Platte

Evening Primrose Family – ONAGRACEAE (28 species in Nebraska)

Plains yellow evening primrose. *Calyphus serrulatus*. #@@ Widespread, dry prairies. 9-mile, Iowa, SCP, Platte

Fireweed. *Epilobium* spp. + Widespread, disturbed sites, often appears following fire. 9-mile, Iowa, SCP

Scarlet gaura. *Gaura coccinea*. *#+@## Widespread, dry prairies, open woods. Iowa,
 Large-flowered gaura. *Gaura longiflora*. #, ##@** Southeastern, rocky prairies, open woods. 9-mile, SCP
 Small-flowered gaura. *Gaura parviflora* (= *mollis*). ** Upland disturbed areas, 9-mile, SCP, Platte
 Common evening primrose. *Oenothera biennis*. *#+@** Widespread, streambanks, open woods. SCP, Platte (Illustration 54)
 Fremont's evening primrose *Oenothera macrocarpa* var. *fremontii*. ##@@ Local along KS border
 White-stemmed evening primrose. *Oenothera nuttallii*. #@ Western half, dry prairies, open woods.
 Fourpoint evening primrose. *Oenothera rhombipetala*. #+ Widespread, sand dunes, sandy prairies. Iowa, Platte
 Yellow evening primrose. *Oenothera villosa*. ## Upland disturbed areas, 9-mile, SCP.

Orchid Family – ORCHIDACEAE (19 species in Nebraska)

Small white lady's-slipper. *Cypripedium candidum*. #@@ Moist meadows. **State threatened**. 9-mile, Iowa,
 Large yellow lady-slipper. *Cypripedium calceolus*. #+** Lower Missouri Valley, moist soils, prairies or woods.
 Prairie fringed orchid. *Platanthera praeclara* #@@ Scattered records in east. Iowa (Nationally threatened). Platte
 Nodding lady's-tresses. *Spiranthes cernua*. #+###@@ Eastern half, prairies, open woods. Iowa, SCP, Platte

Broom-rape Family – OROBRANCHACEAE (3 species in Nebraska)

Cancer-root. *Orobancha fasciculata*.+ Scattered records, dry prairies, sandy soils.

Woodsorrel Family – OXALIDACEAE (3 species in Nebraska)

Gray-green wood sorrel. *Oxalis dillenii*.* ##@** Mostly eastern, open woods, waste sites, weedy. 9-mile, SCP, Platte
 Yellow wood sorrel. *Oxalis stricta*. #+** Mostly eastern, open woods, waste sites, weedy. 9-mile, SCP (Illustration 55)
 Violet wood sorrel. *Oxalis violacea*. #+###@@ Mostly eastern, open woods, weedy. 9-mile, Iowa, SCP

Poppy Family – PAPAVERACEAE (6 species in Nebraska)

Annual pricklypoppy. *Argemone polyanthemus*. *#@## Widespread, sandy soils, waste sites.

Unicorn-plant Family – PEDALIACEAE (1 species in Nebraska)

Devil's claw. *Proboscidea louisianica*. * Southern counties, sandy pastures, waste sites, weedy.

Plantain Family – PLANTAGINACEAE (10 species in Nebraska)

Buckhorn plantain. *Plantago lanceolata*.* ++ Scattered records. Waste sites, introduced weed. SCP
 Woolly plantain (Indianwheat). *Plantago patagonica*. *@ Widespread. waste sites, weedy. 9-mile, Iowa, SCP, Platte
 Blackseed plantain. *Plantago rugelii*.* ++** Mostly eastern, waste sites, shady places, weedy. 9-mile, SCP

Phlox (Polemonium) family – POLEMONIACEAE (16 species in Nebraska)

Slenderleaf collomia. *Collomia linearis*.@ Mostly northern, native prairies.
 Gilia. *Ipomopsis longifolia*. #+ Western half, dry sandy soil.
 Plains phlox. *Phlox andicola*. #+ Western half, dry, sandy prairies.
 Blue phlox. *Phlox divaricata*. #+###** Eastern fourth, open woods, rocky slopes
 Prairie phlox. *Phlox pilosa*. #+@, @** Eastern fourth, open woods, meadows. Iowa,

Milkwort Family – POLYGALACEAE (4 species in Nebraska)

White milkwort. *Polygala alba*. #+@ ## Widespread, rocky prairie hillsides.
 Whorled milkwort. *Polygala verticillata*. Upland disturbed areas. 9-mile, SCP.

Buckwheat Family – POLYGONACEAE (46 species in Nebraska)

Umbrella plant. *Eriogonum annuum*. *@## Widespread, dry open grasslands.
 Common knotweed. *Polygonum arenastrum*. * Widespread, waste sites, introduced weed. 9-mile, SCP
 Pink smartweed. *Polygonum bicornis*. # Mostly eastern, wet sites. 9-mile
 Pale smartweed. *Polygonum lapathifolium*.*,** Widespread, damp soils. 9-mile
 Pennsylvania smartweed. *Polygonum pennsylvanicum*.* ++** Widespread, disturbed sites, weedy. 9-mile, SCP (Illustration 56)
 Bushy knotweed. *Polygonum ramosissimum*. * Widespread, damp, brackish soils.
 Climbing false buckwheat. *Polygonum scandens*. +** Widespread, waste sites, introduced weed. 9-mile
 Wild begonia (veiny dock). *Rumex venosus*. #+@ Widespread, sandy dunes and riverbanks.

Primrose Family – PRIMULACEAE (10 species in Nebraska)

Shooting star. *Dodecatheon pulchellum*. #+ Scattered records, moist woods and prairies.
 Fringed loosestrife. *Lysimachia ciliata*. #+** Widespread, moist woods and wetter sites. 9-mile, Iowa, SCP, Platte
 Moneywort. *Lysimachia nummularia*. + Southeastern, moist sites. Introduced.
 Tufted loosestrife. *Lysimachia thyrsoiflora*. #+** Widespread, moist to wet sites, Platte

Buttercup Family. RANUNCULACEAE (39 species in Nebraska)

Meadow anemone. *Anemone canadensis*. #+@,@@** Mostly eastern, wet prairies, wet woods. Iowa, Platte
 Candle anemone. *Anemone cylindrica*. #+@** Northern and eastern, open prairies and pastures. 9-mile, Iowa, Platte
 Pasque flower. *Anemone patens*. #+@,@@ Mostly northern, open prairies, often rocky soil. Iowa,
 Wild columbine. *Aquilegia canadensis*. #+** Northern and eastern, moist woods.
 Fremont's clematis. *Clematis fremontii*. #,## Southern counties, rocky prairie hillsides.
 Virgin's bower. *Clematis virginiana*. + Eastern half, partly woody, climbing vine. 9-mile
 Prairie larkspur. *Delphinium virescens*. *#+@** Widespread, prairies and pastures. 9-mile, Iowa, Platte
 Early wood (Smallflower) buttercup. *Ranunculus abortivus*.*,** Widespread, moist woods. 9-mile
 Threadleaf buttercup. *Ranunculus flabellaris*. # Scattered records, moist and wet sites.
 Macoun's buttercup. *Ranunculus macouni*. # Western half, streambanks, wet meadows. Platte
 Purple meadow rue. *Thalictrum dasycarpum*. #@,@@** Widespread, moist habitats. 9-mile, Iowa, SCP, Platte

Rose Family – ROSACEAE (55 species in Nebraska)

Wild strawberry. *Fragaria virginiana*. #+## Mostly eastern, moist soils, prairies, open woods. Iowa, SCP
 Silverweed. *Potentilla anserina*. + **Scattered records, streambanks, saline soils.
 Tall cinquefoil. *Potentilla arguta*. #+@,@@** Widespread, prairies, open woods, Platte
 Sulphur cinquefoil. *Potentilla recta*. #+## ++ Mostly eastern, waste sites, prairies. SCP (Illustration 57)

Madder Family – RUBIACEAE (14 species in Nebraska)

Catchweed bedstraw. *Galium aparine*.*,** Widespread, woods, prairies, waste ground. 9-mile, SCP
 Northern bedstraw. *Galium boreale*. +@,@@ Northern half, rocky prairies, woods, roadsides. Iowa,
 Narrow-leafed bluets. *Hedyotis nigricans*. +@@Southeastern, rocky prairies, woods. 9-mile, SCP

Sandalwood Family – SANTALACEAE (1 species in Nebraska)

Bastard toad-flax. *Comandra umbellata*. #+@###@@ Eastern fourth, dry, sandy to rocky soils. 9-mile, Iowa,

Figwort Family – SCROPHULARIACEAE (54 species in Nebraska)

Rough purple gerardia. *Agalinis aspersa*. #,## Widespread, dry prairie, open woods. 9-mile, SCP
 Slender gerardia. *Agalinis tenuifolia*. #+@@ Widespread, moist woods and prairies, Platte
 Butter-and-eggs. *Linaria vulgaris*. + Widespread, waste sites, weedy.
 Allegheny monkey-flower. *Mimulus ringens*. *** Eastern half, wet streambanks, sometimes emergent. 9-mile, Platte
 White beardtongue. *Penstemon albidus* #+@## Widespread, sandy to gravel soils, open prairie.
 Narrow beardtongue. *Penstemon angustifolius*. #+@ Mostly western, sandhills and sandy prairie.
 Cobea penstemon. *Penstemon cobaea*. #+##@@ Southeastern, open prairies, pastures, weedy. 9-mile
 Crested beardtongue. *Penstemon eriantherus*. # Western half, sandy to gravelly soil, dry prairies.
 Slender penstemon. *Penstemon gracilis* #+@ Widespread, sandy to gravel soil, dry prairies, Platte
 Shell-leaf penstemon. *Penstemon grandiflorus*. +@##@@** Widespread, sandy to loamy prairies. 9-mile, Iowa,
 Common mullein. *Verbascum thapsus*. *#+@ ++** Widespread, introduced weed. 9-mile, SCP, Platte (Illustration 59)
 Brooklime speedwell. *Veronica americana*. *** Widespread. emergent in aquatic sites.
 Water speedwell. *Veronica anagallis-aquatica*. #,## Widespread, emergent in aquatic sites, Platte
 Purslane speedwell, *Veronica peregrina*. ++Upland disturbed areas. 9-mile, SCP

Nightshade Family – SOLANACEAE (19 species in Nebraska)

Jimsonweed. *Datura stramonium*. *+ Eastern half, waste sites; poisonous. SCP
 Clammy groundcherry. *Physalis heterophylla*. *#+## Widespread, prairies, open woods. Iowa, Platte,
 Spearleaf ground-cherry. *Physalis longifolia*.** Upland disturbed areas, 9-mile, SCP.
 Virginia groundcherry. *Physalis virginiana*. *@@ ++ Widespread, open woods, waste sites. 9-mile, Iowa, SCP, Platte
 Carolina horse-nettle. *Solanum carolinense*. #,###** Southeastern, waste sites, open woods; poisonous. SCP
 Black nightshade. *Solanum ptycathum*.** Upland disturbed areas, 9-mile, SCP.

Buffalobur. *Solanum rostratum*. *#+@## Widespread, waste sites; poisonous. 9-mile, SCP, Platte

Nettle Family – URTICACEAE (6 species in Nebraska)

Pennsylvania pellitory. *Parietaria pensylvanica*.*,** Widespread, shaded woods. SCP, Platte
 Stinging nettle. *Urtica dioica*.*,** Widespread, moist woods, streambanks, skin irritant. SCP, Platte

Vervain Family – VERBENACEAE (9 species in Nebraska)

Fog-fruit. *Lippia (Phyla) lanceolata*. +** Eastern and southern, prairies, ditches, waste areas. 9-mile, Platte
 Dakota vervain. *Verbena bipinnatifida*. #,## Widespread, dry plains and prairies.

Prostrate vervain. *Verbena bracteata*. * ++** Widespread, waste sites, prairies. 9-mile, SCP, Platte
 Blue vervain. *Verbena hastata*. #, ##@** Widespread, moist meadows, woods, seepage areas. 9-mile, Iowa, Platte
 Hoary (woolly) vervain. *Verbena stricta*. * # @## @ @ ++** Widespread, weedy. 9-mile, Iowa, SCP, Platte (Illustration 60)
 White vervain. *Verbena urticifolia*. ** Upland disturbed areas. 9-mile, SCP, Platte

Violet Family– VIOLACEAE (17 species in Nebraska)

Canada violet. *Viola canadensis*. # Northern and eastern, shaded woods.
 Nuttall's violet. *Viola nuttallii*. # @ Western half, dry prairies, bluffs.
 Prairie violet. *Viola pedatifida*. # + @ ## @ ** Eastern half, prairies, open woodlands. 9-mile, Iowa, SCP
 Blue prairie violet. *Viola pratincola*. # Widespread, open woods, prairie hillsides. Iowa, SCP, Platte
 Downy yellow violet. *Viola pubescens*. # ** Northern and eastern, woods, thickets. 9-mile
 Downy blue violet. *Viola sororia*. # ** Northern and eastern, woods, streamsides. 9-mile, SCP

Caltrop Family ZYGOPHYLLACEAE (1 species in Nebraska)

Puncture vine. *Tribulus terrestris*. # + Widespread, waste places, weedy. 9-mile, SCP

Common Prairie Shrubs

This list includes 24 typical shrubs of Nebraska's prairies. Symbol meanings are as follows:

- # = mostly eastern species described and illustrated by Petrides (1958) .
- * = mostly western species described and illustrated by Stubbendieck et al. (1997) .
- @ = species described and illustrated by Stephens (1969).
- + = species illustrated and described by Johnson and Larson (1999).
- \$ = species illustrated and described by Larson and Johnson (1999)

Cashew Family – ANACARDIACEAE

Aromatic sumac *Rhus aromatica*. * # @ + \$ Widespread.
 Smooth sumac. *Rhus glabra*. # @ + \$ Widespread. 9-mile, SCP, Platte
 Poison ivy. *Toxicodendron (Rhus) radicans*. & *T. rydbergii*. # @ + \$ Statewide. 9-mile, SCP, Platte

Sunflower Family – ASTERACEAE (= COMPOSITAE)

Sand sagebrush. *Artemisia filifolia*. * @ + Western and northern Nebraska.
 Cudweed (White) sagewort. *Artemisia ludoviciana*. * + Statewide, 9-mile
 Rabbitbrush. *Chrysothamnus naseosus*. @ + \$ Western half of state.

Honeysuckle Family –CAPRIFOLIACEAE

Western snowberry. *Symphoricarpos occidentalis*. # * @ + \$ Statewide. 9-mile, SCP, Platte (Illustration 49)
 Buckbrush (Coralberry). *Symphoricarpos orbiculatus*. # * @ Mostly southeastern. 9-mile, SCP

Staff-tree Family - CELASTRACEAE

Wahoo. *Euonymus atropurpurea*. # @ Eastern half of state

Dogwood Family - CORNACEAE

Pale (Silky) dogwood. *Cornus amonum*. # @ Eastern third of state.
 Rough-leaved dogwood. *Cornus drummondii*. # @ Eastern half of state, 9-mile, SCP

Cypress Family - CUPRESSACEAE

Eastern red cedar (Juniper). *Juniperus virginiana*. * # Eastern two-thirds of state. 9-mile, SCP, Platte

Russian Olive Family- ELEAGINACEAE

Buffaloberry. *Shepherdia argentea*. # + \$ Widespread, Platte

Bean Family - FABACEAE

Leadplant. *Amorpha canescens*. # * @ + \$ Statewide in prairies. 9-mile, Iowa, SCP, Platte
 False indigo. *Amorpha fruticosa*. # @ \$ Statewide. 9-mile, SCP, Platte
 Shrubby (Bushy) cinquefoil. *Potentilla paradoxa*. Widespread.

Currant Family - GROSSULARIACEAE

Buffalo current. *Ribes odoratum*. # @ + Widespread.

Buckthorn Family – RHAMNACEAE

New Jersey tea. *Ceanothus americanus*. # @ Eastern third of state. 9-mile, SCP

Rose Family - ROSACEAE

- Wild plum. *Prunus americana*. *#@+ Entire state, 9-mile, SCP, Platte
Sand cherry *Prunus besseyi*. @ Widespread.
Eastern chokecherry. *Prunus virginiana*. *#@\$ Entire state. 9-mile, SCP, Platte
Prairie wild rose. *Rosa arkansana*. +\$ Widespread, woodland edges. 9-mile, Iowa, SCP, Platte
Multiflora rose. *Rosa multiflora*. Introduced, uplands. 9-mile, SCP.
Western wild rose. *Rosa woodsii*. *@\$ Western two-thirds of state, Platte

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- (See literature section for additional plant references, and for details on relative coverage and organizations of the various field guides that might be helpful in identifying prairie plants)

**RELATIVE FREQUENCIES OF GRASSES, SPRING CREEK AND NINE-
MILE PRAIRIES (BASED ON KOTTAS, 2000*)**

(I = Introduced species)

	<u>SPRING CREEK PRAIRIE</u>	<u>NINE-MILE PRAIRIE</u>	<u>AVE.</u>
WARM-SEASON SPECIES (1 sq. m. subplots)			
<i>Andropogon gerardii</i>	80	97	88.5
<i>Sorghastrum nutans</i>	46	64	50
<i>Schizachyrium scoparium</i>	67	33	49
<i>Bouteloua curtipendula</i>	52	13	32.5
<i>Sporobolus asper</i>	42	14	28
<i>Sporobolus heterolepis</i>	0	28	14
<i>Eragrostis spectabilis</i>	5	8	6.5
<i>Panicum virgatum</i>	0	7	3.5
<i>Paspalum setaceum</i>	0	7	3.5
<i>Aristida oligantha</i>	1	1	1
<i>Setaria faberi</i>	0	1	0.5
<i>Bouteloua hirsuta</i>	1	0	0.5
<i>Setaria glauca</i>	0	0	0
<i>Panicum capillare</i>	0	0	0
COOL-SEASON SPECIES (10 sq. m. plots)			
<i>Dichanthelium oligosanthes</i>	78	78	78
<i>Bromus inermis</i> (I)	89	44	66.5
<i>Poa pratensis</i> (I)	67	56	60.5
<i>Bromus japonicus</i> (I)	56	0	28
<i>Dichanthelium acuminatum</i>	11	44	27.5
<i>Poa compressa</i> (I)	33	0	16.5
<i>Elymus canadensis</i>	0	22	11
<i>Stipa spartea</i>	0	22	11

* Kottas, K. L. 2000. Floristic composition and characteristics of Spring Creek Prairie. MS thesis, Univ. of Nebraska-Lincoln.

TWENTY MOST ABUNDANT FALL FORBS IN ORDER OF ABUNDANCE, SPRING CREEK PRAIRIE AND NINE-MILE PRAIRIE (AFTER KOTTAS, 2000*)

(Species reported from both locations are shown in **bold**; I = introduced species; S = shrub.)

SPRING CREEK PRAIRIE

Ambrosia psilostachya
Trifolium repens
Vernonia baldwinii
Aster (Symphiotrichum) ericoides
Artemisia ludoviciana
Achillea millefolium
Physalis longifolia
Cirsium flodmanii
Trifolium pratense (I)
Conyza canadensis
Solidago missouriensis
Antennaria neglecta
Kuhnia eupatorioides
Oxalis dillenii
Euphorbia nutans
Convolvulus arvensis (I)
Medicago lupulina (I)
***Amorpha canescens* (S)**
Symphoricarpos orbiculatus (S)
Ruellia humilis

NINE-MILE PRAIRIE

Ambrosia psilostachya
Aster(Symphiotrichum) ericoides
Artemisia ludoviciana
Helianthus rigidus
***Amorpha canescens* (S)**
Oxalis dillenii
Asclepias verticillata
Solidago missouriensis
Viola pedatifida
Lespedeza capitata
Solidago speciosa
Kuhnia eupatorioides
Monarda fistulosa
Physalis longifolia
Rhus glabra (S)
Callirhoe involucrata
Cirsium altissimum
Solidago rigida
Solidago canadensis
Dalea candida

*Kottas, K. L. 2000. Floristic composition and characteristics of Spring Creek Prairie. MS thesis, Univ. of Nebraska-Lincoln.

Typical Shrubs, Forbs, Grasses and Sedges of Nebraska's Tallgrass Prairies

(Based primarily on more than 200 species reported from Nine-mile Prairie and/or Spring Creek Prairie, exclusive of trees, aquatic species and some woods-adapted species. Organized alphabetically by descending taxa: family, genus, species).

Status: I = Introduced; N = Native

Habit: A = Annual, B = Biennial; P = Perennial

Habitat: D = Disturbed uplands, R = Ravine, U = Upland prairie; W = Wetlands

Flowering Time: Sp = Spring, Su = Summer; F = Fall; Sp/Su = Spring & Summer; Sp/F = Spring to Fall
Su/F = Summer & Fall

GRASSES AND SEDGES

Grass Family - POACEAE (ca. 200 species in Nebraska)

- Western wheatgrass. *Agropyron smithii*. Widespread. NPUSu
Redtop bent. *Agrostis stolonifera*. Widespread introduced weed. IPWSu
Big bluestem *Andropogon gerardii*. Mostly eastern. NPWSu/F
Prairie threeawn. *Aristida oligantha*. Mostly eastern. NADSu/F
Red (Purple) threeawn *Aristida purpurea longiseta*. Widespread. NPDSu
Side-oats grama. *Bouteloua curtipendula*. Widespread. NPUSu/F
Blue grama. *Bouteloua gracilis*. Widespread. NPUSu/F
Hairy grama. *Bouteloua hirsuta*. Mostly western. NPUSu
Smooth brome. *Bromus inermis*. Widespread, introduced weed. IPUSp/Su
Japanese brome. *Bromus japonicus*. Widespread, introduced weed. IADSp/Su
Downy brome. *Bromus tectorum* Widespread, introduced weed. IADSp
Buffalo grass. *Buchloe dactyloides*. Mostly western. NPUSu
Longspine sandbur. *Cenchrus longispinus* Widespread, weedy. NPDSu/F
Tumble windmillgrass. *Chloris verticillata* Mostly southern, weedy. NPDSu/F
Dichanthelium, *Dichanthelium, acuminatum* . Upland disturbed areas. NPUSp/F
Leiberg's dichanthelium. *Dichanthelium leibergii*. Upland prairie. NPUSp/Su
Scribner's dichanthelium. *Dichanthelium oligosanthos scribnerianum*. Disturbed areas. NPUSp/F
Large crabgrass. *Digitaria sanguinalis* Widespread, introduced weed. IADSu/F
Barnyardgrass. *Echinochloa crusgalli* Widespread, introduced weed. IADSu/F
Goosegrass. *Eleusine indica* Southeastern, introduced weed. IADSu/F
Canada wild rye. *Elymus canadensis*. Upland prairie. NPUSu/F
Stinkgrass. *Eragrostis cilianensis*. . Weedy annual. IADSu/F
Purple lovegrass. *Eragrostis spectabilis*. Upland disturbed areas. NPDSu/F
Sixweeks fescue. *Festuca (Vulpia) octoflora* Widespread, weedy. NADSu/F
Fowl mannagrass. *Glyceria striata*. Widespread, moist soils. NPWSu/F
Foxtail barley. *Hordeum jubatum* Widespread, weedy. NPRSp/Su
Little barley. *Hordeum pusillum* Widespread, weedy. NADSp/Su
Fall witchgrass. *Leptoloma cognatum*. Upland prairie. NPUSu/F
Prairie junegrass. *Koeleria pyramidata*. Widespread. NPUSu
Plains muhly. *Muhlenbergia cuspidatum*. Upland prairie. NPUSu/F
Marsh muhly. *Muhlenbergia racemosa* Widespread, weedy. NPUSu/F
Witchgrass. *Panicum capillare* . Widespread, weedy. NADF
Fall panicum. *Panicum dichotomiflorum* Eastern half, weedy. NAWF
Switchgrass. *Panicum virgatum*. Widespread, tallgrass prairies. NPUF
Paspalum. *Paspalum setaceum*. Disturbed upland areas. NPUSp/F

Reed canarygrass. *Phalaris arundinacea*. Widespread, weedy NPWSu
 Timothy *Phleum pratense*. Widespread. IPUSu
 Canada bluegrass. *Poa compressa*. Widespread, introduced. IPUSp/F
 Kentucky bluegrass. *Poa pratensis* Widespread, introduced weed. IPUSp/F
 Tumblegrass. *Schedonnardus paniculatus* Widespread, weedy. NPDSp/F
 Little bluestem. *Schizachyrium (Andropogon) scoparium*. Widespread. NPUSu/F
 Yellow foxtail. *Setaria glauca* Widespread, introduced weed. IADSu/F
 Green foxtail. *Setaria viridis* Widespread, introduced weed. IADSU/F
 Indiangrass. *Sorghastrum nutans*. Widespread. NPUSu/F
 Johnsongrass. *Sorghum halepense* Widespread, weedy. NPUSu/F
 Prairie cordgrass. *Spartina pectinata*. Widespread. NPWSu/F
 Prairie wedgetail grass, *Sphenopholis obtusata*. Upland disturbed areas, NPUSu
 Tall dropseed. *Sporobolus asper*. Widespread. NPUSu/F
 Prairie dropseed, *Sporobolus heterolepis*. Widespread, native prairie. NPUSu/F
 Poverty dropseed. *Sporobolus vaginiflorus* Eastern half, weedy. NAUF
 Needle-and-thread *Stipa comata*. Mostly central and western. NPUSp/Su
 Porcupine grass. *Stipa spartea*. Widespread, native prairies. NPUSp/Su

Sedge Family – CYPERACEAE (126 species in Nebraska)

Fescue sedge. *Carex brevior*. Widespread. NPR/WSp
 Sun sedge *Carex heliophila*. Widespread. NPUSp/Su
 Meade's sedge. *Carex meadii*. Upland prairie. NPUSp/Su
 Sedge. *Carex molesta*. Upland prairies. NPUSp/Su
 Fern flatsedge. *Cyperus lupulinus*. Upland prairies. NPUSu/F

Broad-leaved Herbs (Wildflowers & Weeds)

Acanthus Family – ACANTHACEAE (3 species in Nebraska)

Fringeleaf ruellia. *Ruellia humilis*. Dry prairies, rocky banks, open woods. NPUSu

Pigweed Family – AMARANTHACEAE (17 species in Nebraska)

Redroot pigweed. *Amaranthus retroflexus*. Widespread, weedy. NADSu/F
 Common water hemp. *Amaranthus rudis*. Mostly eastern, weedy. NPWSu/F

Cashew Family – ANACARDIACEAE (5 species in Nebraska)

Poison ivy. *Toxicodendron (Rhus) spp.* Statewide; also a variably woody shrub or vine. PNUSu

Parsley Family – APIACEAE (= Umbellifereae) (31 species in Nebraska)

Spotted waterhemlock. *Cicuta maculata*. Widespread, near streams. IBRSu
 Wild parsley (desert biscuitroot). *Lomatium foeniculaceum*. Eastern and Panhandle, dry prairies. NPUSp
 Black snake-root. *Sanicula canadensis*. Widespread. NBRsu

Dogbane Family – APOCYNACEAE (4 species in Nebraska)

Hemp (Prairie) dogbane. *Apocynum cannabinum*. Widespread, prairies, open woods, weedy. NPWSu

Milkweed Family – ASCLEPIADACEAE (17 species in Nebraska)

Swamp milkweed. *Asclepias incarnata*. Widespread, wet prairies, moist banks. NPWSu
 Narrow-leaved milkweed. *Asclepias stenophylla*. Widespread, sandy or rocky prairies. NPUSu
 Common milkweed. *Asclepias syriaca*. Mostly eastern, banks, floodplains, waste areas. NPUSu
 Butterfly milkweed. *Asclepias tuberosa*. Eastern half, sandy or rocky prairies. NPUSu
 Whorled milkweed. *Asclepias verticillata*. Widespread. sandy or rocky prairies. NPUSu
 Spider milkweed. *Asclepias viridis*. Southeastern corner, sandy or rocky prairies. NPUSu
 Green milkweed. *Asclepias viridiflora*. Widespread, sandy or rocky prairies. NP{USu

Sunflower Family – ASTERACEAE (= COMPOSITAE)(243 species in Nebraska)

Common yarrow. *Achillea millefolium*. Widespread, grasslands, open woods, weedy. NPUSu
 Common ragweed. *Ambrosia artemisiifolia*. Mostly eastern, disturbed sites, weedy. NADSu/F

Western ragweed. *Ambrosia psilostachya*. Widespread, open prairie, waste sites. NAPUSu/F

Giant ragweed, *Ambrosia trifida*. Widespread, weedy. NADSu/F

Pussy-toes. *Antennaria neglecta*. Widespread, prairies, open woodlands, pastures. NPYU Sp/Su

Common burdock. *Arctium minus*. Eastern half, weedy. IBDSu/F

Silky wormwood. *Artemisia dracunculus*. Upland prairie. NPUSu/F

Cudweed (White) sagewort. *Artemisia ludoviciana*. Widespread, dry plains. NPSu/F

White (Heath) aster. *Aster (Symphyotrichum) ericoides*. Widespread, open, upland prairies. NPUF

Aromatic aster. *Aster (Symphyotrichum) oblongifolius*. Upland prairies. NPUF

Silky aster. *Aster (Symphyotrichum) sericeus*. Eastern third, dry, upland sites, open woods, NPUF

Panicled aster. *Aster simplex*. Widespread, NPU/R F

Nodding beggarticks. *Bidens cernua*. Widespread, muddy, disturbed sites, weedy. NAWF

Devils beggarticks. *Bidens frondosa*. Widespread, moist wooded sites. NAWF

Tall beggar- ticks. *Bidens vulgatus*. Widespread, weedy. NAWF

Tuberous Indian plantain. *Cacalia plantaginea (tuberosa.)* Widespread, rocky prairies. NPUSu

Musk thistle. *Carduus nutans*. Widespread, pastures, prairies, weedy. IBDSu

Tall thistle. *Cirsium altissimum*. Mostly eastern, waste sites, weedy. NPUSu/F

Flodman's thistle. *Cirsium flodmanii*. Widespread, moist, open pastures, weedy. NPUSu

Wavyleaf thistle. *Cirsium undulatum*. Widespread. Widespread, dry prairies, weedy. NPUSu

Horseweed. *Conyza canadensis*. Widespread, disturbed sites, weedy. NADSu/F

Fetid marigold. *Dyssodia papposa*. Widespread, open fields, disturbed sites. NADSu/F

Purple coneflower. *Echinacea angustifolia*. Widespread, open, rocky prairies. NpUSu

Daisy fleabane *Erigeron strigosus*. Widespread in eastern half. NAUSu/F

White snakeroot. *Eupatorium rugosum*. Eastern half, open woods, disturbed sites. NPRSu/F

Viscid Euthamia. *Euthamia gymnospermoides* Upland prairies. NPUSu/F

Curly-top gumweed. *Grindelia squarrosa*. Widespread, waste places, weedy. NPDSu/F

Common sunflower. *Helianthus annuus*. Widespread, open sites. NAFSu/F

Sawtooth sunflower. *Helianthus grosseserratus*. Mostly eastern, damp prairies, open bottomlands. NPUF

Stiff sunflower. *Helianthus rigidus*. Eastern half; dry or damp prairies. NPUSu/F

Jerusalem artichoke. *Helianthus tuberosus*. Widespread, open or shaded, moist sites. .NPUSu/F

False sunflower (Oxeye). *Heliopsis helianthoides*. Mostly eastern, dry open woods, weedy. NPUSu

Hawkweed. *Hieracium longipilum*. Upland prairie. PUSu

Falseboneset. *Kuhnia eupatorioides*. Widespread, open prairies. NPUSu/F

Blue lettuce. *Lactuca oblongifolia*. Widespread, low, moist meadows. NPUSu/F

Prickly lettuce. *Lactuca serriola*. Widespread, disturbed sites, weedy. IBDSu/F

Rough gayfeather. *Liatris aspera*. Eastern half, open woods on sandy sites. NPUSu/F

Dotted gayfeather. *Liatris punctata*. Widespread, dry, sandy upland prairies. NPUSu/F

Skeletonweed. *Lygodesma juncea*. Upland prairies. NPUSu

False dandelion. *Microseris cuspidata*. Widespread, dry or drying open prairie. NPUSp

Prairie coneflower. *Ratibida columnifera*. Widespread, disturbed sites, weedy. NPUSu

Black-eyed susan. *Rudbeckia hirta*. Widespread, disturbed prairies, waste sites. NPUSu

Golden glow. *Rudbeckia laciniata*. Eastern half, moist places. NPRSu

Lamb's-tongue groundsel. *Senecio integerrimus*, Upland prairies. NPUSp

Prairie ragwort. *Senecio plattensis*. Widespread, open prairies. NPUSp

Rosinweed. *Silphium integrifolium*. Eastern third, open, disturbed sites. NPUSp

Cup plant. *Silphium perfoliatum*. Eastern third, moist, low ground. NPRSu

Canada goldenrod. *Solidago canadensis*. Widespread, dry or drying open sites. NPUF

Prairie goldenrod. *Solidago missouriensis*. Widespread, open prairies, sparse woods. NPUF

Gray goldenrod. *Solidago nemoralis*. Upland prairies. NPUF

Rigid goldenrod. *Solidago rigida*. Widespread, sandy or rocky prairies, drying sites. NPUF

Showy goldenrod. *Solidago speciosa*. Upland prairies. NPUF

Common dandelion. *Taraxacum officinale*. Widespread introduced weed. IPD Sp/F
 Goat's beard (Western salsify). *Tragopogon dubius*. Widespread, disturbed sites, introduced weed. IBDSu
 Meadow salsify. *Tragopogon pratensis*. Upland prairies. IBDSp/Su
 Baldwin's ironweed. *Vernonia baldwinii*. Southeastern, open, dry pastures. NPUSu
 Cocklebur. *Xanthium strumarium*. Upland prairies. IAUSu/F
Borage Family – BORAGINACEAE (29 species in Nebraska)
 Hoary puccoon. *Lithospermum canescens*. Upland prairies. NPUSp/Su
 Narrow-leaved puccoon. *Lithospermum incisum*. Widespread, dry prairies, open woods. NPUSp/Su
 False gromwell. *Osmodium molle*. Upland prairies. NPUSu
Mustard Family – BRASSICACEAE (74 species in Nebraska)
 Hoary cress. *Cardaria draba*. Introduced weed, widespread. IPDSp
 Whitlow grass. *Draba reptans*. Upland disturbed areas. NADSp
 Pennycress. *Thlaspi arvense*. Widespread, waste sites, weedy. IADSp
Caesalpinia Family – CAESALPINIACEAE (6 species in Nebraska)
 Partridge-pea. *Cassia chamaecrista*. Eastern half, rocky or sandy prairies. NADSu/F
Bellflower Family – CAMPANULACEAE (12 species in Nebraska)
 Blue lobelia. *Lobelia siphilitica*. Widespread, moist soil, woods and meadows. NPWSu/F
 Venus' looking glass. *Triodanis perfoliata*. Widespread, sandy to gravelly prairies, disturbed sites. NADSp/Su
Hemp Family – CANNABACEAE (3 species in Nebraska)
 Hemp. *Cannabis sativa*. Upland disturbed areas, IADSu/F
Pink Family – CARYOPHYLLACEAE (35 species in Nebraska)
 Sleepy catchfy. *Silene antirrhina*. Upland disturbed areas. NADSu
Goosefoot Family – CHENOPODIACEAE (42 species in Nebraska)
 Lamb's quarters. *Chenopodium berlandieri*. Upland disturbed areas. NADSu/F
Spiderwort Family – COMMELINACEAE (5 species in Nebraska)
 Long-bracted spiderwort. *Tradescantia bracteata*. Widespread, prairies, disturbed sites. NPUSu
Morning-glory Family – CONVULVACEAE (19 species in Nebraska)
 Hedge bindweed. *Calystegia sepium*. Upland disturbed areas. NPRSu/F
 Field bindweed. *Convolvulus arvensis*. Widespread, introduced weed. NPDSp/F
Stonecrop Family – CRASSULACEAE (2 species in Nebraska)
 Virginia stonecrop. *Penthorum sedoides*. Mostly eastern, ditches, streambanks. NPWSu/F
Cucumber Family – CUCURBITACEAE (4 species in Nebraska)
 Bur cucumber. *Sicyos angulatus*. Southeastern, damp river soils, waste sites. NARSu/F
Horsetail Family – EQUISETACEAE (6 species in Nebraska)
 Field horsetail. *Equisetum arvense*. Widespread, disturbed sites. NPWSp
Spurge Family – EUPHORBIACEAE (28 species in Nebraska)
 Flowing spurge. *Euphorbia corollata*. Upland prairies. NPYUSu/F
 Toothed spurge. *Euphorbia dentata*. Widespread, prairies, waste sites. NDSu/F
 Snow-on-the-mountain. *Euphorbia marginata*. Widespread, prairies, waste sites; poisonous. NADSu/F
 Eyebane. *Euphorbia nutans*. Upland disturbed areas. NADSu/F
Bean Family – FABACEAE (= LEGUMINACEAE) (ca. 100 species in Nebraska)
 Canada milk-vetch. *Astragalus canadensis*. Widespread, moist prairies, open woods. NPUSp
 Ground-plum. *Astragalus crassicaarpus*. Widespread, prairies, rocky soils. NPUSp
 Platte River milk-vetch, *Astragalus plattensis*. Upland prairies. NPUSp/Su
 Plains wild indigo. *Baptisia (leucophea) bracteata*. Southeastern, prairies, pastures. NPUSp
 Canada tickclover. *Desmodium canadense*. Widespread, rocky or sandy prairies. NPUSu
 Tick trefoil. *Desmodium illinoensis*. Widespread, prairie ravines, hillsides. NPUSu
 Wild licorice. *Glycyrrhiza lepidota*. Widespread, prairie ravines, moist areas. NPUSu
 Bush-clover. *Lespedeza capitata*. Upland prairie. NPUSu/F
 Alfalfa. *Medicago sativa*. Introduced forage crop. IPOSp/F

Sweet-clover. *Melilotis albus*. Widespread, waste places, introduced weed and forage crop. IPDSp/F
 White prairie-clover. *Petalostemon (Dalea) candida*. Widespread, waste sites, weedy. NPUSu
 Purple prairie-clover. *Petalostemon (Dalea) purpurea*. Widespread, rocky prairies NPUSu
 Silky prairie-clover. *Petalostemon (Dalea) villosa* Widespread, sandy prairies, open woods. NPUSu
 Silver-leaf scurf-pea. *Psoralea (Pediomelum) argophylla*. Widespread, prairies, open woods. NPUSu
 Broad-leaf scurf-pea (Prairie-turnip). *Psoralea (Pediomelum) esculenta*. Widespread, prairies. NPUSu
 Wild alfalfa. *Psoralea (Pediomelum) tenuiflora*. Widespread, prairies, roadsides. NPUSu
 Clovers. *Trifolium* spp. Mostly introduced and cultivated forage plants. IPDSp/F
 American vetch. *Vicia americana*. Widespread, mostly sandy soils. NPUSp/Su
Gentian Family – GENTIANACEAE (6 species in Nebraska)
 Downy gentian. *Gentiana puberulenta*. Upland prairies. NPUF
Waterleaf Family – HYDROPHYLLACEAE (4 species in Nebraska)
 Waterpod. *Ellisia nyctelea*. Widespread, sandy prairies, open woods. NARSp
Iris Family – IRIDACEAE (7 species in Nebraska)
 White-eyed grass. *Sisyrinchium campestre*. Eastern half, prairies, open woods. NPUSp
Mint Family – LAMIACEAE (= LABITAE)(49 species in Nebraska)
 Rough false pennyroyal. *Hedeoma hispidum*. Widespread, waste sites, open ground. NAUSp/Su
 Field mint. *Mentha arvensis*. Widespread, moist sites. NPWSu/F
 Wild bergamot. *Monarda fistulosa*. Widespread, prairies, open woods. NPUSu
 Catnip. *Nepeta cataria*. Widespread, waste sites, introduced weed. .IPWSu/F
 Pitcher's (Blue) sage. *Salvia azurea (pitcheri)* Southeastern, rocky to sandy prairies. NPUF
 Leonard small scullcap. *Scutellaria parvula*. Eastern, upland prairies, open woods. NPUSu
 American germander. *Teucrium canadense*. Widespread, streambanks, pastures. NPRSu
Lily Family – LILIACEAE (32 species in Nebraska)
 Wild onion. *Allium canadense*. Widespread, prairies, open woods NPUSu
 Asparagus. *Asparagus officianalis*. Upland prairie. IPUSp
 Solomon's seal. *Polygonatum biflorum*. Widespread, moist deciduous woods. NPRSu
Flax Family – LINACEAE (8 species in Nebraska)
 Grooved (prairie) flax. *Linum sulcatum*. Eastern half, prairies, open woods. NAUSu
Mallow Family – MALVACEAE (15 species in Nebraska)
 Velvet leaf. *Abutilon theophrasti*. Upland disturbed areas. IADSu/F
 Plains poppy-mallow. *Callirhoe alcaeoides*. Upland prairies. NPUSu
 Purple poppy mallow. *Callirhoe involucrata*. Widespread, dry, sandy prairies. NPUSp/Su
Four-O'Clock Family – NYCTAGINACEAE (9 species in Nebraska)
 Hairy four-o'clock. *Mirabilis hirsuta*. Upland prairies. NPUSu
 Narrow-leaved four o'clock. *Mirabilis linearis*. Upland prairies. NPUSu
 Wild four-o'clock. *Mirabilis nyctaginea*. Widespread, waste places, weedy. NPUSu
Evening Primrose Family – ONAGRACEAE (28 species in Nebraska)
 Plains yellow evening primrose. *Calyphus serrulatus*. Widespread, dry prairies, open woods. NPUSu
 Fireweed. *Epilobium* spp. Widespread, disturbed sites, often appears following fire. NPWSu/F
 Large-flowered gaura. *Gaura longiflora*. Southeastern, rocky prairies, open woods. NBDSu/F
 Small-flowered guara. *Gaura parviflora (= mollis)*. Upland disturbed areas, NBDSu/F
 Yellow evening primrose. *Oenothera villosa*. Upland disturbed areas,
Orchid Family – ORCHIDACEAE (19 species in Nebraska)
 Nodding lady's-tresses. *Spiranthes cernua*. Eastern half, prairies, open woods. NPUF
 Early ladies' tresses. *Spiranthes vernalis*. Upland prairies. NPUSu
Woodsorrel Family – OXALIDACEAE (3 species in Nebraska)
 Gray-green wood sorrel. *Oxalis dillenii*. Mostly eastern, open woods, waste sites, weedy. NPUSp/F
 Yellow wood sorrel. *Oxalis stricta*. Mostly eastern, open woods, waste sires, weedy. NPUSu
 Violet wood sorrel. *Oxalis violacea*. Mostly eastern, open woods, waste places, weedy. NPUSp
Plantain Family – PLANTAGINACEAE (10 species in Nebraska)

Woolly plantain (Indianwheat). *Plantago patagonica*. Widespread, waste sites, weedy. NASDSu
 Blackseed plantain. *Plantago rugelii*. Mostly eastern, waste sites, shady places, weedy. NPDSu
Phlox (Polemonium) family – POLEMONIACEAE (16 species in Nebraska)
 Slenderleaf collomia. *Collimia linearis*. Mostly northern, native prairies. NAUSu
 Blue phlox. *Phlox divaricata*. Eastern fourth, open woods, rocky slopes NPUSp/Su
 Prairie phlox. *Phlox pilosa*. Eastern fourth, open woods, meadows. NPUSu
Milkwort Family – POLYGALACEAE (4 species in Nebraska)
 Whorled milkwort. *Polygala verticillata*. Upland disturbed areas. NPUSu/F
Buckwheat Family – POLYGONACEAE (46 species in Nebraska)
 Common knotweed. *Polygonum arenostrium*. Widespread, waste sites, introduced weed. IADSu/F
 Pink smartweed. *Polygonum bicornne*. Mostly eastern, wet sites. NADSu/F
 Pennsylvania smartweed. *Polygonum pennsylvanicum*. Widespread, disturbed sites, weedy. NADSu/F
 Climbing false buckwheat. *Polygonum scandens*. Widespread, waste sites, introduced weed. NPRSu/F
 Sheep sorrel. *Rumex acetosella*. Upland prairie. IPUSp/Su
Primrose Family – PRIMULACEAE (10 species in Nebraska)
 Fringed loosertrife. *Lysimachia ciliata*. Widespread, moist woods and wetter sites. NPWSu
Buttercup Family – RANUNCULACEAE (39 species in Nebraska)
 Meadow anemone. *Anemone canadensis*. Mostly eastern, wet prairies, wet woods. NPWSu
 Candle anemone. *Anemone cylindrica*. Northern and eastern, open prairies and pastures. NPUSu
 Prairie larkspur. *Delphinium virescens*. Widespread, prairies and pastures. NPUSu
 Purple meadow rue. *Thalictrum dasycarpum*. Widespread, moist habitats. NPUSu
Rose Family – ROSACEAE (55 species in Nebraska)
 Wild strawberry. *Fragaria virginiana*. Mostly eastern, moist soils, prairies, open woods. NPUSp
 Tall cinquefoil. *Potentilla arguta*. Widespread, prairies, open woods. NPUSu
 Sulphur cinquefoil. *Potentilla recta*. Mostly eastern, waste sites, prairies. NPUSp/Su
Madder Family – RUBIACEAE (10 species in Nebraska)
 Catchweed bedstraw. *Galium aparine*. Widespread, woods, prairies, waste ground. NARSu
 Narrow-leaved bluets. *Hedyotis nigricans*. Southeastern, rocky prairies, woods. NPUSu
Figwort Family – SCROPHULARIACEAE (54 species in Nebraska)
 Rough purple gerardia. *Agalinis aspersa*. Widespread, dry prairie, open woods. NAUSu
 Cobea penstemon. *Penstemon cobaea*. Southeastern, open prairies, pastures, weedy. NPUSp
 Common mullein. *Verbascum thapsus*. Widespread, waste sites, introduced weed. IPDSu
 Purslane speedwell, *Veronica peregrina*. Upland disturbed areas. NADSp/Su
Nightshade Family – SOLANACEAE (19 species in Nebraska)
 Clammy ground-cherry. *Physalis heterophylla*. Upland prairie. NPUSu
 Spearleaf ground-cherry. *Physalis longifolia*. Upland disturbed areas, NPUSp
 Virginia ground-cherry. *Physalis virginiana*. Upland disturbed areas, NPUSp
 Black nightshade. *Solanum ptycathum*. Upland disturbed areas, NAUSp/F
 Buffalobur. *Solanum rostratum*. Widespread, waste sites; poisonous. NADSu/F
Nettle Family – URTICACEAE (5 species in Nebraska)
 Pennsylvania pellitory. *Parietaria pennsylvanica*. Widespread, shaded woods. NARSu
 Stinging nettle. *Urtica dioica*. Widespread, moist woods, streambanks, skin irritant. NPWSu
Vervain Family – VERBENACEAE (9 species in Nebraska)
 Prostrate vervain. *Verbena bracteata*. Widespread, waste sites, prairies. NADSp/F
 Blue vervain. *Verbena hastata*. Widespread, moist meadows, woods, seepage areas. NPUSu
 Hoary (woolly) vervain. *Verbena stricta*. Widespread, pastures, prairies, waste sites. NPRSu
 White vervain. *Verbena urticifolia*. Upland disturbed areas. NPUSu/F
Violet Family– VIOLACEAE (17 species in Nebraska)
 Prairie violet. *Viola pedatifida*. Eastern half, prairies, open woodlands. NPUSp
 Blue prairie violet. *Viola pratincola*. Widespread, open woods, prairie hillsides. NPUSp
 Downy blue violet. *Viola sororia*. Northern and eastern, woods, streamsides. NPUSp

Caltrop Family – ZYGOPHYLLACEAE (1 species in Nebraska)
Puncture vine. *Tribulus terrestris*. Widespread, waste places, weedy. IADSu/F

Shrubs and Woody Vines

Cashew Family – ANACARDIACEAE

Smooth sumac. *Rhus glabra*. Widespread.

Poison ivy. *Toxicodendron (Rhus) radicans*. Statewide (may grows as a woody vine or forb)

Sunflower Family – ASTERACEAE (= COMPOSITAE)

Cudweed sagebrush. *Artemisia ludoviciana*. Widespread.

Honeysuckle Family – CAPRIFOLIACEAE

Elderberry. *Sambucus canadensis*. Mainly eastern.

Western snowberry. *Symphoricarpos occidentalis*. Statewide.

Buckbrush (Coralberry). *Symphoricarpos orbiculatus*. Mostly southeastern.

Staff-tree Family - CELASTRACEAE

Climbing Bittersweet. *Celastrus scandens*. Mainly eastern (woody vine).

Dogwood Family - CORNACEAE

Rough-leaved dogwood. *Cornus drummondii*. Eastern half of state

Cypress Family - CUPRESSACEAE

Eastern red cedar (Eastern juniper). *Juniperus virginiana*. Eastern two-thirds of state.(May grow as a shrub or tree)

Bean Family - FABACEAE

Leadplant. *Amorpha canescens*. Statewide in prairies.

False indigo. *Amorpha fruticosa*. Statewide.

Currant Family - GROSSULARIACEAE

Missouri gooseberry. *Ribes missouriensis*. Widespread, moist woods.

Buckthorn Family - RHAMNACEAE

New Jersey tea. *Ceanothus americanus*. Eastern third of state.

Rose Family - ROSACEAE

Wild plum. *Prunus americana*. Entire state,

Sand cherry *Prunus besseyi*. Widespread.

Eastern chokecherry. *Prunus virginiana*. Entire state.

Prairie wild rose. *Rosa arkansana*. Widespread, woodland edges.

Multiflora rose. *Rosa multiflora*. Introduced, uplands.

Black raspberry. *Rubus occidentalis*. Eastern Nebraska, riparian.

Willow Family - SALICACEAE

Peach-leaved willow *Salix amygdaloides*. Widespread. (May grow as a shrub or tree)

Sand-bar willow. *Salix interior*. Widespread in wetter sites

Grape Family - VITACEAE

River-bank grape *Vitis riparia*. Widespread (woody vine).

**English: Latin Name Equivalents of 370 Tallgrass Prairie Plants
(Based largely on Spring Creek Prairie list of Kay Kottas, 2000)**

Alfalfa	<i>Medicago sativa</i>	Catnip giant hyssop	<i>Agastache nepetoides</i>
American bittersweet	<i>Celastrus scandens</i>	Catnip	<i>Nepeta cataria</i>
American bugleweed	<i>Lycopus americana</i>	Chenopodium	<i>Chenopodium standleyanum</i>
American germander	<i>Teucrium canadense</i>	Chenopodium	<i>Chenopodium strictum</i>
Aromatic aster	<i>Aster oblongifolius.</i>	Chickweed	<i>Stellaria pallida</i>
Asparagus	<i>Asparagus officinalis</i>	Chicory	<i>Chichorium intybus</i>
Bald spikerush	<i>Eleocharis erythropoda</i>	Chokecherry	<i>Prunus virginiana</i>
Barnyard grass	<i>Echinochloa crusgalli</i>	Clammy ground-cherry	<i>Physalis heterophylla</i>
Bearded hawkweed	<i>Hieracium longipilum</i>	Clearweed	<i>Pilea pumila</i>
Beggar's-ticks	<i>Bidens vulgatus</i>	Climbing buckwheat	<i>Polygonum convolvulus</i>
Big bluestem	<i>Andropogon gerardii</i>	Cobaea penstemon	<i>Penstemon cobaea</i>
Black locust	<i>Robinia pseudo-acacia</i>	Cocklebur.	<i>Xanthium strumarium.</i>
Black medic	<i>Medicago lupulina</i>	Common arrowhead	<i>Sagittaria latifolia</i>
Black raspberry	<i>Rubus occidentalis</i>	Common burdock	<i>Arctium minus</i>
Black snakeroot	<i>Sanicula canadensis</i>	Common evening primrose	<i>Oenothera villosa</i>
Black walnut	<i>Juglans nigra</i>	Common knotweed	<i>Polygonum arenastrum</i>
Black-eyed susan	<i>Rudbeckia hirta</i>	Common milkweed	<i>Asclepias syriaca</i>
Blue grama	<i>Bouteloua gracilis</i>	Common mullein	<i>Verbascum thapsus</i>
Blue lettuce	<i>Lactuca oblongifolia</i>	Common ragweed	<i>Ambrosia artemisiifolia</i>
Blue lobelia	<i>Lobelia siphilitica</i>	Common sow thistle	<i>Sonchus asper</i>
Blue mustard	<i>Chorispora tenella</i>	Common sunflower	<i>Helianthus annuus</i>
Blue prairie violet	<i>Viola pratincola</i>	Coralberry, buckbrush	<i>Symphoricarpos orbiculatus</i>
Blue vervain	<i>Verbena hastata</i>	Corn speedwell	<i>Veronica arvensis</i>
Bog yellow cress	<i>Rorippa palustris</i>	Cottonwood	<i>Populus deltoides</i>
Bottlebrush sedge	<i>Carex hystericina</i>	Cudweed sage	<i>Artemisia ludoviciana</i>
Box elder	<i>Acer negundo</i>	Cup plant	<i>Silphium perfoliatum</i>
Bristly greenbriar	<i>Smilax hispida</i>	Curly dock	<i>Rumex crispus</i>
Broad-leaved cat-tail	<i>Typha latifolia</i>	Curly-top gumweed	<i>Grindelia squarrosa</i>
Buffalo bur	<i>Solanum rostratum</i>	Cursed crowfoot	<i>Ranunculus sceleratus</i>
Buffalo grass	<i>Buchloe dactyloides</i>	Daisy fleabane	<i>Erigeron strigosus</i>
Bull thistle	<i>Cirsium vulgare</i>	Dandelion	<i>Taraxacum officinale</i>
Bur cucumber	<i>Sicyos angulatus</i>	Dark green rush	<i>Scirpus atrovirens</i>
Bur oak	<i>Quercus macrocarpa</i>	Deptford pink	<i>Dianthus armeria</i>
Bushy wallflower	<i>Erysimum repandum</i>	Desert goosefoot	<i>Chenopodium pratericola</i>
Butterfly milkweed	<i>Asclepias tuberosa</i>	Devil's beggar-tick	<i>Bidens frondosus</i>
Canada bluegrass	<i>Poa compressa</i>	Dichanthelium	<i>Dichanthelium acuminatum</i>
Canada goldenrod	<i>Solidago canadensis</i>	Ditch stonecrop	<i>Penthorum sedoides</i>
Canada milkvetch	<i>Astragalus canadensis</i>	Dotted gayfeather	<i>Liatris punctata</i>
Canada wild rye	<i>Elymus canadensis.</i>	Downy blue violet	<i>Viola sororia</i>
Candle anemone	<i>Anemone cylindrica</i>	Downy brome	<i>Bromus tectorum</i>
Carolina anemone	<i>Anemone caroliniana</i>	Downy gentian	<i>Gentiana puberulenta</i>
Carpetweed	<i>Mollugo verticillata</i>	Early ladies' tresses	<i>Spiranthes vernalis</i>
Catchweed bedstraw	<i>Galium aparine</i>	Eastern black nightshade	<i>Solanum ptycanthum</i>

Elderberry	<i>Sambucus canadensis</i>	Hairy grama	<i>Bouteloua hirsuta</i>
Emory's sedge	<i>Carex emoryi</i>	Hairy vetch	<i>Vicia villosa</i>
English plantain	<i>Plantago lanceolata</i>	Hairy wild rye	<i>Elymus villosus</i>
Eyebane	<i>Euphorbia nutans</i>	Hard grass	<i>Aster ericoides</i>
Fall panicum	<i>Panicum dichotomiflorum</i>	Heavy sedge	<i>Carex grvida</i>
Fall witchgrass	<i>Leptoloma cognatum</i>	Hedge bindweed	<i>Calystegia sepium</i>
False boneset	<i>Kuhnia eupatorioides</i>	Henbit	<i>Lamium amplexicaule</i>
False climbing buckwheat	<i>Polygonum scandens</i>	Hoary cress	<i>Cardaria draba</i>
False dandelion	<i>Microseris cuspidata</i>	Hoary puccoon	<i>Lithospermum canescens.</i>
False gromwell.	<i>Osmodium molle.</i>	Hoary vervain	<i>Verbena stricta</i>
False indigo	<i>Amorpha fruticosa</i>	Hog peanut	<i>Amphicarpaea bracteata</i>
False sunflower, ox-eye	<i>Heliopsis helianthoides</i>	Hooded arrowhead	<i>Sagittaria calycina</i>
False toadflax	<i>Comandra umbellata</i>	Hornwort	<i>Ceratophyllum demersum</i>
Fern flatsedge	<i>Cyperus lupulinus.</i>	Horsenettle	<i>Solanum carolinense</i>
Fetid marigold	<i>Dyssodia papposa</i>	Horse-weed	<i>Conyza canadensis</i>
Field bindweed	<i>Convolvulus arvensis</i>	Illinois tickclover	<i>Desmodium illinoense</i>
Field horsetail	<i>Equisetum arvense</i>	Indian grass	<i>Sorghastrum nutans</i>
Field mint, wild mint	<i>Mentha arvensis</i>	Indian hemp dogbane	<i>Apocynum cannabinum</i>
Field pennycress	<i>Thlaspi arvense</i>	Indian plantain	<i>Cacalia plantaginea</i>
Field pussy-toes	<i>Antennaria neglecta</i>	Inland rush	<i>Juncus interior</i>
Field speedwell	<i>Veronica agrestis</i>	Japanese brome	<i>Bromus japonicus</i>
Fire-on-the-mountain	<i>Euphorbia cyathophora</i>	Jerusalem artichoke	<i>Helianthus tuberosus</i>
Fireweed	<i>Erechtites hieracifolia</i>	Jimson weed	<i>Datura stramonium</i>
Flodman's thistle	<i>Cirsium flodmanii</i>	Johnny-jump-up	<i>Viola rafinesquii</i>
Flowing spurge	<i>Euphorbia corollata</i>	Junegrass	<i>Koeleria pyramidata</i>
Four o'clock	<i>Mirabilis nyctaginea</i>	Kentucky bluegrass	<i>Poa pratensis</i>
Fowl mannagrass	<i>Glyceria striata</i>	Korean lespedeza	<i>Lespedeza stipulacea</i>
Fox sedge	<i>Carex vulpinoidea</i>	Lady's thumb	<i>Polygonum persicaria</i>
Foxtail barley	<i>Hordeum jubatum</i>	Lamb's-tongue groundsel	<i>Senecio integerrimus,</i>
Fringed loosestrife	<i>Lysimachia ciliata</i>	Large-flowered gaura	<i>Gaura longiflora</i>
Giant ragweed	<i>Ambrosia trifida</i>	Lead plant	<i>Amorpha canescens</i>
Goat's beard	<i>Tragopogon dubius</i>	Leafy pondweed	<i>Potamogeton foliosus</i>
Golden glow	<i>Rudbeckia laciniata</i>	Leafy spurge	<i>Euphorbia esula</i>
Goosegrass	<i>Eleusine indica</i>	Leiberg's dichanthelium	<i>Dichanthelium leibergii.</i>
Gray goldenrod	<i>Solidago nemoralis.</i>	Leonard's small skullcap	<i>Scutellaria parvula</i>
Gray sedge	<i>Carex grisea</i>	Little barley	<i>Hordeum pusillum</i>
Gray-green wood sorrel	<i>Oxalis dillenii</i>	Little bluestem	<i>Schizachyrium scoparium</i>
Great Plains ladies'-tresses	<i>Spiranthes magnicamporum</i>	Long-bracted spiderwort	<i>Tradescantia bracteata</i>
Greater duckweed	<i>Spirodela polyrrhiza</i>	Maple-leaved goosefoot	<i>Chenopodium simplex</i>
Green ash	<i>Fraxinus pennsylvanica</i>	Marijuana (Hemp)	<i>Cannabis sativa</i>
Green foxtail	<i>Setaria viridis</i>	Marsh muhly	<i>Muhlenbergia racemosa</i>
Green milkweed	<i>Asclepias viridiflora</i>	Meadow salsify.	<i>Tragopogon pratensis.</i>
Grooved yellow flax	<i>Linum sulcatum</i>	Mead's sedge	<i>Carex meadii</i>
Ground plum	<i>Astragalus crassicaarpus</i>	Missouri goldenrod	<i>Solidago missouriensis</i>
Hairy crabgrass	<i>Digitaria sanguinalis</i>	Missouri gooseberry	<i>Ribes missouriense</i>
Hairy four-o'clock.	<i>Mirabilis hirsuta.</i>	Moonseed	<i>Menispermum canadense</i>

Motherwort	<i>Leonurus cardiaca</i>	Prairie three-awn	<i>Aristida oligantha</i>
Multiflora rose	<i>Rosa multiflora</i>	Prairie trefoil	<i>Lotus purshianus</i>
Musk thistle	<i>Carduus nutans</i>	Prairie turnip	<i>Psoralea esculenta</i>
Narrowleaf bluet	<i>Hedyotis nigricans</i>	Prairie violet	<i>Viola pedatifida</i>
Narrow-leaved cat-tail	<i>Typha angustifolia</i>	Prairie wedgegrass	<i>Sphenopholis obtusata</i>
Narrow-leaved coneflower	<i>Echinacea angustifolia</i>	Prairie wild rose	<i>Rosa arkansana</i>
Narrow-leaved four o'clock	<i>Mirabilis linearis</i>	Prickly lettuce	<i>Lactuca serriola</i>
Narrow-leaved milkweed	<i>Asclepias stenophylla</i>	Prostrate vervain	<i>Verbena bracteata</i>
Narrow-leaved puccoon	<i>Lithospermum incisum</i>	Puncture vine	<i>Tribulus terrestris</i>
New Jersey tea	<i>Ceanothus herbaceus</i>	Purple-leaved willow-herb	<i>Epilobium coloratum</i>
Nimblewill	<i>Muhlenbergia schreberi</i>	Purple lovegrass	<i>Eragrostis spectabilis</i>
Nodding beggar-ticks	<i>Bidens cernuus</i>	Purple meadow rue	<i>Thalictrum dasycarpum</i>
Nodding fescue	<i>Festuca obtusa</i>	Purple poppy mallow	<i>Callirhoe involucrata</i>
Northern catalpa	<i>Catalpa speciosa</i>	Purple prairie clover	<i>Dalea purpurea</i>
Norwegian cinquefoil	<i>Potentilla norvegica</i>	Red cedar	<i>Juniperus virginiana</i>
Old-field balsam	<i>Gnaphalium obtusifolium</i>	Red clover	<i>Trifolium pratense</i>
Orchardgrass	<i>Dactylis glomerata</i>	Red elm	<i>Ulmus rubra</i>
Pale dock	<i>Rumex altissimus</i>	Red-root flatsedge	<i>Cyperus erythrorhizos</i>
Pale-seeded plantain	<i>Plantago virginica</i>	Redtop	<i>Agrostis stolonifera</i>
Panicled aster	<i>Aster simplex</i>	Reed canary grass	<i>Phalaris arundinacea</i>
Partridge pea	<i>Cassia chamaecrista</i>	Rhombic copper leaf	<i>Acalypha rhomboidea</i>
Peachleaf willow	<i>Salix amygdaloides</i>	Rice cutgrass	<i>Leersia oryzoides</i>
Pennsylvania pellitory	<i>Parietaria pennsylvanica</i>	River-bank grape	<i>Vitis riparia</i>
Pennsylvania smartweed	<i>Polygonum pennsylvanicum</i>	Rosin-weed	<i>Silphium integrifolium</i>
Peppergrass	<i>Lepidium densiflorum</i>	Rough false pennyroyal	<i>Hedeoma hispidum</i>
Philadelphia fleabane	<i>Erigeron philadelphicus</i>	Rough gayfeather	<i>Liatris aspera</i>
Pineapple weed	<i>Matricaria matricarioides</i>	Rough pigweed	<i>Amaranthus retroflexus</i>
Pink smartweed	<i>Polygonum bicornne</i>	Rough-leaved dogwood	<i>Cornus drummondii</i>
Pitcher sage	<i>Salvia azurea</i>	Round-headed bush clover	<i>Lespedeza capitata</i>
Pitseed goosefoot	<i>Chenopodium missouriense</i>	Round-leaved mallow	<i>Malva rotundifolia</i>
Pitseed goosefoot	<i>Chenopodium berlandieri</i>	Rugel's plantain	<i>Plantago rugelii</i>
Plains muhly.	<i>Muhlenbergia cuspidatum</i>	Russian olive	<i>Elaeagnus angustifolia</i>
Plains poppy-mallow.	<i>Callirhoe alcaeoides</i>	Rusty flatsedge	<i>Cyperus odoratus</i>
Plains wild indigo	<i>Baptisia bracteata</i>	Sand paspalum	<i>Paspalum setaceum</i>
Plains yellow primrose	<i>Calylophus serrulatus</i>	Sandbar willow	<i>Salix exigua</i>
Platte River milk-vetch	<i>Astragalus plattensis</i>	Sandbur	<i>Cenchrus longispinus</i>
Poison hemlock	<i>Conium maculatum</i>	Sawbeak sedge	<i>Carex stipata</i>
Poison ivy	<i>Toxicodendron radicans</i>	Sawtooth sunflower	<i>Helianthus grosseserratus</i>
Pokeweed	<i>Phytolacca americana</i>	Scribner dichanthelium	<i>Dichanthelium oligosanthes</i>
Porcupine-grass	<i>Stipa spartea</i>	Schweinitz's sedge	<i>Cyperus schweinitzii</i>
Poverty grass	<i>Sporobolus vaginiflorus</i>	Sedge.	<i>Carex molesta</i>
Prairie cordgrass	<i>Spartina pectinata</i>	Shattercane	<i>Sorghum bicolor</i>
Prairie dropseed	<i>Sporobolus heterolepis</i>	Sheep sorrel	<i>Rumex acetosella</i>
Prairie larkspur	<i>Delphinium virescens</i>	Shepherd's purse	<i>Capsella bursa-pastoris</i>
Prairie ragwort	<i>Senecio plattensis</i>	Short-beaked sedge	<i>Carex brevior</i>
Prairie sedge	<i>Carex bicknellii</i>	Showy goldenrod	<i>Solidago speciosa</i>

Showy tick trefoil	<i>Desmodium canadense</i>	Venus' looking glass	<i>Triodanis perfoliata</i>
Siberian elm	<i>Ulmus pumila</i>	Violet wood sorrel	<i>Oxalis violacea</i>
Sideoats grama	<i>Bouteloua curtipendula</i>	Virginia creeper	<i>Parthenocissus quinquefolia</i>
Silky aster	<i>Aster sericeus</i>	Virginia groundcherry	<i>Physalis virginiana</i>
Silky wormwood	<i>Artemisia dracunculus</i>	Virginia wild rye	<i>Elymus virginicus</i>
Silky wormwood	<i>Artemisia dracunculus.</i>	Viscid Euthamia	<i>Euthamia gymnospermoides</i>
Silver-leaf scurf-pea	<i>Psoralea argophylla</i>	Water hemp	<i>Amaranthus rudis</i>
Skeletonweed	<i>Lygodesma juncea.</i>	Water smartweed	<i>Polygonum punctatum</i>
Sleepy catchfly	<i>Silene antirrhina</i>	Watermeal	<i>Wolffia columbiana</i>
Slender gerardia	<i>Agalinis tenuifolia</i>	Waterpod	<i>Ellisia nyctelea</i>
Small duckweed	<i>Lemna minor</i>	Wavyleaf thistle	<i>Cirsium undulatum</i>
Smallflower buttercup	<i>Ranunculus arbortivus</i>	Western ironweed	<i>Vernonia baldwinii</i>
Smartweed dodder	<i>Cuscuta polygonorum</i>	Western ragweed	<i>Ambrosia psilostachya</i>
Smooth brome	<i>Bromus inermis</i>	Western rock jasmine	<i>Androsace occidentalis</i>
Smooth scouring rush	<i>Equisetum laevigatum</i>	Western snowberry	<i>Symphoricarpos occidentalis</i>
Smooth sumac	<i>Rhus glabra</i>	Western wallflower	<i>Erysimum asperum</i>
Snow-on-the-mountain	<i>Euphorbia marginata</i>	Western wheatgrass	<i>Agropyron smithii</i>
Soft-stem bulrush	<i>Schoenoplectus tabernaemontanii</i>	White avens	<i>Geum canadense</i>
Solomon's seal	<i>Polygonatum biflorum</i>	White clover	<i>Trifolium repens</i>
Spearleaf groundcherry	<i>Physalis longifolia</i>	White lettuce	<i>Prenanthes aspera</i>
Spider milkweed	<i>Asclepias viridis</i>	White mulberry	<i>Morus alba</i>
St. John's-wort	<i>Hypericum perforatum</i>	White prairie clover	<i>Dalea candida</i>
Stickseed	<i>Hackelia virginiana</i>	White (Cudweed) sage	<i>Artemisia ludoviciana</i>
Stiff goldenrod	<i>Solidago rigida</i>	White snakeroot	<i>Eupatorium rugosum</i>
Stiff sunflower	<i>Helianthus rigidus</i>	White sweet clover	<i>Melilotus albus</i>
Stinkgrass	<i>Eragrostis cilianensis</i>	White vervain	<i>Verbena urticifolia</i>
Straw-colored flatsedge	<i>Cyperus strigosus</i>	White whitlowort	<i>Draba reptans</i>
Sulphur cinquefoil	<i>Potentilla recta</i>	White-eyed grass	<i>Sisyrinchium campestre</i>
Sun sedge	<i>Carex heliophila</i>	Whitegrass	<i>Leersia virginica</i>
Swamp milkweed	<i>Asclepias incarnata</i>	Whorled milkweed	<i>Asclepias verticillata</i>
Switchgrass	<i>Panicum virgatum</i>	Whorled milkwort	<i>Polygala verticillata</i>
Tall dropseed	<i>Sporobolus asper</i>	Wild alfalfa	<i>Psoralea tenuiflora</i>
Tall fescue	<i>Festuca arundinacea</i>	Wild bean	<i>Strophostyles leiosperma</i>
Tall nettle	<i>Urtica dioica</i>	Wild bergamot	<i>Monarda fistulosa</i>
Tall thistle	<i>Cirsium altissimum</i>	Wild lettuce	<i>Lactuca canadensis</i>
Tallhedge mustard	<i>Sisymbrium loeselli</i>	Wild licorice	<i>Glycyrrhiza lepidota</i>
Tansy mustard	<i>Descurainia pinnata</i>	Wild onion	<i>Allium canadense</i>
Three-square bulrush	<i>Schoenoplectus pungens</i>	Wild parsley	<i>Lomatium foeniculaceum</i>
Tick trefoil	<i>Desmodium illinoense</i>	Wild petunia	<i>Ruellia humilis</i>
Timothy	<i>Phleum pratense</i>	Wild plum	<i>Prunus americana</i>
Toothcup	<i>Ammannia robusta</i>	Wild strawberry	<i>Fragaria virginiana</i>
Toothed spurge	<i>Euphorbia dentata</i>	Willow-leaved lettuce	<i>Lactuca saligna</i>
Tumblegrass	<i>Schedonnardus paniculatus</i>	Windmill grass	<i>Chloris verticillata</i>
Velvet-leaf	<i>Abutilon theophrasti</i>	Winter cress	<i>Barbarea vulgaris</i>
Velvety gaura	<i>Gaura parviflora</i>	Wirestem muhly	<i>Muhlenbergia frondosa</i>
Venice mallow	<i>Hibiscus trionum</i>	Wood sedge	<i>Carex blanda</i>

Woodbine	<i>Parthenocissus vitacea</i>	Yellow sweet clover	<i>Melilotus officinalis</i>
Woolly plantain	<i>Plantago patagonica</i>	Yellow wood sorrel	<i>Oxalis stricta</i>
Yarrow	<i>Achillea millefolium</i>	Yerba de tajo	<i>Eclipta prostrata</i>
Yellow foxtail	<i>Setaria glauca</i>		

**Latin: English Name Equivalents of 370 Tallgrass Prairie Plants
(Based largely on Spring Creek Prairie list of Kay Kottas, 2000)**

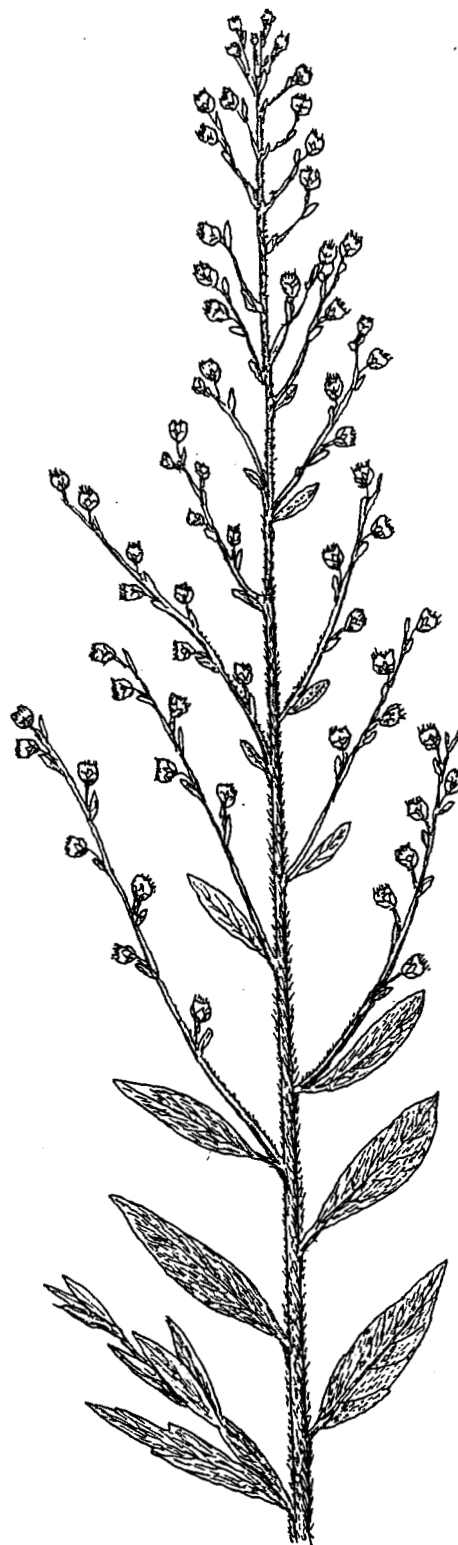
<i>Abutilon theophrasti</i> Velvet-leaf	<i>Asclepias verticillata</i> Whorled milkweed
<i>Acalypha rhomboidea</i> Rhombic copper leaf	<i>Asclepias viridiflora</i> Green milkweed
<i>Acer negundo</i> Box elder	<i>Asclepias viridis</i> Spider milkweed
<i>Achillea millefolium</i> Yarrow	<i>Asparagus officinalis</i> Asparagus
<i>Agalinis tenuifolia</i> Slender gerardia	<i>Aster (Symphyotrichum) ericoides</i> Heath aster
<i>Agastache nepetoides</i> Catnip giant hyssop	<i>Aster (Symphyotrichum oblongifolius)</i> Aromatic aster
<i>Agropyron smithii</i> Western wheatgrass	<i>Aster (Symphyotrichum sericeus)</i> Silky aster
<i>Agrostis stolonifera</i> Redtop	<i>Aster simplex</i> Panicked aster
<i>Allium canadense</i> Wild onion	<i>Astragalus canadensis</i> Canada milkvetch
<i>Amaranthus retroflexus</i> Rough pigweed	<i>Astragalus plattensis</i> Platte River milk-vetch
<i>Amaranthus rudis</i> Water hemp	<i>Astragalus crassicaarpus</i> Ground plum
<i>Ambrosia artemisiifolia</i> Common ragweed	<i>Baptisia bracteata</i> Plains wild indigo
<i>Ambrosia psilostachya</i> Western ragweed	<i>Barbarea vulgaris</i> Winter cress
<i>Ambrosia trifida</i> Giant ragweed	<i>Bidens cernuus</i> Nodding beggar-ticks
<i>Ammannia robusta</i> Toothcup	<i>Bidens frondosus</i> Devil's beggar-ticks
<i>Amorpha canescens</i> Lead plant	<i>Bidens vulgatus</i> Beggar's-ticks
<i>Amorpha fruticosa</i> False indigo	<i>Bouteloua curtipendula</i> Side-oats grama
<i>Amphicarpaea bracteata</i> Hog peanut	<i>Bouteloua gracilis</i> Blue grama
<i>Andropogon gerardii</i> Big bluestem	<i>Bouteloua hirsuta</i> Hairy grama
<i>Androsace occidentalis</i> Western rock jasmine	<i>Bromus inermis</i> Smooth brome
<i>Anemone canadensis</i> Candle anemone	<i>Bromus japonicus</i> Japanese brome
<i>Anemone caroliniana</i> Carolina anemone	<i>Bromus tectorum</i> Downy brome
<i>Antennaria neglecta</i> Field pussy-toes	<i>Buchloe dactyloides</i> Buffalo grass
<i>Apocynum cannabinum</i> Indian hemp dogbane	<i>Cacalia plantaginea</i> Indian plantain
<i>Arctium minus</i> Common burdock	<i>Callirhoe involucrata</i> Purple poppy mallow
<i>Aristida oligantha</i> Prairie three-awn	<i>Calylophus serrulatus</i> Plains yellow primrose
<i>Artemisia dracunculul.</i> Silky wormwood	<i>Calystegia sepium</i> Hedge bindweed
<i>Artemisia ludoviciana</i> White (Cudweed) sage	<i>Cannabis sativa</i> Hemp, marijuana
<i>Asclepias incarnata</i> Swamp milkweed	<i>Capsella bursa-pastoris</i> Shepherd's purse
<i>Asclepias lanuginosa</i> Woolly milkweed	<i>Cardaria draba</i> Hoary cress
<i>Asclepias stenophylla</i> Narrow-leaved milkweed	<i>Carduus nutans</i> Musk thistle
<i>Asclepias sullivantii</i> Sullivant's milkweed	<i>Carex bicknellii</i> Prairie sedge
<i>Asclepias syriaca</i> Common milkweed	<i>Carex blanda</i> Wood sedge
<i>Asclepias tuberosa</i> Butterfly milkweed	<i>Carex brevior</i> Short-beaked sedge

Carex emoryi Emory's sedge
Carex gravida Heavy sedge
Carex grisea Gray sedge
Carex heliophila Sun sedge
Carex hystericina Bottlebrush sedge
Carex meadii Mead's sedge
Carex stipata Sawbeak sedge
Carex vulpinoidea Fox sedge
Cassia chamaecrista Partridge pea
Catalpa speciosa Northern catalpa
Ceanothus herbaceus New Jersey tea
Celastrus scandens American bittersweet
Cenchrus longispinus Sandbur
Ceratophyllum demersum Hornwort
Chenopodium berlandieri Pitseed goosefoot
Chenopodium missouriense Pitseed goosefoot
Chenopodium pratericola Desert goosefoot
Chenopodium simplex Maple-leaved goosefoot
Chenopodium standleyanum Chenopodium
Chenopodium strictum Chenopodium
Chichorium intybus Chicory
Chloris verticillata Windmill grass
Chorispora tenella Blue mustard
Cirsium altissimum Tall thistle
Cirsium flodmanii Flodman's thistle
Cirsium undulatum Wavyleaf thistle
Cirsium vulgare Bull thistle
Comandra umbellata False toadflax
Conium maculatum Poison hemlock
Convolvulus arvensis Field bindweed
Conyza canadensis Horse-weed
Cornus drummondii Rough-leaved dogwood
Cuscuta polygonorum Smartweed dodder
Cyperus erythrorhizos Red-root flatsedge
Cyperus lupulinus Fern flatsedge
Cyperus odoratus Rusty flatsedge
Cyperus schweinitzii Sedge
Cyperus strigosus Straw-colored flatsedge
Dactylis glomerata Orchardgrass
Dalea candida White prairie clover
Dalea purpurea Purple prairie clover
Datura stramonium Jimson weed
Delphinium virescens Prairie larkspur
Descurainia pinnata Tansy mustard
Desmodium canadense Showy tick trefoil
Desmodium illinoense Illinois tickclover
Desmodium illinoense Tick trefoil
Dianthus armeria Deptford pink
Dichanthelium acuminatum Dichanthelium
Dichanthelium leibergii. Leiberg's dichanthelium
Dichanthelium oligosanthes Scribner dichanthelium
Digitaria sanguinalis Hairy crabgrass
Dyssodia papposa Fetid marigold
Echinacea angustifolia Narrow-leaved coneflower
Echinochloa crusgalli Barnyard grass
Eclipta prostrata Yerba de tajo
Elaeagnus angustifolia Russian olive
Eleocharis erythropoda Bald spikerush
Eleusine indica Goosegrass
Ellisia nyctelea Waterpod
Elymus canadensis Canada wild rye
Elymus villosus Hairy wild rye
Epilobium coloratum Purple leaved willow-herb
Equisetum arvense Field horsetail
Equisetum laevigatum Smooth scouring rush
Eragrostis cilianensis Stinkgrass
Eragrostis spectabilis Purple lovegrass
Erechtites hieracifolia Fireweed
Erigeron philadelphicus Philadelphia fleabane
Erigeron strigosus Daisy fleabane
Erysimum asperum Western wallflower
Erysimum repandum Bushy wallflower
Eupatorium rugosum White snakeroot
Euphorbia corollata Flowering spurge
Euphorbia cyathophora Fire-on-the-mountain
Euphorbia dentata Toothed spurge
Euphorbia esula Leafy spurge
Euphorbia marginata Snow-on-the-mountain
Euphorbia nutans Eyebane
Euthamia gymnospermoides. Viscid euthamia
Festuca arundinacea Tall fescue
Festuca obtusa Nodding fescue
Fragaria virginiana Wild strawberry
Fraxinus pennsylvanica Green ash
Galium aparine Catchweed bedstraw
Gaura longiflora Large-flowered gaura
Gaura parviflora Velvety gaura
Gentiana puberulenta Downy gentian
Geum canadense White avens
Glyceria striata Fowl mannagrass
Glycyrrhiza lepidota Wild licorice
Gnaphalium obtusifolium Old-field balsam

Grindelia squarrosa Curly-top gumweed
Hackelia virginiana Stickseed
Hedeoma hispidum Rough false pennyroyal
Hedyotis nigricans Narrowleaf bluet
Helianthus annuus Common sunflower
Helianthus grosseserratus Sawtooth sunflower
Helianthus rigidus Stiff sunflower
Helianthus tuberosus Jerusalem artichoke
Heliopsis helianthoides False sunflower; ox-eye
Hibiscus trionum Venice mallow
Hieracium longipilum Bearded hawkweed
Hordeum jubatum Foxtail barley
Hordeum pusillum Little barley
Hypericum perforatum St. John's-wort
Juncus interior Inland rush
Juniperus virginiana Red cedar
Koeleria pyramidata Junegrass
Kuhnia eupatorioides False boneset
Lactuca canadensis Wild lettuce
Lactuca oblongifolia Blue lettuce
Lactuca saligna Willow-leaved lettuce
Lactuca serriola Prickly lettuce
Lamium amplexicaule Henbit
Leersia oryzoides Rice cutgrass
Leersia virginica Whitegrass
Lemna minor Small duckweed
Leonurus cardiaca Motherwort
Lepidium densiflorum Peppergrass
Leptoloma cognatum Fall witchgrass
Lespedeza capitata Round-headed bush clover
Lespedeza stipulacea Korean lespedeza
Liatris aspera Rough gayfeather
Liatris punctata Dotted gayfeather
Linum sulcatum Grooved yellow flax
Lithospermum incisum Narrow-leaved puccoon
Lobelia siphilitica Blue lobelia
Lomatium foeniculaceum Wild parsley
Lotus purshianus Prairie trefoil
Lycopus americana American bugleweed
Lygodesmia juncae. Skeletonweed
Lysimachia ciliata Fringed loosestrife
Malva rotundifolia Round-leaved mallow
Matricaria matricarioides Pineapple weed
Medicago lupulina Black medic
Medicago sativa Alfalfa
Melilotus albus White sweet clover
Melilotus officinalis Yellow sweet clover
Menispermum canadense Moonseed
Mentha arvensis Field mint, wild mint
Microseris cuspidata False dandelion
Mirabilis hirsuta Hairy four-o'clock
Mirabilis linearis Narrow-leaved four-o'clock
Mirabilis nyctaginea Four o'clock
Mollugo verticillata Carpetweed
Monarda fistulosa Wild bergamot
Morus alba White mulberry
Muhlenbergia frondosa Wirestem muhly
Muhlenbergia racemosa Marsh muhly
Muhlenbergia schreberi Nimblewill
Nepeta cataria Catnip
Oenothera villosa Common evening primrose
Onosmodium molle False gromwell
Oxalis dillenii Gray-green wood sorrel
Oxalis stricta Yellow wood sorrel
Oxalis violacea Violet wood sorrel
Panicum dichotomiflorum Fall panicum
Panicum virgatum Switchgrass
Parietaria pennsylvanica Pennsylvania pellitory
Parthenocissus quinquefolia Virginia creeper
Parthenocissus vitacea Woodbine
Paspalum setaceum Sand paspalum
Pediomelum (=Psoralea) Scurfpeas
Penstemon cobaea Cobaea penstemon
Penstemon grandiflorus. Large beardtongue
Penthorum sedoides Ditch stonecrop
Phalaris arundinacea Reed canary grass
Phleum pratense Timothy
Physalis heterofolia Clammy ground-cherry
Physalis longifolia Spearleaf groundcherry
Physalis virginiana Virginia groundcherry
Phytolacca americana Pokeweed
Pilea pumila Clearweed
Plantago lanceolata English plantain
Plantago patagonica Woolly plantain
Plantago rugelii Rugel's plantain
Plantago virginica Pale-seeded plantain
Poa compressa Canada bluegrass
Poa pratensis Kentucky bluegrass
Polygala verticillata Whorled milkwort
Polygonatum biflorum Solomon's seal
Polygonum arenastrum Common knotweed
Polygonum bicorne Pink smartweed

Polygonum convolvulus Climbing buckwheat
Polygonum pennsylvanicum Pennsylvania smartweed
Polygonum persicaria Lady's thumb
Polygonum punctatum Water smartweed
Polygonum scandens False climbing buckwheat
Populus deltoides Eastern Cottonwood
Potamogeton foliosus Leafy pondweed
Potentilla norvegica Norwegian cinquefoil
Potentilla recta Sulphur cinquefoil
Prenanthes aspera White lettuce
Prunus americana Wild plum
Prunus virginiana Chokecherry
Psoralea argophylla Silver-leaf scurf-pea
Psoralea esculenta Prairie turnip
Psoralea tenuiflora Wild alfalfa
Quercus macrocarpa Bur oak
Ranunculus arbortivus Smallflower buttercup
Ranunculus sceleratus Cursed crowfoot
Ratibida columnifera Coneflower
Ratibida pinnata Tall Coneflower
Rhus glabra Smooth sumac
Ribes missouriense Missouri gooseberry
Robinia pseudo-acacia Black locust
Rorippa palustris Bog yellow cress
Rosa arkansana Prairie wild rose
Rosa multiflora Multiflora rose
Rubus occidentalis Black raspberry
Rudbeckia hirta Black-eyed susan
Rudbeckia laciniata Golden glow
Ruellia humilis Wild petunia
Rumex acetosella. Sheep sorrel
Rumex altissimus Pale dock
Rumex crispus Curly dock
Sagittaria calycina Hooded arrowhead
Sagittaria latifolia Common arrowhead
Salix amygdaloides Peachleaf willow
Salix exigua Sandbar willow
Salvia azurea Pitcher sage
Sambucus canadensis Elderberry
Sanicula canadensis Black snakeroot
Schedonnardus paniculatus Tumblegrass
Schizachyrium scoparium Little bluestem
Schoenoplectus pungens Three-square bulrush
Schoenoplectus tabernaemontanii Soft-stem bulrush
Scirpus atrovirens Dark green rush
Sclerochloa dura Hard grass
Scutellaria parvula Leonard's small skullcap
Senecio interrimus Lamb's-tongue groundsel
Senecio plattensis Prairie ragwort
Setaria glauca Yellow foxtail
Setaria viridis Green foxtail
Sicyos angulatus Bur cucumber
Silene antirrhina Sleepy catchfly
Silphium integrifolium Rosin-weed
Silphium laciniatum Compass plant
Silphium perfoliatum Cup plant
Sisymbrium loeselli Tallhedge mustard
Sisyrinchium campestre White-eyed grass
Smilax hispida Bristly greenbriar
Solanum carolinense Horsenettle
Solanum ptycanthum Eastern black nightshade
Solanum rostratum Buffalo bur
Solidago canadensis Canada goldenrod
Solidago gigantea. Late goldenrod
Solidago missouriensis Missouri goldenrod
Solidago nemoralis. Gray goldenrod
Solidago rigida Stiff goldenrod
Solidago speciosa. Showy goldenrod
Sonchus asper Common sow thistle
Sorghastrum nutans Indian grass
Sorghum bicolor Shattercane
Spartina pectinata Prairie cordgrass
Sphenopholis obtusata Prairie wedgegrass
Spiranthes magnicamporum Great Plains ladies'-tresses
Spiranthes vernalis Early ladies'-tresses
Spirodela polyrrhiza Greater duckweed
Sporobolus asper Tall dropseed
Sporobolus heterolepis Prairie dropseed
Sporobolus vaginiflorus Poverty grass
Stellaria pallida Chickweed
Stipa spartea Porcupine-grass
Strophostyles leiosperma Wild bean
Symphoricarpos occidentalis Western snowberry
Symphoricarpos orbiculatus Coralberry, buckbrush
Symphyotrichum (=Aster) spp. Asters
Taraxacum officinale Dandelion
Teucrium canadense American germander
Thalictrum dasycarpum Purple meadow rue
Thlaspi arvense Field pennycress
Toxicodendron radicans Poison ivy
Tradescantia bracteata Long-bracted spiderwort
Tragopogon dubius Goat's beard

Thlaspi arvense Field pennycress
Toxicodendron radicans Poison ivy
Tradescantia bracteata Long-bracted spiderwort
Tragopogon dubius Goat's beard
Tribulus terrestris Puncture vine
Tridens flavus Redtop grass
Trifolium pratense Red clover
Trifolium repens White clover
Triodanis perfoliata Venus' looking glass
Typha angustifolia Narrow-leaved cat-tail
Typha latifolia Broad-leaved cat-tail
Ulmus americana American bugleweed
Ulmus pumila Siberian elm
Ulmus rubra Red elm
Urtica dioica Tall nettle
Verbascum thapsus Common mullein
Verbena bracteata Prostrate vervain
Verbena hastata Blue vervain
Verbena stricta Hoary vervain
Verbena urticifolia White vervain
Verbena urticifolia White whitlowort
Vernonia baldwinii Western ironweed
Veronica agrestis Field speedwell
Veronica arvensis Corn speedwell
Vicia americana American vetch
Vicia villosa Hairy vetch
Viola pedatifida Prairie violet
Viola pratincola Blue prairie violet
Viola rafinesquii Johnny-jump-up
Viola sororia Downy blue violet
Vitis riparia River-bank grape
Wolffia columbiana Watermeal
Xanthium strumarium. Cocklebur



White (Cudweed) Sage (*Artemisia ludoviciana*).

Identification Keys to Some Common Nebraska Grassland Forbs

(Page references refer to descriptions in Farrar, 1990)

Key to Common Nebraska Goldenrods (*Solidago* & *Euthamia*)

A Flowers in a terminal, flat-topped cluster or tight group at end of central axis

B. Leaves without glandular dots... **Rigid goldenrod**. *S. rigida*. (p 121). Widespread

BB. Leaves with tiny glandular dots... **Grassleaf goldenrod**, *Euthamia graminifolia*. (p. 119.) Widespread.

AA Flowers not in terminal cluster, often in cone-like panicles

B Flowers in small clusters in leaf axils or a straight cylindrical cluster

C. Leaf veins nearly parallel... **Canada goldenrod**. *S. canadensis* (p. 121). Widespread

CC. Veins spreading from midrib... **Showy-wand goldenrod**... *S. speciosa* (p. 120). Eastern fourth of Nebraska.

- BB. Flowers terminal, in racemes (short stalks off a main axis) or panicle (coming of a main branch), nodding, and with the heads mainly along one side

C Leaves mostly basal, the upper ones progressively reduced

D. Stems smooth... **Prairie goldenrod**. *S. missouriensis* (p. 120). Widespread

DD. Stem slightly hairy... **Gray goldenrod**. *S. nemoralis*. Widespread.

CC. Leaves mostly on the stem, not progressively reduced.

D. Leaves with a single main vein... **Elm-leaved goldenrod**. *S. ulmifolia*. Rare in southeastern Nebraska

DD. Leaves with three prominent veins.

E. Leaves and stem smooth 5-6 feet tall... **Late goldenrod**. *S. gigantea*. (p. 121.) Widespread.

EE. Leaves rough or pubescent 1-4 feet tall

F. From 2-4 ft. tall. ... **Canada goldenrod**. *S. canadensis* (p. 121). Widespread

FF. From 12-20" tall... **Soft goldenrod** *S. mollis*. Uncommon.

Key to Common Nebraska Gayfeathers (*Liatris*)

A. **Heads 4-6 flowered, leaves linear, with tiny dots**... *L. punctata* (**Dotted gayfeather**). Statewide. (p. 176)

AA. **Heads usually with 10 or more flowers, leaves variably punctate (dotted)**

B. Spikes with leafy supports longer than florets, to 2 ft tall, upper stem not hairy; flower bracts with short pointed tips ... *L. squarosa* = *glabrata* (**Scaly gayfeather** or **Blazing star**). Statewide, sandy grasslands. (p. 175)

BB. Spikes not with conspicuous leafy supports below flower clusters, often 3-5 ft tall

C. Spikes interrupted, leaves with rough edges, bracts rounded, upper stem hairy... *L. aspera* (**Rough gayfeather**). Eastern half of Nebraska. (p. 177)

CC, Spikes continuous, leaves not with rough edges, to 5 ft tall Lower leaves much longer basally (to 20"), flower bracts spreading, long-pointed... *L. pycnostachya* (**Prairie gayfeather**). Eastern third of Nebraska (p. 176)

Key to Common Nebraska Milkweeds (*Asclepias*)

1a. Habitat: Upland fields, prairies, wasteland

1. Flowers orange...**Butterfly milkweed**, (*A. tuberosa*) p. 127 (Southeastern Nebraska)
2. Flowers flesh-colored, pink...**Common milkweed**, (*A. syriaca*) p. 163 (Widespread in eastern Nebraska)
3. Flowers green and purple... **Spider or Green-flowered milkweed** (*A. viridis*), p. 16 (Southeastern Nebraska)
4. Flowers all green: Go to 5
 - 5a. Leaves small, linear, flowers terminal on unbranched stems...**Whorled milkweed** (*A. verticilla*) p. 46. (Widespread)
 - 5b. Leaves narrow & long, flowers clustered on short stems...**Narrow-leaved milkweed** (*A. stenophylla*) (p. 17) (Widespread)
 - 5c. Leaves broad ovate, flowers terminal and in leaf axils...**Green milkweed** (*A. viridiflora*) (p. 17) (Widespread)

1b. Habitat: Moist, open bottomlands, floodplains

- Flowers pink, rarely white, leaves linear... **Swamp milkweed** (*A. incarnata*) (p. 165) (Widespread)

1c. Habitat: Low prairies

- Flowers pink, leaves oval, thick,... **Smooth or Sullivant's milkweed** (*A. sullivantii*), (p. 162)(Eastern Nebraska)

Key to Common Nebraska Sunflowers (*Helianthus & Heliopsis*)

1a. Leaves with long petioles (leaf stems), petioles not winged

- 2a. Leaves large, ovate to broad, with irregular large teeth, mostly alternate except uppermost, disk without white center... **Common sunflower**, *H. annuus*. Widespread. p. 125
- 2b. Leaves ovate to lance-like, usually not notched and few teeth, all leaves alternate, disk with whitish center... **Plains sunflower**, *H. petiolaris*. Widespread, p. 122
- 2c. Leaves *opposite* on long petioles, broadly ovate to triangular, large teeth, hairy. ..**False sunflower or Oxeye**, *Heliopsis helianthoides*. Eastern Nebraska. p. 116

1b. Leaves with winged (having flattened edges) petioles

- 2d. Leaves lance-shaped, coarsely toothed, long, 3-veined, rough hairy above, downy below...**Jerusalem artichoke** *H. tuberosus*. Widespread in east. p. 124
- 2e. Leaves long, coarsely toothed, petioles often with small wings, upper leaves closely spaced, alternate, lower ones usually opposite...**Sawtooth sunflower**, *H. grosseserratus*. Mostly eastern Nebraska. p. 124

1c. Leaves sessile or with very short petioles.

- 2f. Leaves densely gray-green, broadly ovate, opposite, teeth inconspicuous...**Ashy sunflower**, *H. mollis*. Rare in southeastern Nebraska.
- 2g. Leaves rough, arched and folded into a trough, toothless, with conspicuous middle veins...**Maximilian's sunflower**, *H. maximiliani* Widespread. p. 125
- 2h. Leaves fairly uniformly lance-like, rough hairy, very short petioles, almost all opposite, 9-15 leaves below a few flowers, teeth small...**Stiff sunflower**, *H. rigidus*. Central & western Nebraska.
- 2i. Leaves variable, broadly lance-like, rough, hairy, & toothless, with very short petioles...**Hairy sunflower**, *H. hirsutus*. Southeastern Nebraska.

Key to Common Nebraska Thistles (*Cirsium* spp. and *Carduus nutans*)

1. Flower head white or pale pink to pale purple; if colored then heads small, in dense clusters; plant to 4 ft. tall
 - A. Leaves lighter below than above, nodding flower heads 1+ inch wide...**Platte thistle** (*C. canescens*). Mostly western.
 - AA. Leaves whitish above and below, heads 1/2" wide & clustered...**Canada thistle** (*C. arvense*). Statewide, moist sites.(p. 156)
2. Flower heads pink to purple, not white and not densely clustered; variable height
 - A. Stem with spiny wings below leaf bases, plant up to 6+ ft tall
 - a. Flower head bracts reflexed down, nodding head, leaves not hairy above...**Musk thistle** (*Carduus nutans*). Eastern Nebraska, moist sites.(p. 159)
 - aa. Flower head with erect bracts that are yellow-tipped, head erect, leaves hairy above...**Bull thistle** (*C. vulgare*). Statewide, disturbed sites.(p. 158)
 - AA. Stem without spiny wings below leaf bases, plant up to 5 ft tall
 - b. Leaves generally oval in shape, not so highly dissected and spiny
 1. Leaves not wavy-edged, head not sticky, to 5 ft tall...**Tall thistle** (*C. altissimum*). Mostly eastern Nebraska.
 2. Leaves wavy-edged, head sticky. to 3 ft tall ...**Wavyleaf thistle** (*C. undulatum*). Mostly western Nebraska.
 - bb. Leaves not oval. very dissected & spiny. undersides very hairy
 1. Upper leaf surface smooth green, leaves large, to 5 ft tall...**Field thistle** (*C. discolor*) Rare in southeastern Nebraska.
 2. Upper leaf surface partly hairy, leaves small, to 2.5 ft. tall ...**Flodman's or Prairie thistle** (*C. flodmanii*). Statewide, in moist soils.(p. 158)

Key to Common Nebraska Sages & Sageworts (*Artemisia*)

A Herbs, stem base not woody

- a. Leaf segments 2 mm. or more wide, or entire and over 2 mm wide, plant to 40" high,
 - aa. Leaves with dense woolly & white pubescence, at least below... **White or Cudweed sage** (*A. ludoviciana*). Statewide.
 - bb. Leaves green and glabrous, to 3" long, stems reddish... **Green sagewort** (*A. dracunculus*). Widespread
- b. Leaf segments often less than 2 mm. wide
 - aa. Receptacle hairy between flowers; leaf segments <1 mm, plant to 2 ft tall...**Fringed sagewort** (*A. frigida*) West and central Nebraska
 - bb. Receptacle not hairy between flowers; leaf segments > 1 mm, to 3 ft tall..
 - aaa. Leaves mostly entire, to 6 mm. wide, surface glabrous (shiny) green, heads numerous, in compound panicle...**Green sagewort** (*A. dracunculus*). Widespread,
 - bbb. Leaves usually subdivided; if entire then tormentose (woolly) leaves to 1.5 cm. wide, heads numerous, in open panicle...**Cudweed or White sage** (*A. ludoviciana*). Statewide.

AA. Shrubs or subshrubs, the stem base woody

B: Leaves deeply divided, repeatedly dissected., to 1/2 m high ...*A. frigida* (Fringed sagewort).
West and central Nebraska

BB: Leaves entire or 3-cleft at tip, usually over 1/2 m high

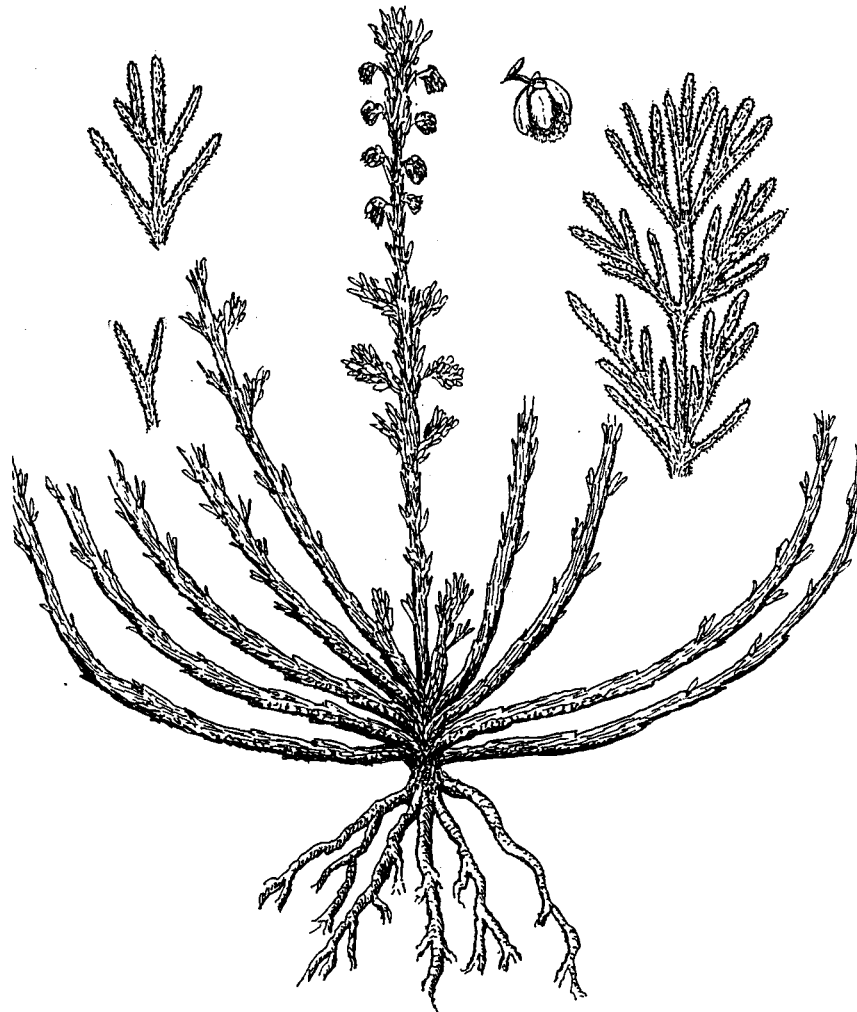
aa. Leaves simple or deeply 3-cleft into linear lobes., to 1 m. high.. *A. filifolia* (Sand
sagebrush). West and southwestern Nebraska.

bb. Leaves lanceolate or elliptic-lanceolate, to 1 m. high... *A. cana* (Silver sagebrush).
Northwestern panhandle.

cc. Leaves shallowly 3-cleft at tip, to 4 m high...*A. tridentata* (Big sagebrush). Northwestern
panhandle

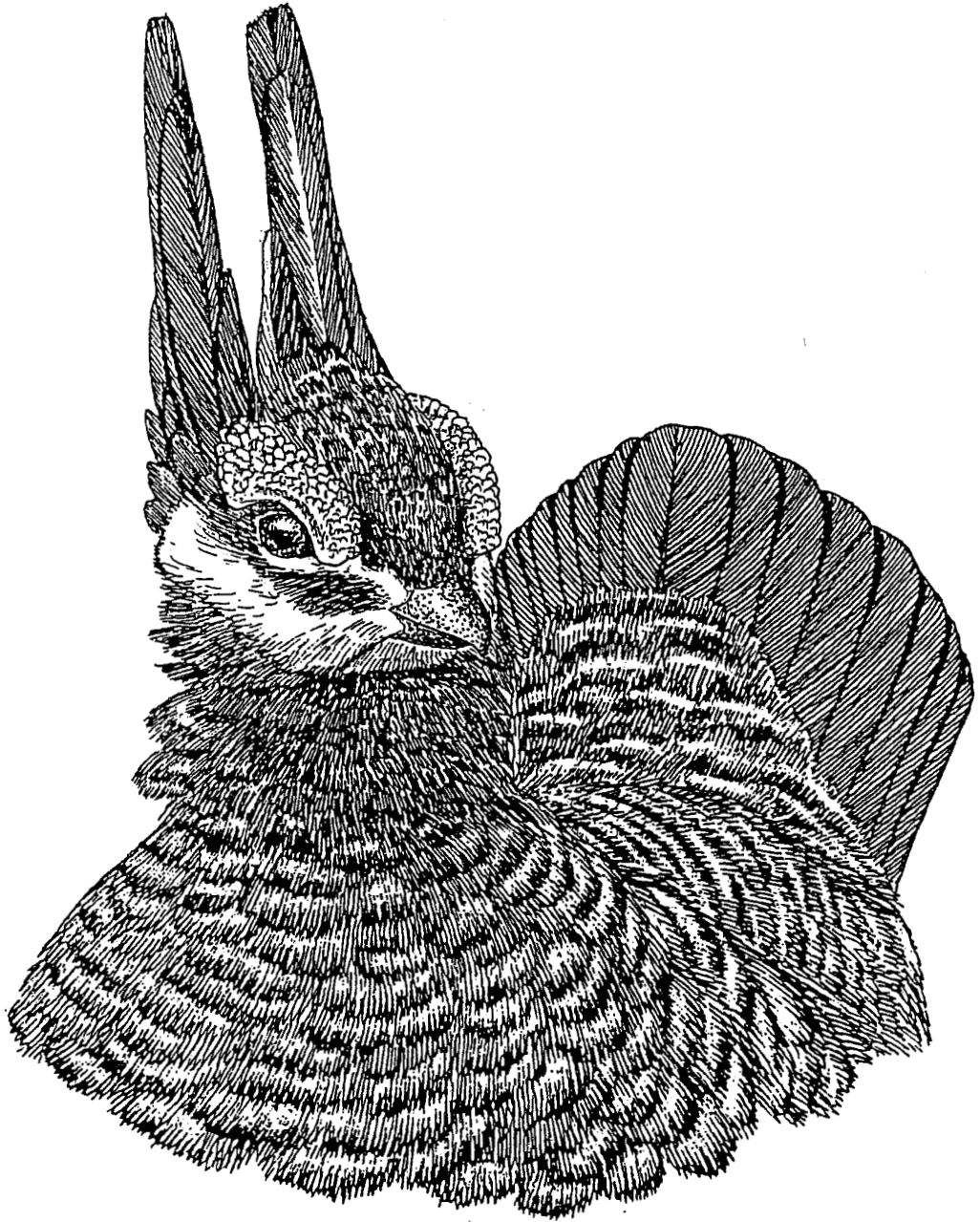
Note:

**Technical keys to all of the vascular plants of Nebraska can be found in *The
Flora of Nebraska*, by R. Kaul, D. Sutherland and S. Rolfsmeier, 2006,
Conservation & Survey Division, School of Natural Resources, U. of Nebraska-
Lincoln. Lincoln, NE. 966 pp.**



Fringed sagewort (*Artemisia frigida*)

Part 3: Animals of the Tallgrass Prairies



Drawing by P. Johnsgard: Greater Prairie-chicken

Greater Prairie-chickens and Native Prairies

The greater prairie-chicken has an English vernacular name that sadly understates both its beauty and its aesthetic values. Granted this name makes clear that the bird's presence provides a reliable indication of native prairies, and it is somewhat "greater" in size than the lesser prairie-chicken, which was eliminated from western Nebraska more than 70 years ago. But the prairie-chickens are no more chickens than is a turkey from Turkey. Perhaps the prairie-chicken should have been called something like "soul-of-the prairie," or possibly "spirit-of-the-grasslands," forcing anybody who wants to kill it to think twice about his motives. Those who have spent a spring sunrise with prairie-chickens will know exactly what is meant by these semantic intimations of the holy; there is a sense of the sublime when one is in the presence of displaying prairie-chickens. They are acting out the identical courtship routines that they inherited from distant ancestors, on grassland sites made sacred through their annual use by uncountable generations past. Additionally they are determining, by both battle and bluff, which individual males are most fit to transmit their genes to the next generation through differentially being able to attract the females that visit the lek when ready to lay their eggs. Darwin's concept of survival and reproduction of the fittest is played out on a daily basis on these grassy hilltops every spring. Being able to witness these performances is an auspicious act in the original Latin sense; the actions of the birds provide a reliable augury relative to the future fortunes of the species.

We have far too few sacred natural sites in eastern Nebraska; most of the Pawnee, Omaha and Otoe holy sites have since been cleared and "developed," or their exact locations have been long forgotten. But we must not forget the locations of prairie-chicken leks; they whisper to us of secret places where grama-grasses and bluestems grow thick on the ground, and where flint arrowheads are likely to lie buried beneath the thatch and loess. They tell us of meadowlark and dickcissel song-perches, and of traditional coyote hunting grounds. They are as much a connection to our past as are the ruts left in the Nebraska soil by Conestoga wagons, or the preserved costumes of Native Americans Plains cultures carefully stored in museums. But such eroding wagon trails and fading costumes are essentially static and retrospective icons; prairie-chickens are the vital essence of life itself, clinging to their brief moments in the sun with all the energies they can muster. They risk attack by both early-rising hawks and late-flying owls, simply to have a chance to reproduce before they are all too quickly cut down by predators, disease or a hunter's gun. The feathers that they wear, and that are sometimes strewn over the ground when a predator has been successful, are the camouflage colors of dead grass, and their soft hypnotic voices are both exciting and yet at the same time soothing, like the mantras emanating from a Hindu temple. They comprise a New World symphony all by themselves, a harmony of sound, color and movement.

It is easy enough to save these wonderful sights and sounds for following generations. We only need recognize that both prairies and prairie-chickens need to be preserved, if for no other reason than to help us understand what Nebraskans such as Willa Cather meant when she wrote lovingly of our "shaggy grass land" or what John Weaver meant when he said that "civilized man is destroying a masterpiece of nature without recording for posterity that which he has destroyed." We may well sometimes destroy the things we love out of ignorance; we should never do it purposefully.

To provide some sense of what is at stake, the eastern race of the greater prairie-chicken (the Pilgrim's famous "heath hen") is now extinct in all seven Atlantic Coast states where it once occurred. The Attwater's race of the Gulf Coast has been extirpated from Louisiana and is critically endangered

in Texas. The species' interior race has been extirpated from 11 states and provinces, and is marginally surviving in eight others. Only three states (Nebraska, Kansas and South Dakota) still allow for regular, virtually uncontrolled, prairie-chicken hunting, although in none of these states are agency biologists willing to even hazard a guess as to how many birds still exist there. The annual hunter kill in Kansas has dropped from a peak of 109,000 in the early '80s to about 12,000 in 1999, paralleling a comparable 70-90 percent decline in Missouri's population over the same time span. Although as recently as 1980 there may have been as many as a million greater prairie-chickens present in North America, by the late 1990s no more than 200,000-300,000 were believed to be present. Of the 55,000 birds estimated to have been shot legally by hunters in 1997, some 35,000 were killed in Nebraska.

Rather than permitting the killing of prairie-chickens, state game and parks agencies around the Midwest could better spend their efforts in preserving every last shred of prairie they can locate, thereby conserving not only prairie-chickens but also more than 200 species of native prairie plants, some 30-odd grassland-adapted birds that like the prairie-chicken are nearly all declining nationally, and countless other living things. They would also thus be preserving special places of spiritual renewal for human visitors who prefer seeing, enjoying and remembering the natural world, rather than providing hunters with opportunities for collecting a few soon-forgotten feathered trophies.

By comparison, a spring sunrise spent in the company of prairie-chickens can be as meaningful as witnessing a miraculous rebirth, for that is what is actually occurring. The odor of freshly greening grass is infinitely more memorable than the stringent smell of burnt gunpowder, and the harmonic cooing notes of a dozen male grouse calling simultaneously on a prairie hilltop in the half-light of dawn is as compellingly beautiful as a string ensemble playing a late Beethoven quartet. For those who know the current perilous status of prairie-chickens, the soft sounds might also bring to mind the ineffable sadness of the ending of Tchaikovsky's last (Pathétique) Symphony, with its intimations of despair and forebodings of death. Perhaps it is not too late to alter this ending, or at least to add a final triumphant coda. We only need to save the prairies to accomplish this small miracle ourselves.

Courtship Behavior of the Greater Prairie-chicken

Within each male's greater prairie-chicken's territory, which is within the collective area used by all the males, called the lek,, he spends his time performing a variety of postures, movements and calls that both serve to ward off potential competitors and tend to attract females. Much of the early display period is actually spent in establishing an adequate amount of space where he can posture and call without constant attacks from other males. Older, more experienced males are able to establish larger and more desirable territories than younger ones, namely those locations situated near the middle of the overall lekking area, which are the sites that females seek out when soliciting mating. Somehow females can rapidly recognize and are attracted to these most dominant males, or "alpha cocks," perhaps by their interior position and probably also by their relative vigor and frequency of displays.

Much the most characteristic display of all greater prairie-chickens is the booming posture and call. In assuming the preliminary forward posture, the tail is cocked to at least the vertical, the ear-like feathers call pinnae are variably raised, and the primaries of both wings are lowered while still held within the flank feathers, rather than being spread laterally as in sharp-tailed grouse. The display sequence begins with a rapid foot-stamping that lasts up to two seconds, while the feet are alternately stamped at a rate of about 20 times per second, producing a sound audible up to 100 feet away. The tail is then quickly opened and shut twice, producing a seemingly single click audible only at close range, and the first of the three booming or tooting notes are uttered as the yellow air sacs rapidly inflate. The three-noted call varies little in loudness, or in fundamental sound frequency, but the third

and longest note (lasting about a second) has better developed harmonics, making its average pitch seem somewhat higher. The head is jerked down slightly during the first note, but nearly so conspicuously as in the lesser prairie-chicken. The air sacs also slightly vary in degree of inflation during the three notes, being most highly expanded during the final note. The call's typical transcription, "Old-Mul-doon," describes the sound well, a noise much like that which is produced by blowing over the opening of a large bottle. The tail is progressively spread and again closed toward the end of the vocalization, and the beak finally opens as the air sacs deflate. The tail is progressively spread and again closed toward the end of the vocalization, and the beak finally opens as the air sacs deflate. No special direction is maintained during booming, over time the male is likely to face all directions. Booming occurs by each male at a usual rate of several times per minute, but is especially frequent and intense when females make their appearance on the lek.

Under favorable conditions this call can be heard well over a mile away, and rarely it may carry for several miles, normally making it well within the home ranges of many other prairie-chickens. In favorable habitats, leks are often spaced little more than a mile apart, so under such conditions female prairie-chicken are probably never out of the hearing range of males from at least the nearest lek, and perhaps they can hear several. The low frequency notes are especially well adapted for long-distance transmission over open habitats, in contrast to high-pitched sounds that tend to be easily absorbed by surrounding vegetation and wind.

The other most common call is a cackling note, sometimes called the "staccato cackle", and usually uttered from an upright posture. This or a very similar cackle is sometime also uttered immediately after short, jumping flights, called "flutter-jumps," which are usually initiated when a new bird arrives on the lek, regardless of its sex.

Although the cackles are largely oriented toward other males, one call is uttered only in the visual presence of females. It is a strange, whooping call, sometimes described as a "poik" note, lasting about a half-second. It has a fundamental frequency about twice that of the booming call but otherwise is somewhat similar to it acoustically. There is no associated obvious neck inflation, but at times sharp tail-clicks may precede it, as is the case with booming. It also carries relatively long distances, and can be more easily localized aurally as to the sound source than can booming.

Males also use one specific postural display directed only toward females, and only when the male is close to a specific female and in a precopulatory situation. This is a "bowing" or "prostrate" posture, with the breast lowered to the ground, the wings outstretched to the side, and the pinnae and tail fully cocked. The posture is silent, and may be held only for a few seconds. Often copulation immediately follows. The occurs in the usual manner of all gallinaceous birds such as chickens, pheasants and turkeys, with the female lying with her breast flat on the ground, and with her wings spread sufficiently far as to provide a stable platform for the male. Copulation is very brief, and if successful, the female shakes herself, preens for a time, and then leaves the lek rather promptly. A moderate percentage of the total copulation attempts are unsuccessful, often because of harassment and direct physical interference by nearby males or even by other females.

Aggressive encounters between males involve several different postures, such as confrontational crouching while facing one another and uttering cackling or whining notes. The birds may also walk parallel to a rival in an upright stance, often simultaneously booming. Fights are most common early in the lekking season, while territorial boundaries are still being actively contested. They involve alternate or simultaneous jumping into the air, attempting to strike the opponent with the feet or the wings, or pecking the other bird's throat or breast. Often feathers are pulled out during these contests, and I have seen some bleeding scratches on the bare air sacs, but fatalities have never been reported.

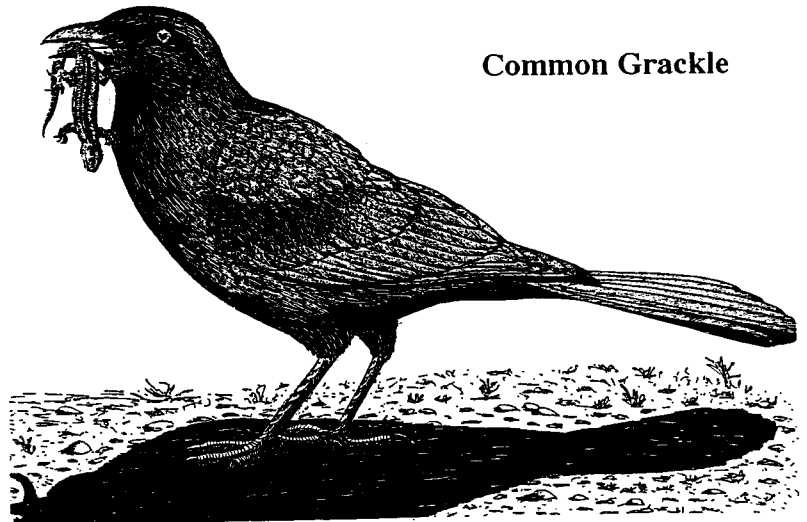
Seasonal Checklist of Nebraska Tallgrass Ecoregion Birds (Gage County)
 (Adapted by Paul Johnsgard from "The Birds of Gage County, Nebraska," by Kent Fiala
 (Nebraska Bird Review 38(3): 42–72).

Abundance Abbreviations:

- A: Abundant
- C: Common
- U: Uncommon
- O: Occasional
- R: Rare or Local
- Ac: Accidental

Seasonal Abbreviations:

- PR: Permanent Resident
- SR: Summer Resident (Breeding assumed)
- SV: Summer Visitant (non-breeding)
- M: Spring & Fall Migrant
- SM: Spring Migrant
- FM: Fall Migrant
- WM: Wintering Migrant
- V: Vagrant in Nebraska (varied seasons)



Common Grackle

Anatidae: Swans, Geese, and Ducks

- ___ Greater White-fronted Goose, *Anser albifrons* OM
- ___ Snow Goose, *Chen caerulescens* UM
- ___ Ross's Goose, *Chen rossii* UM
- ___ Cackling Goose, *Branta hutchinsii* CM
- ___ Canada Goose, *Branta canadensis* CMSR
- ___ Wood Duck, *Aix sponsa* OMSR
- ___ Gadwall, *Anas strepera* OM
- ___ Eurasian Wigeon, *Anas penelope* UM
- ___ American Wigeon, *Anas americana*
- ___ American Black Duck, *Anas rubripes*
- ___ Mallard, *Anas platyrhynchos* UMSR
- ___ Blue-winged Teal *Anas discors* UMSR
- ___ Cinnamon Teal *Anas cyanoptera* RM
- ___ Northern Shoveler, *Anas clypeata* IM
- ___ Northern Pintail, *Anas acuta* UM
- ___ Green-winged Teal *Anas crecca* UM
- ___ Canvasback, *Aythya valisineria* OM
- ___ Redhead, *Aythya americana* OM
- ___ Ring-necked Duck, *Aythya collaris* OM
- ___ Lesser Scaup, *Aythya affinis* UM
- ___ Long-tailed Duck, *Clangula hyemalis* RM
- ___ Bufflehead, *Bucephala albeola* OM
- ___ Common Goldeneye, *Bucephala clangula* RM
- ___ Hooded Merganser, *Lophodytes cucullatus* OM

- ___ Red-breasted Merganser, *Mergus serrator* RM
 - ___ Common Merganser, *Mergus merganser* OM
 - ___ Ruddy Duck, *Oxyura jamaicensis* OM
- Phasianidae: Partridges, Grouse, etc**
- ___ Ring-necked Pheasant, *Phasianus colchicus* CPR
 - ___ Greater Prairie-Chicken, *Tympanuchus cupido* RPR?
 - ___ Wild Turkey, *Meleagris gallopavo* Reintroduced PR

Odontophoridae: New World Quail

- ___ Northern Bobwhite, *Colinus virginianus* CPR

Gaviidae: Loons

- ___ Common Loon, *Gavia immer* RM

Podicipedidae: Grebes

- ___ Pied-billed Grebe, *Podilymbus podiceps* CM
- ___ Red-necked Grebe, *Podiceps grisegena* RM
- ___ Eared Grebe, *Podiceps nigricollis* OM

Pelecanidae: Pelicans

- ___ American White Pelican, *Pelecanus erythrorhynchos* OM

Phalacrocoracidae: Cormorants

- ___ Double-crested Cormorant, *Phalacrocorax auritus* OM

Ardeidae: Bitterns and Herons

- ___ Great Blue Heron, *Ardea herodias* UMSR
- ___ Little Blue Heron, *Egretta caerulea* OSV

- __ Green Heron, *Butorides virescens* UMSR
- __ Black-crowned Night-Heron, *Nycticorax nycticorax* OM
- __ Yellow-crowned Night-Heron, *Nyctanassa violacea* OMSV

Cathartidae: American Vultures

- __ Turkey Vulture, *Cathartes aura* UMSR

Accipitridae: Kites, Hawks, Eagles

- __ Osprey, *Pandion haliaetus* OM
- __ Northern Harrier, *Circus cyaneus* UPR
- __ Sharp-shinned Hawk, *Accipiter striatus* UVW
- __ Cooper's Hawk, *Accipiter cooperii* OWM
- __ Northern Goshawk, *Accipiter gentilis* RWM
- __ Red-shouldered Hawk, *Buteo lineatus* RWM
- __ Broad-winged Hawk, *Buteo platypterus* RM
- __ Swainson's Hawk, *Buteo swainsoni* OM
- __ Red-tailed Hawk, *Buteo jamaicensis* CPR
- __ Ferruginous Hawk, *Buteo regalis* RM
- __ Rough-legged Hawk, *Buteo lagopus* UWM
- __ Golden Eagle, *Aquila chrysaetos* RWM

Falconidae: Falcons

- __ American Kestrel, *Falco sparverius* UPR
- __ Merlin, *Falco columbarius* RM
- __ Prairie Falcon, *Falco mexicanus* RWM
- __ Peregrine Falcon, *Falco peregrinus* RWM

Rallidae: Rails, Gallinules, Coots

- __ American Coot, *Fulica americana* UM

Gruidae: Cranes

- __ Sandhill Crane, *Grus canadensis* RM
- __ Whooping Crane, *Grus americana*

EXTIRPATED

Charadriidae: Plovers

- __ Semipalmated Plover, *Charadrius semipalmatus* OM
- __ Killdeer, *Charadrius vociferus* CSR

Recurvirostridae: Stilts and Avocets

- __ American Avocet, *Recurvirostra americana* OM

Scolopacidae: Sandpipers, Phalaropes

- __ Greater Yellowlegs, *Tringa melanoleuca* UM
- __ Lesser Yellowlegs, *Tringa flavipes* UM
- __ Solitary Sandpiper, *Tringa solitaria* OM
- __ Willet, *Catoptrophorus semipalmatus* OM
- __ Spotted Sandpiper, *Actitis macularia* UM
- __ Upland Sandpiper, *Bartramia longicauda* RM
- __ Long-billed Curlew, *Numenius americanus* OM
- __ Hudsonian Godwit, *Limosa haemastica* OM
- __ Sanderling, *Calidris alba* RM
- __ Semipalmated Sandpiper, *Calidris pusilla* UM
- __ Western Sandpiper, *Calidris mauri* OM
- __ Least Sandpiper, *Calidris minutilla* OM

- __ White-rumped Sandpiper, *Calidris fuscicollis* OM

- __ Baird's Sandpiper, *Calidris bairdii* OM
- __ Pectoral Sandpiper, *Calidris melanotos* UM
- __ Dunlin, *Calidris alpina* OM

- __ Stilt Sandpiper, *Calidris himantopus* RM

- __ Buff-breasted Sandpiper, *Tryngites subruficollis* RM

- __ Long-billed Dowitcher, *Limnodromus scolopaceus* RM

- __ Wilson's Snipe, *Gallinago delicata* UM

- __ American Woodcock, *Scolopax minor* RM

- __ Wilson's Phalarope, *Phalaropus tricolor* OM

Laridae: Gulls and Terns

- __ Franklin's Gull, *Larus pipixcan* UM

- __ Ring-billed Gull, *Larus delawarensis* OM

- __ California Gull, *Larus californicus*

- __ Sabine's Gull, *Xema sabini* RM

- __ Common Tern, *Sterna hirundo* RM

- __ Forster's Tern, *Sterna forsteri* OM

- __ Least Tern, *Sterna antillarum* RM

- __ Black Tern, *Chlidonias niger* RM

Columbidae: Pigeons and Doves

- __ Rock Pigeon, *Columba livia* CPR

- __ Mourning Dove, *Zenaida macroura* APR

Cuculidae: Cuckoos and Anis

- __ Black-billed Cuckoo, *Coccyzus erythrophthalmus* OSR

- __ Yellow-billed Cuckoo, *Coccyzus americanus* USR

Tytonidae: Barn Owls

- __ Barn Owl, *Tyto alba* RPR

Strigidae: Typical Owls

- __ Eastern Screech-Owl, *Otus asio* UPR

- __ Great Horned Owl, *Bubo virginianus* UPR

- __ Snowy Owl, *Nyctea scandiaca* RWM

- __ Long-eared Owl, *Asio otus* OPR

- __ Short-eared Owl, *Asio flammeus* OWM

- __ Northern Saw-whet Owl, *Aegolius acadicus* RWM

Caprimulgidae: Goatsuckers

- __ Common Nighthawk, *Chordeiles minor* CSR

Apodidae: Swifts

- __ Chimney Swift, *Chaetura pelagica*

- __ White-throated Swift, *Aeronauts saxatalis*

Trochilidae: Hummingbirds

- __ Ruby-throated Hummingbird, *Archilochus colubris* UM, RSR

Alcedinidae: Kingfishers

- __ Belted Kingfisher, *Ceryle alcyon* UPR

Picidae: Woodpeckers

- __ Lewis's Woodpecker, *Melanerpes lewis*
- __ Red-headed Woodpecker, *Melanerpes erythrocephalus* CSR
- __ Red-bellied Woodpecker, *Melanerpes carolinus* CPR
- __ Yellow-bellied Sapsucker, *Sphyrapicus varius* RWM
- __ Williamson's Sapsucker, *Sphyrapicus thyroideus*
- __ Downy Woodpecker, *Picoides pubescens* CPR
- __ Hairy Woodpecker, *Picoides villosus* CPR
- __ Northern Flicker, *Colaptes auratus* CPR
- __ Pileated Woodpecker, *Dryocopus pileatus*

Tyrannidae: Tyrant Flycatchers

- __ Olive-sided Flycatcher, *Contopus cooperi* RM
- __ Eastern Wood-Pewee, *Contopus virens* CSR
- __ Yellow-bellied Flycatcher, *Empidonax flaviventris*
- __ Willow Flycatcher, *Empidonax traillii* RSR
- __ Least Flycatcher, *Empidonax minimus* UM
- __ Eastern Phoebe, *Sayornis phoebe* CSR
- __ Great Crested Flycatcher, *Myiarchus crinitus* CSR
- __ Western Kingbird, *Tyrannus verticalis* CSR
- __ Eastern Kingbird, *Tyrannus tyrannus* CSR
- __ Scissor-tailed Flycatcher, *Tyrannus forficatus* OSR

Laniidae: Shrikes

- __ Loggerhead Shrike, *Lanius ludovicianus* UM

Vireonidae: Vireos

- __ White-eyed Vireo, *Vireo griseus* OM
- __ Bell's Vireo, *Vireo bellii* USR
- __ Blue-headed Vireo, *Vireo solitarius* RM
- __ Yellow-throated Vireo, *Vireo flavifrons* RM
- __ Warbling Vireo, *Vireo gilvus* CSR
- __ Philadelphia Vireo, *Vireo philadelphicus* RM
- __ Red-eyed Vireo, *Vireo olivaceus* CSR

Corvidae: Jays, Magpies, and Crows

- __ Blue Jay, *Cyanocitta cristata* CPR
- __ Black-billed Magpie, *Pica pica* RWM
- __ American Crow, *Corvus brachyrhynchos* CPR

Alaudidae: Larks

- __ Horned Lark, *Eremophila alpestris* CPR

Hirundinidae: Swallows

- __ Purple Martin, *Progne subis* CSR
- __ Tree Swallow, *Tachycineta bicolor* USR
- __ N Rough-winged Swallow, *Stelgidopteryx serripennis* USR
- __ Bank Swallow, *Riparia riparia* USR
- __ Barn Swallow, *Hirundo rustica* CSR

- __ Cliff Swallow, *Petrochelidon pyrrhonota* USR

Paridae: Titmice

- __ Black-capped Chickadee, *Poecile atricapillus* CPR
- __ Tufted Titmouse, *Baeolophus bicolor* UPR

Sittidae: Nuthatches

- __ Red-breasted Nuthatch, *Sitta canadensis* UWM
- __ White-breasted Nuthatch, *Sitta carolinensis* CPR

Certhiidae: Creepers

- __ Brown Creeper, *Certhia americana* UWM

Troglodytidae: Wrens

- __ Carolina Wren, *Thryothorus ludovicianus* RPR
- __ Bewick's Wren, *Thryomanes bewickii* RSR
- __ House Wren, *Troglodytes aedon* CSR
- __ Winter Wren, *Troglodytes troglodytes* UWM
- __ Sedge Wren, *Cistothorus platensis* RM
- __ Marsh Wren, *Cistothorus palustris* RM

Regulidae: Kinglets

- __ Golden-crowned Kinglet, *Regulus satrapa* UWM

- __ Ruby-crowned Kinglet, *Regulus calendula* UM

Sylviidae: Gnatcatchers

- __ Blue-gray Gnatcatcher, *Poliophtila caerulea* RSR

Turdidae: Thrushes and Allies

- __ Eastern Bluebird, *Sialia sialis* UPR
- __ Townsend's Solitaire, *Myadestes townsendi* OWM

- __ Veery, *Catharus fuscescens* RM

- __ Gray-cheeked Thrush, *Catharus minimus* UM

- __ Swainson's Thrush, *Catharus ustulatus* CM

- __ Hermit Thrush, *Catharus guttatus* RM

- __ Wood Thrush, *Hylocichla mustelina* RSR

- __ American Robin, *Turdus migratorius* APR

Mimidae: Mockingbirds, Thrashers

- __ Gray Catbird, *Dumetella carolinensis* CSR
- __ Northern Mockingbird, *Mimus polyglottos*; USR

- __ Sage Thrasher, *Oreoscoptes montanus*

- __ Brown Thrasher, *Toxostoma rufum* CSR

Sturnidae: Starlings

- __ European Starling, *Sturnus vulgaris* APR

Motacillidae: Pipits

- __ American Pipit, *Anthus rubescens* OM

- __ Sprague's Pipit, *Anthus spragueii* OM

Bombycillidae: Waxwings

- __ Bohemian Waxwing, *Bombycilla garrulus* OWM

- __ Cedar Waxwing, *Bombycilla cedrorum* UWM

Parulidae: Wood Warblers

- __ Blue-winged Warbler, *Vermivora pinus*

- __ Golden-winged Warbler, *Vermivora chrysoptera* RM
- __ Tennessee Warbler, *Vermivora peregrina* CM
- __ Orange-crowned Warbler, *Vermivora celata* CM
- __ Nashville Warbler, *Vermivora ruficapilla* UM
- __ Northern Parula, *Parula americana* RM
- __ Yellow Warbler, *Dendroica petechia* CSR
- __ Chestnut-sided Warbler, *Dendroica pensylvanica* OM
- __ Magnolia Warbler, *Dendroica magnolia* RM
- __ Black-throated Blue Warbler, *Dendroica caerulescens* RM
- __ Yellow-rumped Warbler, *Dendroica coronata* CM
- __ Black-throated Green-Warbler, *Dendroica virens* RM
- __ Blackburnian Warbler, *Dendroica fusca* UM
- __ Yellow-throated Warbler, *Dendroica dominica* RM
- __ Palm Warbler, *Dendroica palmarum* RM
- __ Bay-breasted Warbler, *Dendroica castanea* OM
- __ Blackpoll Warbler, *Dendroica striata* UM
- __ Black-and-white Warbler, *Mniotilta varia* RM
- __ American Redstart, *Setophaga ruticilla* USR
- __ Prothonotary Warbler, *Protonotaria citrea* RSR
- __ Ovenbird, *Seiurus aurocapillus* OSR
- __ Northern Waterthrush, *Seiurus noveboracensis* UM
- __ Louisiana Waterthrush, *Seiurus motacilla* OM
- __ Kentucky Warbler, *Oporornis formosus* RM
- __ Mourning Warbler, *Oporornis philadelphia* RM
- __ MacGillivray's Warbler, *Oporornis tolmiei*
- __ Common Yellowthroat, *Geothlypis trichas* CSR
- __ Hooded Warbler, *Wilsonia citrina* RM
- __ Yellow-breasted Chat, *Icteria virens* OSR
- Thraupidae: Tanagers**
- __ Summer Tanager, *Piranga rubra* OM
- __ Scarlet Tanager, *Piranga olivacea* RSR?
- Emberizidae: Towhees & Sparrows**
- __ Eastern Towhee, *Pipilo erythrophthalmus* UWM
- __ Spotted Towhee, *Pipilo maculatus* UWM
- __ American Tree Sparrow, *Spizella arborea* AWM
- __ Chipping Sparrow, *Spizella passerina* USR
- __ Clay-colored Sparrow, *Spizella pallida* CM
- __ Field Sparrow, *Spizella pusilla* USR
- __ Vesper Sparrow, *Poocetes gramineus* UM
- __ Lark Sparrow, *Chondestes grammacus* USR
- __ Lark Bunting, *Calamospiza melanocorys* OSR
- __ Savannah Sparrow, *Passerculus sandwichensis* IM
- __ Baird's Sparrow, *Ammodramus bairdii* RM
- __ Grasshopper Sparrow, *Ammodramus savannarum* CSR
- __ Henslow's Sparrow, *Ammodramus henslowii* OM, SR?
- __ Fox Sparrow, *Passerella iliaca* OM
- __ Song Sparrow, *Melospiza melodia* CWM
- __ Lincoln's Sparrow, *Melospiza lincolni* UM
- __ Swamp Sparrow, *Melospiza georgiana* RWM
- __ White-throated Sparrow, *Zonotrichia albicollis* CWM
- __ Harris's Sparrow, *Zonotrichia querula* CWM
- __ White-crowned Sparrow, *Zonotrichia leucophrys* UWM
- __ Dark-eyed Junco, *Junco hyemalis* AWM
- __ McCown's Longspur, *Calcarius mccownii* OWM
- __ Lapland Longspur, *Calcarius lapponicus* CWM
- __ Chestnut-collared Longspur, *Calcarius ornatus* OWM
- Cardinalidae: Cardinals & Grosbeaks**
- __ Northern Cardinal *Cardinalis cardinalis* CPR
- __ Rose-breasted Grosbeak, *Pheucticus ludovicianus* CSR
- __ Black-headed Grosbeak, *Pheucticus melanocephalus* OSR
- __ Blue Grosbeak, *Passerina caerulea* RSR
- __ Lazuli Bunting, *Passerina amoena* RM
- __ Indigo Bunting, *Passerina cyanea* CSR
- __ Dickcissel, *Spiza americana* ASR
- Icteridae: Blackbirds, Orioles, etc**
- __ Bobolink, *Dolichonyx oryzivorus* OM
- __ Red-winged Blackbird, *Agelaius phoeniceus* ASR
- __ Eastern Meadowlark, *Sturnella magna* CPR
- __ Western Meadowlark, *Sturnella neglecta* CPR
- __ Yellow-headed Blackbird, *Xanthocephalus xanthocephalus* UM
- __ Rusty Blackbird, *Euphagus carolinus* UWM
- __ Brewer's Blackbird, *Euphagus cyanocephalus* OWM
- __ Common Grackle, *Quiscalus quiscula* ASR
- __ Great-tailed Grackle, *Quiscalus mexicanus* OSR
- __ Brown-headed Cowbird, *Molothrus ater* ASR
- __ Orchard Oriole, *Icterus spurius* CSR
- __ Baltimore Oriole, *Icterus galbula* CSR
- __ Bullock's Oriole, *Icterus bullockii* OSR

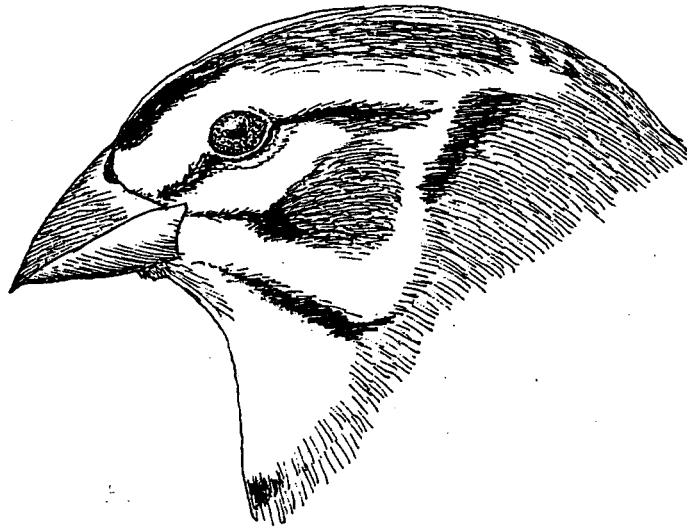
Fringillidae: Finches

- Gray-crowned Rosy-Finch, *Leucosticte tephrocotis* AcWM
- Pine Grosbeak, *Pinicola enucleator* RWM
- Purple Finch, *Carpodacus purpureus* OWM
- Cassin's Finch, *Carpodacus cassinii*
- House Finch, *Carpodacus mexicanus* CPR
- Red Crossbill, *Loxia curvirostra* RWM

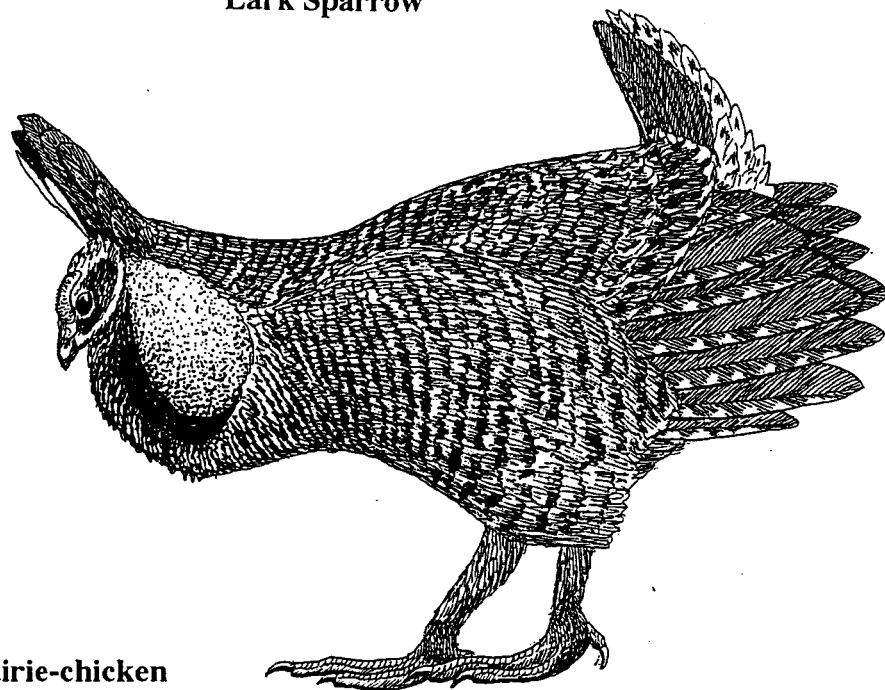
- Common Redpoll, *Carduelis flammea* RWM
- Pine Siskin, *Carduelis pinus* UWM
- American Goldfinch, *Carduelis tristis* CPR
- Evening Grosbeak, *Coccothraustes vespertinus* OWM

Passeridae: Old World Sparrows

- House Sparrow, *Passer domesticus* APR



Lark Sparrow



Greater Prairie-chicken

Tallgrass Prairie Landbirds of Spring Creek & Konza Prairies

This list of 178 species excludes all aquatic or water-dependent taxa. Species shown in **Bold** are probable or known breeders in one or both locations (abbreviations indicate which), Twenty-one (out of 33 total) species considered by Johnsgard to be grassland endemics (*Prairie Birds*, 2001, Univ.

Press of Kansas) are present at one or both sites, and are shown in *italics*. Indicated habitat preferences are only general, and refer to the seasons during which the species occurs on the prairie. The Konza bird list is based on *The Birds of Konza*, J. L. Zimmerman, 1993, Univ. Press of Kansas. Compiled by Paul Johnsgard.

Prairie Locations

K = Reported from Konza Prairie, Riley & Geary counties, Kansas

S = Reported from Spring Creek Prairie, Lancaster County, Nebraska

Habitat Preferences

(DC) = Species of Disturbed & Culturally Modified Habitats

(FE) = Forest-edge & Shrub-adapted Species

(G) = Grassland Species (endemics in *italics*)

(UGF) = Upland & Gallery Forest Species

Phasianidae: Partridges, Grouse, etc

Ring-necked Pheasant, *Phasianus colchicus* (G): S, K

Greater Prairie-chicken, *Tympanuchus cupido* (G): S, K

Wild Turkey, *Meleagris gallopavo* (FE): S, K

Odontophoridae: New World Quail

Northern Bobwhite, *Colinus virginianus* (G): S, K

Cathartidae: American Vultures

Turkey Vulture, *Cathartes aura* (G): S, K

Accipitridae: Kites, Hawks, Eagles

Mississippi Kite, *Ictinia mississippiensis* (G): K

Northern Harrier, *Circus cyaneus* (G): S, K

Sharp-shinned Hawk, *Accipiter striatus* (UGF): S, K

Cooper's Hawk, *Accipiter cooperii* (UGF): S, K

Northern Goshawk, *Accipiter gentilis* (UGF): K

Broad-winged Hawk, *Buteo platypterus* (UGF): S, K

Swainson's Hawk, *Buteo swainsoni* (G): S, K

Red-tailed Hawk, *Buteo jamaicensis* (UGF): S, K

Rough-legged Hawk, *Buteo lagopus* (G): K,

Falconidae: Falcons

American Kestrel, *Falco sparverius* (G): S, K

Merlin, *Falco columbarius* (G): K

Prairie Falcon, *Falco mexicanus* (G): K

Peregrine Falcon, *Falco peregrinus* (G): S, K

Gruidae: Cranes

Sandhill Crane, *Grus canadensis* (G): S

Charadriidae:

American Golden-Plover, *Pluvialis dominica* (G): K

Killdeer, *Charadrius vociferus* (G): S, K

Scolopacidae: Sandpipers, Snipes, Phalaropes, etc.

Upland Sandpiper, *Bartramia longicauda* (G): S, K
Marbled Godwit, *Limosa fedoa* (G): K
Buff-breasted Sandpiper, *Tryngites subruficollis* (G): S
American Woodcock, *Scolopax minor* (UGF): S, K

Laridae: Gulls and Terns

Franklin's Gull, *Larus pipixcan* (G): S, K

Columbidae: Pigeons and Doves

Rock Pigeon, *Columba livia* (DC): S, K
Mourning Dove, *Zenaida macroura* (FE, G): S, K

Cuculidae: Cuckoos and Anis

Black-billed Cuckoo, *Coccyzus erythrophthalmus* (UGF): S, K
Yellow-billed Cuckoo, *Coccyzus americanus* (UGF): S, K

Tytonidae: Barn Owls

Barn Owl, *Tyto alba* (G): K

Strigidae: Typical Owls

Eastern Screech-Owl, *Otus asio* (UGF): S, K
Great Horned Owl, *Bubo virginianus* (UGF): S, K
*Burrowing Owl, *Athene cunicularia* (G): K*
Barred Owl, *Strix varia* (UGF): S, K
Long-eared Owl, *Asio otus* (UGF): K
*Short-eared Owl, *Asio flammeus* (G): S, K*

Caprimulgidae: Goatsuckers

Common Nighthawk, *Chordeiles minor* (G): S, K
Common Poorwill, *Phalaenoptilus nuttallii* (G): K
Chuck-will's-widow, *Caprimulgus carolinensis* (UGF): K
Whip-poor-will, *Caprimulgus vociferus* (UGF): K

Apodidae: Swifts

Chimney Swift, *Chaetura pelagica* (DC): S, K

Trochilidae: Hummingbirds

Ruby-throated Hummingbird, *Archilochus colubris* (FE): S, K

Picidae: Woodpeckers

Red-headed Woodpecker, *Melanerpes erythrocephalus* (UGF, FE): S, K
Red-bellied Woodpecker, *Melanerpes carolinus* (UGF, FE): S, K
Yellow-bellied Sapsucker, *Sphyrapicus varius* (UGF, FE): S, K
Downy Woodpecker, *Picoides pubescens* (UGF, FE): S, K
Hairy Woodpecker, *Picoides villosus* (UGF, FE): S, K
Northern Flicker, *Colaptes auratus* (UGF, FE): S, K

Tyrannidae: Tyrant Flycatchers

Olive-sided Flycatcher, *Contopus cooperi* (UGF, FE): S, K
Eastern Wood-Pewee, *Contopus virens* (UGF, FE): S, K
Yellow-bellied Flycatcher, *Empidonax flaviventris* (UGF, FE): S
Willow Flycatcher, *Empidonax traillii* (UGF, FE): S, K
Least Flycatcher, *Empidonax minimus* (UGF, FE): S, K
Eastern Phoebe, *Sayornis phoebe* (UGF, FE): S, K

Great Crested Flycatcher, *Myiarchus crinitus* (UGF, FE): S, K
Western Kingbird, *Tyrannus verticalis* (FE): S, K
Eastern Kingbird, *Tyrannus tyrannus* (FE): S, K
Scissor-tailed Flycatcher, *Tyrannus forficatus* (FE): K

Laniidae: Shrikes

Loggerhead Shrike, *Lanius ludovicianus* (G): S, K

Vireonidae: Vireos

White-eyed Vireo, *Vireo griseus* (UGF): K
Bell's Vireo, *Vireo bellii* (FE): S, K
Blue-headed Vireo, *Vireo solitarius* (UGF): S, K
Warbling Vireo, *Vireo gilvus* (UGF): S, K
Red-eyed Vireo, *Vireo olivaceus* (UGF): S, K

Corvidae: Jays, Magpies, and Crows

Blue Jay, *Cyanocitta cristata* (UGF, FE): S, K
Black-billed Magpie, *Pica pica* (FE, G): S
American Crow, *Corvus brachyrhynchos* (UGF, FE): S, K

Alaudidae: Larks

Horned Lark, *Eremophila alpestris* (G): S, K

Hirundinidae: Swallows

Purple Martin, *Progne subis* (DC): S, K
Tree Swallow, *Tachycineta bicolor* (FE S, K)
Northern Rough-winged Swallow, *Stelgidopteryx serripennis* (UGF, G): S, K
Bank Swallow, *Riparia riparia* (G): S
Barn Swallow, *Hirundo rustica* (DC): S, K
Cliff Swallow, *Petrochelidon pyrrhonota* (G): S, K

Paridae: Titmice

Black-capped Chickadee, *Poecile atricapillus* (UGF): S, K
Tufted Titmouse, *Baeolophus bicolor* (UGF): K

Sittidae: Nuthatches

Red-breasted Nuthatch, *Sitta canadensis* (UGF): S, K
White-breasted Nuthatch, *Sitta carolinensis* (UGF): S, K

Certhiidae: Creepers

Brown Creeper, *Certhia americana* (UGF): S, K

Troglodytidae: Wrens

Carolina Wren, *Thryothorus ludovicianus* (UGF, FE): S, K
Bewick's Wren, *Thryomanes bewickii* (FE): K
House Wren, *Troglodytes aedon* (UGF): S, K
Winter Wren, *Troglodytes troglodytes* (UGF): K
Sedge Wren, *Cistothorus platensis* (G): S, K

Regulidae: Kinglets

Golden-crowned Kinglet, *Regulus satrapa* (UGF): S, K
Ruby-crowned Kinglet, *Regulus calendula* (UGF): S, K

Sylviidae: Gnatcatchers

Blue-gray Gnatcatcher, *Poliophtila caerulea* (UGF, FE): S, K

Turdidae: Thrushes and Allies

Eastern Bluebird, *Sialia sialis* (FE, G): S, K
Mountain Bluebird, *Sialia currucoides* (FE, G): K
Veery, *Catharus fuscescens* (UGF): K
Gray-cheeked Thrush, *Catharus minimus* (UGF): K
Swainson's Thrush, *Catharus ustulatus* (UGF): S, K
Hermit Thrush, *Catharus guttatus* (UGF): K
Wood Thrush, *Hylocichla mustelina* (UGF): K
American Robin, *Turdus migratorius* (UGF, FE): S, K

Mimidae: Mockingbirds, Thrashers

Gray Catbird, *Dumetella carolinensis* (FE): S, K
Northern Mockingbird, *Mimus polyglottos* (FE): S, K
Brown Thrasher, *Toxostoma rufum* (FE): S, K

Sturnidae: Starlings

European Starling, *Sturnus vulgaris* (FE): S, K

Motacillidae: Pipits

American Pipit, *Anthus rubescens* (G): S, K
Sprague's Pipit, Anthus spragueii (G): S, K

Bombycillidae: Waxwings

Cedar Waxwing, *Bombycilla cedrorum* (UGF, FE): S, K

Parulidae: Wood Warblers

Tennessee Warbler, *Vermivora peregrina* (UGF, FE): S, K
Orange-crowned Warbler, *Vermivora celata* (UGF, FE): S, K
Nashville Warbler, *Vermivora ruficapilla* (UGF, FE): S, K
Northern Parula, *Parula americana* (UGF, FE): K,
Yellow Warbler, *Dendroica petechia* (UGF, FE): S, K
Chestnut-sided Warbler, *Dendroica pensylvanica* (UGF, FE): K
Magnolia Warbler, *Dendroica magnolia* (UGF, FE): S, K
Yellow-rumped Warbler, *Dendroica coronata* (UGF, FE): S, K
Black-throated Green-Warbler, *Dendroica virens* (UGF, FE): K
Blackburnian Warbler, *Dendroica fusca* (UGF, FE): K
Pine Warbler, *Dendroica pinus* (UGF, FE): K
Palm Warbler, *Dendroica palmarum* (UGF, FE): S, K
Bay-breasted Warbler, *Dendroica castanea* (UGF, FE): K
Blackpoll Warbler, *Dendroica striata* (UGF, FE): S, K
Black-and-white Warbler, *Mniotilta varia* (UGF, FE): S, K
American Redstart, *Setophaga ruticilla* (UGF, FE): S, K
Ovenbird, *Seiurus aurocapillus* (UGF): S, K
Northern Waterthrush, *Seiurus noveboracensis* (UGF): S
Louisiana Waterthrush, *Seiurus motacilla* (UGF): S, K
Kentucky Warbler, *Oporornis formosus* (UGF, FE): K
Mourning Warbler, *Oporornis philadelphia* (UGF, FE): K
Common Yellowthroat, *Geothlypis trichas* (G): S, K
Wilson's Warbler, *Wilsonia pusilla* (UGF, FE): S, K
Yellow-breasted Chat, *Icteria virens* (FE): K

Thraupidae: Tanagers

Summer Tanager, *Piranga rubra* (UGF): S, K
Scarlet Tanager, *Piranga olivacea* (UGF): K

Emberizidae: Towhees & Sparrows

Eastern Towhee, *Pipilo erythrophthalmus* (UGF, FE): S, K
Spotted Towhee, *Pipilo maculatus* (UGF, FE): S, K
American Tree Sparrow, *Spizella arborea* (FE, G): S, K
Chipping Sparrow, *Spizella passerina* (FE): S, K
Clay-colored Sparrow, Spizella pallida (G): S, K
Field Sparrow, *Spizella pusilla* (G)K S
Vesper Sparrow, Poocetes gramineus (G): S, K
Lark Sparrow, *Chondestes grammacus* (G): S, K
Lark Bunting, Calamospiza melanocorys (G): K
Savannah Sparrow, Passerculus sandwichensis (G): S, K
Grasshopper Sparrow, *Ammodramus savannarum* (G): S, K
Henslow's Sparrow, *Ammodramus henslowii* (G): S
Le Conte's Sparrow, Ammodramus leconteii (G): S, K
Nelson's Sharp-tailed Sparrow, Ammodramus nelsoni (G): S
Fox Sparrow, Passerella iliaca (FE): S, K
Song Sparrow, *Melospiza melodia* (FE): S, K
Lincoln's Sparrow, Melospiza lincolni (FE): S, K
Swamp Sparrow, Melospiza georgiana (G): S, K
White-throated Sparrow, Zonotrichia albicollis (FE): S, K
Harris's Sparrow, Zonotrichia querula (FE): S, K
White-crowned Sparrow, Zonotrichia leucophrys (FE): S, K
Dark-eyed Junco, Junco hyemalis (G): S, K
Lapland Longspur, Calcarius lapponicus (G): K
Smith's Longspur, Calcarius pictus (G): S, K
Chestnut-collared Longspur, Calcarius ornatus (G): K
Snow Bunting, Plectrophenax nivalis (G): K

Cardinalidae: Cardinals & Grosbeaks

Northern Cardinal *Cardinalis cardinalis* (FE): S, K
Rose-breasted Grosbeak, *Pheucticus ludovicianus* (UGF): S, K
Black-headed Grosbeak, Pheucticus melanocephalus (UGF): S
Blue Grosbeak, Passerina caerulea (FE, G): K
Lazuli Bunting, Passerina amoena (FE): K
Indigo Bunting, *Passerina cyanea* (UGF): S, K
***Dickcissel, Spizamericana* (G): S, K**

Icteridae: Blackbirds, Orioles, etc

***Bobolink, Dolichonyx oryzivorus*: S, K**
Red-winged Blackbird, *Agelaius phoeniceus* (G): S, K
Eastern Meadowlark, *Sturnella magna* (G): S, K
Western Meadowlark, *Sturnella neglecta* (G): S, K
Rusty Blackbird, Euphagus carolinus (UGF): K
Brewer's Blackbird, Euphagus cyanocephalus (FE, G): S, K
Common Grackle, *Quiscalus quiscula* (FE, G): S, K
Great-tailed Grackle, Quiscalus mexicanus (FE, G): K
Brown-headed Cowbird, *Molothrus ater* (FE, G): S, K
Orchard Oriole, *Icterus spurius* (UGF): S, K
Baltimore Oriole, *Icterus galbula* (UGF): S, K

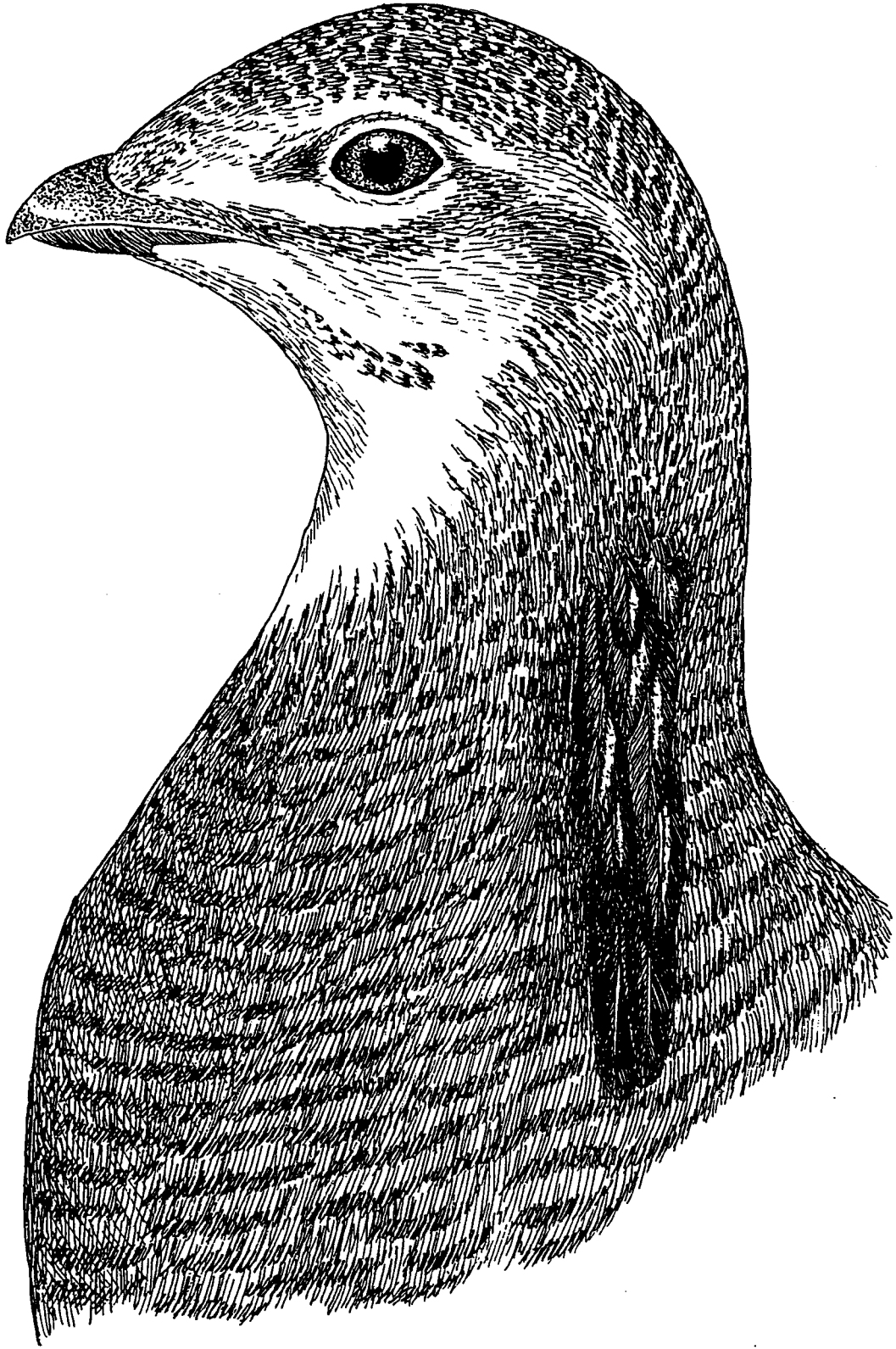
Fringillidae: Finches

Purple Finch, Carpodacus purpureus (UGF, FE): S, K
House Finch, *Carpodacus mexicanus* (FE, G): S, K
Pine Siskin, Carduelis pinus (FE): S, K

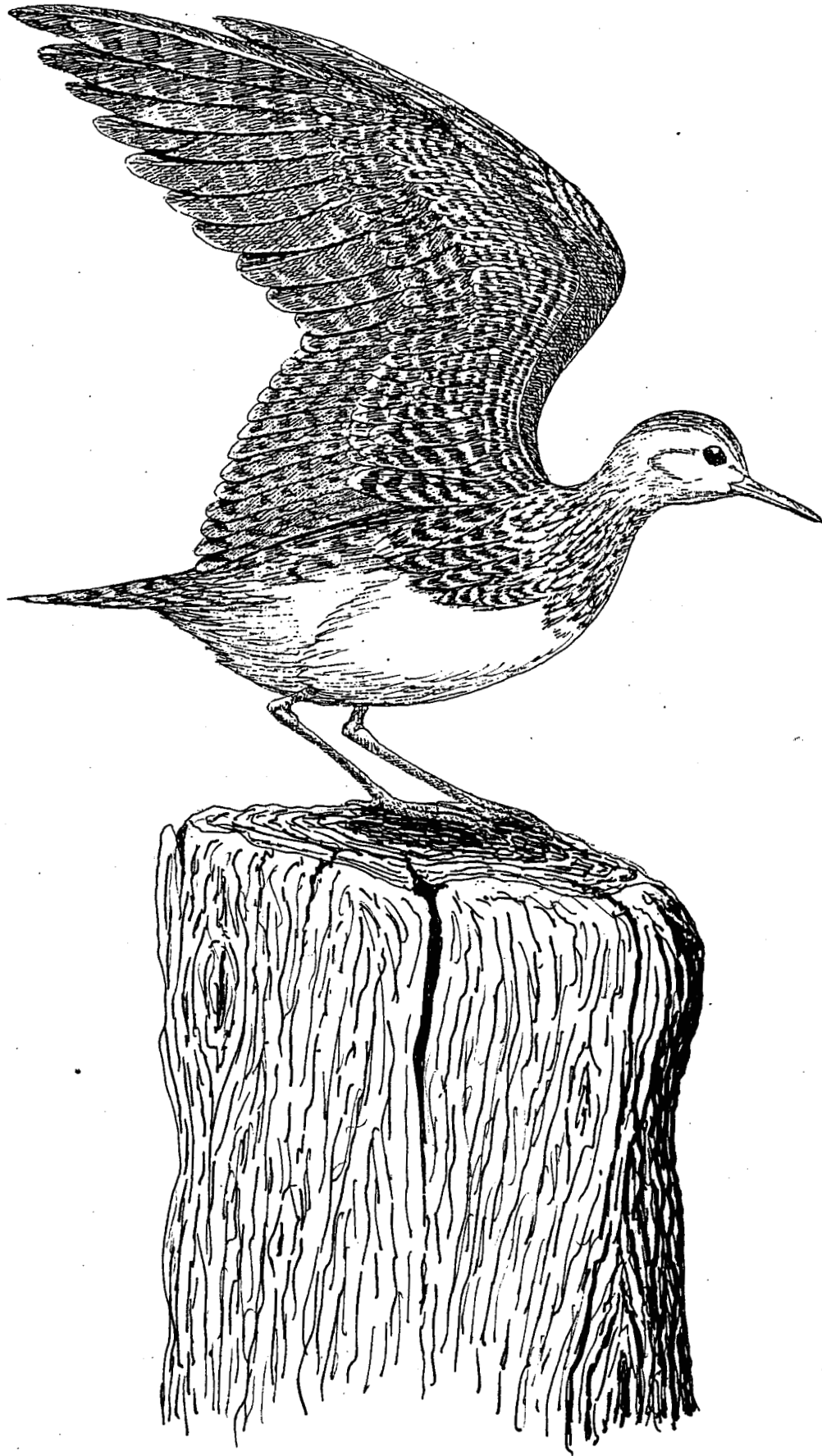
American Goldfinch, *Carduelis tristis* (G): S, K
Evening Grosbeak, *Coccothraustes vespertinus* (UGF): K

Passeridae: Old World Sparrows

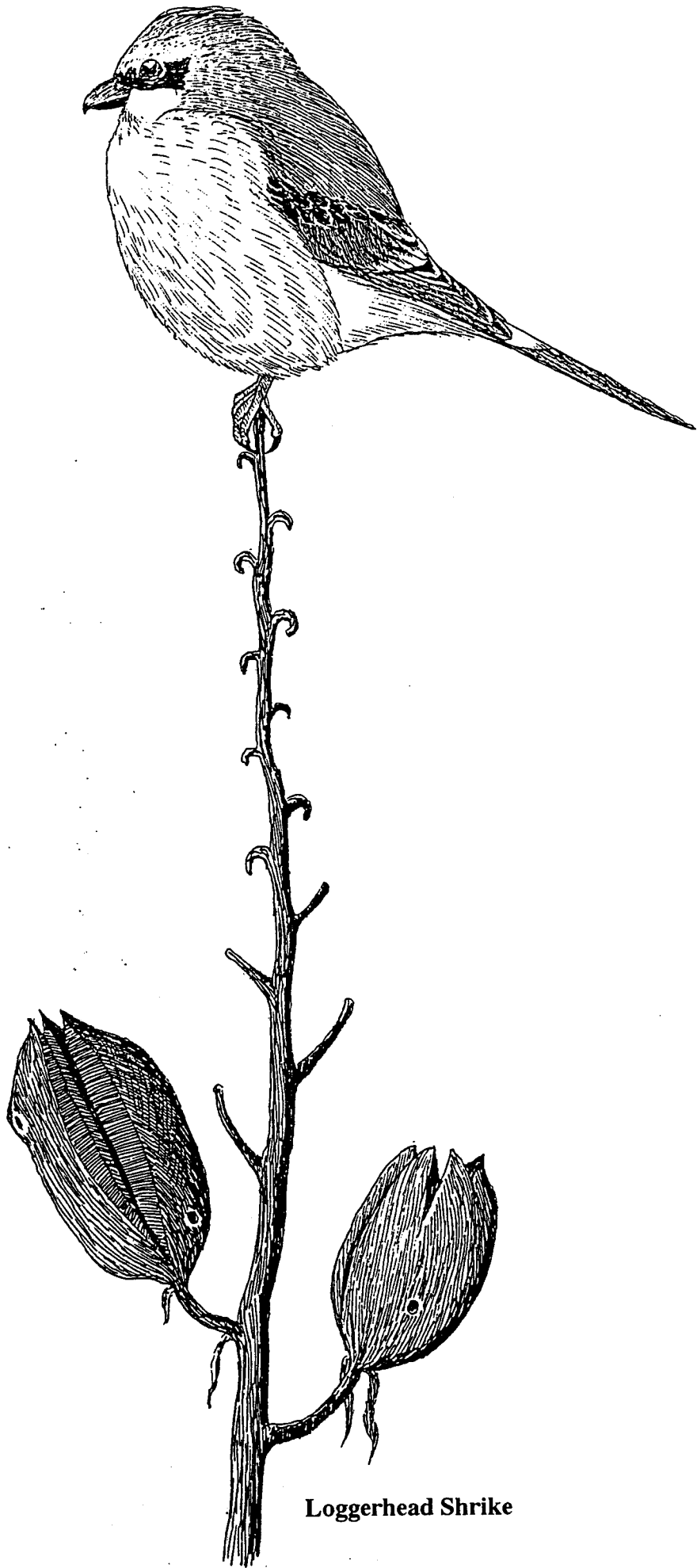
House Sparrow, *Passer domesticus* (FC): S, K



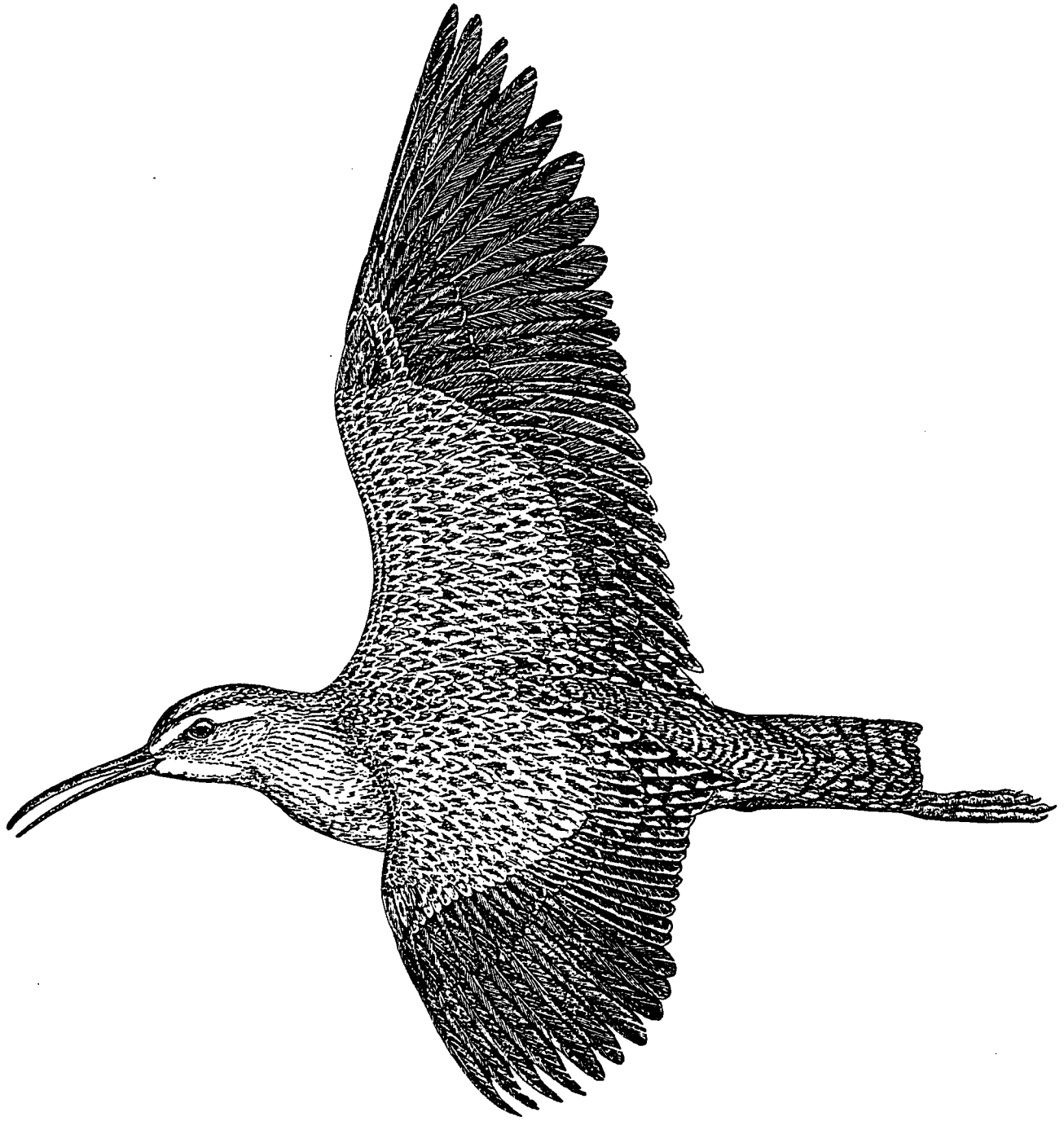
Greater Prairie-chicken



Upland Sandpiper



Loggerhead Shrike



Eskimo Curlew

Mammals of Nebraska's Eastern Prairies

Species reported from Lancaster County are underlined. Excludes some extirpated species and those of uncertain current status. Of the several available field guides, the one by Kays and Wilson (2002) is probably the best and most up-to-date taxonomically.

Family Didelphidae–New World Opossums

Virginia Opossum, *Didelphis virginiana*. Common (mainly in east); in woodland edges & suburbs

Family Soricidae–Shrews

Masked Shrew, *Sorex cinereus*. Diverse habitats, common..

Northern Short-tailed Shrew, *Blarina brevicauda*. Common in grasslands (east & central)

Southern Short-tailed Shrew, *Blarina carolinensis*. Common in grasslands (south)

Least Shrew, *Cryptotis parva*. Uncommon (east & central). open grassy or weedy habitats, especially tallgrass prairie.

Family Talpidae – Moles

Eastern Mole, *Scalopus aquaticus*. Widespread, mostly subterranean, loamy soils and taller grasses.

Family Vespertilionidae–Vespertilionid Bats

Little Brown Myotis, *Myotis lucifugus*. Eastern Nebraska deciduous edges; hibernator.

Northern Myotis, *Myotis septentrionalis*. Southeastern Nebraska (to Lancaster Co.), wooded edges; hibernator.

Big Brown Bat, *Eptesicus fuscus*. Widespread, diverse habitats, including woods; hibernator.

Eastern Red Bat, *Lasiurus borealis*. Widespread, diverse habitats; migratory.

Hoary Bat, *Lasiurus cinereus*. Widespread, woodland edges; migratory.

Evening Bat, *Nycticeius humeralis*. Southeast (north to Butler Co.), deciduous woods; probably migratory.

Family Leporidae–Hares and Rabbits

Eastern Cottontail, *Sylvilagus floridanus*. Widespread, woods and taller grasslands.

Black-tailed Jackrabbit, *Lepus californicus*. More common southeastwardly; grasslands, especially mixed-grass prairies. Becoming relatively rare.

White-tailed Jackrabbit, *Lepus townsendii*. More common northwestwardly in grasslands, becoming relatively rare.

Family Sciuridae–Squirrels

Woodchuck, *Marmota monax*. East and central, deciduous woods and edges.

Franklin's Ground Squirrel, *Spermophilus franklini*. East and central, tallgrass prairies.

Thirteen-lined Ground Squirrel, *Spermophilus tridecemlineatus*. Widespread, especially mixed-grass prairies.

Black-tailed Prairie Dog, *Cynomys ludovicianus*. Drier grasslands (east to Fillmore Co.).

Family Geomyidae–Pocket Gophers

Plains Pocket Gopher, *Geomys bursarius*. Widespread, especially in taller grasslands.

Family Heteromyidae–Heteromyid Rodents

Plains Pocket Mouse, *Perognathus flavescens*. Widespread in drier or sandy prairie.

Hispid Pocket Mouse, *Perognathus hispidus*. Widespread, sandy grasslands.

Family Castoridae–Beavers

Beaver, *Castor canadensis*. Widespread in aquatic habitats, especially rivers.

Family Cricetidae–Native Rats and Mice

Western Harvest Mouse. *Reithrodontomys megalotis*. Widespread, taller grasslands.
Plains Harvest Mouse. *Reithrodontomys montanus*. Widespread, drier grasslands.
White-footed Mouse. *Peromyscus leucopus*. East and central, all habitats.
Deer Mouse. *Peromyscus maniculatus*. Widespread, all grassland habitats.
Northern Grasshopper Mouse. *Onychomys leucogaster*. Widespread, especially sandy grasslands.
Southern Bog Lemming. *Synaptomys cooperi*. East and central, in wet meadows.
Prairie Vole. *Microtus ochrogaster*. Widespread, taller grasslands.
Meadow Vole. *Microtus pennsylvanicus*. Widespread, moist grasslands.
Muskrat. *Ondatra zibethicus*. Widespread in aquatic habitats.

Family Muridae–Old World Rats and Mice

House Mouse. *Mus musculus*. Introduced; statewide near human habitations.
Norway Rat. *Rattus norvegicus*. Introduced; statewide near human habitations.

Family Zapodidae–Jumping Mice

Meadow Jumping Mouse. *Zapus hudsonicus*. East and central, grassy or herbaceous habitats.

Family Canidae–Coyotes, Wolves and Foxes

Coyote. *Canis latrans*. Widespread, especially in grasslands.
Red Fox. *Vulpes vulpes*. Widespread, especially near woods, sometimes in city parks.
Gray Fox. *Urocyon cinereoargenteus*. East only, deciduous woods and edges.

Family Felidae – Cats

Bobcat. *Felis rufus*. Uncommon to rare, mostly in rocky terrain.

Family Procyonidae–Raccoons and Allies

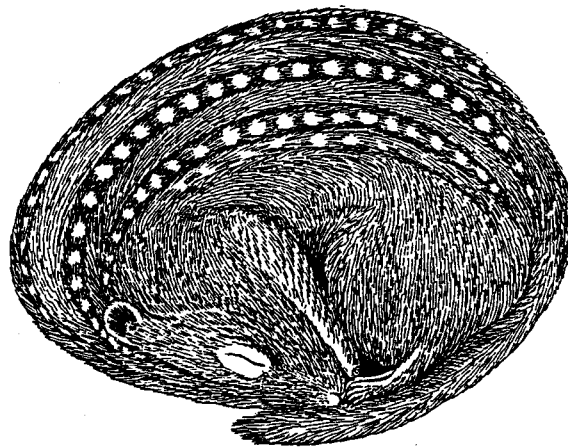
Raccoon. *Procyon lotor*. Statewide, near trees & in wooded suburbs.

Family Mustelidae–Weasels, Badgers, Skunks and Otters

Long-tailed Weasel. *Mustela frenata*. Statewide, grasslands and woods.
Least Weasel. *Mustela nivalis*. East and central, diverse habitats.
Mink. *Mustela vison*. Statewide, near rivers and marshes.
Badger. *Taxidea taxus*. Statewide, grasslands, especially drier grasslands.
Spotted Skunk. *Spilogale putorius*. Local, forest edges.
Striped Skunk. *Mephitis mephitis*. Statewide, diverse habitats.

Family Cervidae–Deer, Elk and Moose

White-tailed Deer. *Odocoileus virginianus*. Widespread, forests and grasslands.



13-lined Ground Squirrel

Typical Reptiles and Amphibians of Nebraska's Eastern Prairies

Species of uncertain or rare occurrence are excluded, Species reported from Lancaster County are underlined. Mainly based on Lynch (1985), but a current species listing, with photos, natural history information, identification aids and range maps, can be found at <http://snrs.unl.edu/herpneb>. Listed alphabetically by generic names.

Order Caudata–Salamanders

Tiger Salamander, *Ambystoma tigrinum*. Statewide; common in wetlands

Order Anura–Frogs and Toads

Northern Cricket Frog, *Acris crepitans*. East and central Nebraska; common in wetlands

Great Plains Toad, *Bufo cognatus*. Statewide, fairly common in dry grasslands

Rocky Mountain Toad, *Bufo woodhousei*. Statewide, common in dry grasslands

Western Gray Treefrog, *Hyla chrysocelis*. Eastern Nebraska, in wetlands near trees

Western Striped Chorus Frog, *Pseudacris triseriata*. Statewide, common in wetlands

Plains Leopard Frog, *Rana blairi*, Eastern Nebraska, in wetlands

Bull Frog, *Rana catesbiana*. Statewide & common in wetlands

Northern Leopard Frog, *Rana pipiens*. Widespread from Platte R. north, varied wetlands

Plains Spadefoot Toad, *Spea bombifrons*. Statewide & common in sandy soils

Order Chelonia–Turtles

Snapping Turtle, *Chelydra serpentina*. Statewide & common in wetlands

Painted Turtle, *Chrysemys picta*. Statewide & abundant in wetlands

Ornate Box Turtle, *Terrapena ornata*. Sandy soils, east to Gage County.

Order Lacertilia–Lizards

Six-lined Racerunner, *Cnemidophorus sexlineatus*. Statewide in sandy soils

Prairie Skink, *Eumeces septentrionalis*. Eastern Nebraska, in tallgrass prairies

Lesser Earless Lizard, *Holbrookia maculata*. Sandy soils, east to Cuming County

Northern Prairie Lizard, *Sceloporus undulatus*. Sandy soils, east to Cuming County

Order Serpentes–Snakes

Blue (Green) Racer, *Coluber constrictor*. Common in grasslands statewide.

Prairie Rattlesnake, *Crotalis viridis*. Rocky & eroded pastures, east to Knox County

Ringneck Snake, *Diadophis punctatus*. Eastern half of Nebraska, in wooded wetlands

Fox Snake, *Elaphe vulpina*. West to Boyd, Platte & Seward Co., prairies and woodlands.

Eastern Hognose Snake, *Heterodon platyrhinos*. Eastern Nebraska, sandy river valleys.

Prairie Kingsnake, *Lampropeltis calligaster*. SE Nebraska to Lancaster & Douglas Co., grasslands

Milk Snake, *Lampropeltis triangulum*. Common in grasslands statewide

Common (Northern) Watersnake, *Nerodia sipedon*. Statewide in wetlands

Buillsnake, *Pituophis catenifer*. Statewide, very common in grasslands

Massasauga Rattlesnake, *Sistrurus catenatus*. SE Nebraska (Pawnee Co.); very rare in grasslands

Plains Gartersnake, *Thamnophis radix*. Statewide, abundant in grasslands

Common (Red-sided) Gartersnake, *Thamnophis sirtalis*. Statewide, abundant in grasslands.

Lined Snake, *Tropicoclonion lineatum*. East-central and southeast, uncommon in open prairies, woodland edges.

Typical Butterflies of Eastern Nebraska

The following approximately 90 species are likely to be found in eastern Nebraska grasslands, although in total more than 200 species have been reported in the state. Page references in Roman type refer to *Butterflies and Moths of Missouri*, J. Richard & J. E. Heitzman, 1996, Mo. Dept. of Conservation. Page references in italics refer to *Field Guide to Butterflies of South Dakota*, G. M. Marrone, 2002, So. Dak. Dept. of Game, Fish & Parks. Underlined species have been reported from Lancaster County. About 40 Nebraska butterflies are shown in *Insects in Kansas* as well as about 140 moths (Salisbury & White, 2000). A recent Nebraska species list, with range maps and color photographs of all the state's reported butterflies, can be found at: <http://www.npwrc.usgs.gov/resource/distr/liped/bflyusa/ne/toc.htm>

Family Hesperiiidae - Skippers

- Epargyreus clarus*. Silver-spotted Skipper. Widespread. P. 18
Achalarus lyciades. Hoary Edge. Southeastern records only. P. 21
Thorybes bathyllus. Southern Cloudywing. Mostly eastern records. P. 22
Thorybes pylades. Northern Cloudywing. Scattered records. P. 23, 350
Staphylus hayhurstii. Scalloped Cloudywing. Mostly eastern. P. 26, 352
Erynnis brizo. Sleepy Duskywing. Southeastern records only. P. 28, 356
Erynnis juvenalis. Juvenal's Duskywing. Mostly eastern records. P. 29, 358
Erynnis horatius. Horace's Duskywing. Eastern records. P. 30, 360
Erynnis funeralis. Funereal Duskywing. Mostly eastern records. P. 32
Erynnis baptisiae. Wild Indigo Duskywing. Scattered records. P. 33
Pyrgus communis. Common Checkered Skipper. Widespread. P. 35, 370
Pholisora catullus. Common Sootywing. Widespread over state. P. 37, 372
Ancyloxypha numitor. Least Skipperling. Probably entire state. P. 40, 374
Hylephila phyleus. Fiery Skipper. Mostly eastern records. P. 42, 380
Hesperia uncas. Uncas Skipper. Scattered records across state. P. 382
Hesperia ottoe. Ottoe Skipper. Probably entire state. P. 44, 390
Hesperia leonardus pawnee. Pawnee Skipper Entire state. P. 45, 392
Polites peckius. Yellowpatch Skipper. Widespread. P. 405
Polites themistocles. Tawny-edged Skipper. Widespread. P. 49, 407
Polites origenes. Crossline Skipper. Probably entire state. P. 50, 409
Polites mystic. Long Dash. Scattered records across state. P. 52, 411
Wallengrenia egeremeti. Northern Broken Dash. Mostly eastern. P. 413
Pompeius verna. Little Glassywing. Mostly eastern records. P. 415
Atalopedes campestris. Sachem. Widespread across state. P. 54, 403
Atrytone arogos. Beard-grass (Arogos) Skipper. Entire state. P. 55, 417
Atrytone logan. Delaware Skipper. Widespread entire state. P. 56, 419
Poanes hobomok. Hobomok Skipper. Probably entire state. P. 59, 425
Poanes zabulon. Zabulon Skipper. Only eastern records. P. 62, 427
Poanes viator. Broad-winged Skipper. Scattered records P. 63, 431
Euphyes dion. Sedge Skipper. Only eastern records. P. 65, 433
Euphyes conspicuus. Black Dash. Mostly eastern records.
Euphyes bimacula. Two-spotted Skipper. Scattered records. P. 435
Euphyes vestris. Dun Skipper. Probably entire state. P. 437
Artytonopsis hianna. Dusted Skipper. Scattered records. P. 67, 439
Amblyscirtes oslari. Oslar's Roadside Skipper. Few records.
Amblyscirtes vialis. Roadside Skipper. Probably entire state. P. 73, 445
Lerodea eufala. Eufala Skipper. Mostly eastern records. P. 75,

Family Papilionidae - Swallowtails

Battus philenor. Pipevine (Blue) Swallowtail. Mostly eastern. P. 78, 28
Eurytides marcellus. Zebra Swallowtail. Mostly eastern records. P. 81, 31
Papilio polyxenes asterius. Eastern Black Swallowtail. Widespread. P. 82, 33
Heraclides crespontes. Giant Swallowtail. Mostly eastern. P. 88, 49
Pterourus glaucus. Tiger Swallowtail. Widespread across state. P. 89, 52
Pterourus palamedes. Palamedes Swallowtail. Mostly eastern. P. 91

Family Pieridae - Sulphurs, Orange-tips and Whites

Pontia protodice. Checkered White. Widespread. P. 85, 78
Pieris rapae. Imported Cabbage White. Widespread entire state. P. 86
Euchloe olympia. Olympia Marblewing. Probably entire state. P. 99, 93
Colias philodice. Common Sulfur. Widespread across state. P. 101, 97
Colias euytheme. Orange Sulphur. Widespread. P. 102, 99
Zerena cesonia. Dogface. Probably extends across state. P. 107
Phoebis sennae. Cloudless Giant Sulfur. Mostly eastern records. P. 109
Phoebis agarithe. Orange Giant Sulfur. Mostly eastern records. P. 111
Kricogonia lyside. Lyside. Five southern records. P. 108
Eurema mexicanum. Mexican Yellow. Probably across state. P. 110, 115
Eurema lisa. Little Yellow. Mostly eastern records. P. 111, 117
Eurema nicippe. Sleepy Orange. Southern half of state. P. 112, 119
Nathalis iole. Dwarf Yellow (Dainty Sulfur). Widespread. P. 113, 121

Family Lycaenidae-Blues, Coppers and Hairstreaks

Feniseca tarquinius. Harvester. Southeastern records mainly. P. 15, 124
Gaeides xanthoides. Great Gray Copper. Widespread across state. P. 117
Hyllolycaena hyllus. Bronze Copper. Widespread across state. P. 118
Epidemia helloides. Purplish Copper. Probably entire state. P. 135
Harkenclenus titus. Coral Hairstreak. Probably entire state. P. 122, 137
Satyrium acadicum. Acadian Hairstreak. Probably entire state. P. 140
Satyrium edwardsii. Edward's Hairstreak. Scattered records. P. 123, 142
Satyrium calanus. Banded Hairstreak. Scattered records. P. 125, 144
Satyrium liparops. Striped Hairstreak. Probably entire state. P. 127, 146
Mitoura siva. Juniper Hairstreak. Scattered records. P. 148
Mitoura grynea. Olive Hairstreak. Mostly eastern records. P. 129, 148
Incisalis henrici. Henry's Elfin. Southeastern records only. P. 130
Strymon melinus. Gray Hairstreak. Widespread. P. 135, 158
Leptotes marina. Marine Blue. Probably entire state. P. 160
Hemiargus isola. Reakirt's Blue. Widespread. P. 139, 162
Everes comyntas. Eastern Tailed Blue. Widespread. P. 140, 164
Celastrina argiolus. Spring Azure. Widespread. P. 141, 168
Lycaeides melissa. Melissa Blue. Probably entire state. P. 179
Icaricia acmon. Acmon Blue. Scattered records across state.

Family Libytheidae - Snout Butterflies

Libytheana bachmanii. Snout Butterfly. Records in south. P. 147, 195

Family Nymphalidae - Brush-footed Butterflies

Agraulis vanillae. Gulf Fritillary. Scattered records. P. 149, 197
Heliconius charitonius. Zebra Butterfly. Scattered records. P. 150

Euptoieta claudia. Variegated Fritillary. Widespread P. 152, 199
Speyaria cybele. Great Spangled Fritillary. Widespread. P. 155, 202
Speyaria aphrodite. Aphrodite (Manitoba) Fritillary. Entire state. P. 205
Speyaria idalia. Regal Fritillary. Widespread. P. 156, 210
Clossinia (Boloria) selene. Silver-bordered Fritillary. Entire state. P. 158, 233
Clossinia bellona. Meadow Fritillary. Mostly eastern records. P. 158, 236
Phycoides tharos. Pearly Crescentspot. Widespread. P. 165, 246
Polygonia interrogationis. Question Mark. Widespread. P. 167, 258
Polygonia comma. Comma (Hop Merchant). Widespread. P. 168, 261
Polygonia progne. Gray Comma. Probably entire state. P. 169, 270
Nymphalis antiopa. Mourning Cloak. Widespread. P. 170, 276
Aglais milberti. Milbert's Tortoiseshell. Probably entire state. P. 171, 280
Vanessa virginiensis. American Lady. Widespread. P. 173, 284
Vanessa cardui. Painted Lady. Widespread across state. P. 174, 286
Vanessa atalanta. Red Admiral. Widespread across state. P. 175, 282
Junonia coenia. Buckeye. Widespread across entire state. P. 176, 291
Basilarchia arthemis astyanax. Red-spotted Purple. Eastern. P. 179, 298
Basilarchia archippus. Eastern Viceroy. Widespread. P. 178, 304

Family Apaturidae - Goatweed & Hackberry Butterflies; Emperors

Anaea andria. Goatweed Butterfly. Probably entire state. P. 182, 311
Asterocampa celtis. Hackberry Butterfly. Widespread. P. 184, 313
Asterocampa clyton. Tawny Emperor. Mostly eastern records. P. 185, 316

Family Satyridae - Ringlets, Satyrs and Wood Nymphs

Enodia anthedon. Northern Pearly Eye. Mostly eastern. P. 188, 319
Satyroides eurydice. Eyed Brown. Probably entire state. P. 190, 321
Megisto cymela. Little Wood Satyr. Widespread across state. P. 193, 323
Cercyonis pegala. Large Wood Nymph (Grayling). Widespread. P. 194, 329

Family Danaidae-Queens and Monarchs

Danaus plexippis. Monarch. Widespread across state. P. 198, 341
Danaus gilippis. Queen. Probably extends across state. P. 199

BUTTERFLIES & COMMON MOTHS OF LANCASTER COUNTY

Source: <http://www.butterfliesandmoths.org>. The most usable field guide for Nebraska is probably *Butterflies of North America*, by J. Bock & K. Kaufman (Houghton Mifflin, 2003)(underlined page references refer to this source).

Page references in Roman type refer to *Butterflies and Moths of Missouri*, J. Richard & J. E. Heitzman, 1996, Mo. Dept. of Conservation. Page references in *italics* refer to *Field Guide to Butterflies of South Dakota*, G. M. Marrone, 2002, So. Dak. Dept. of Game, Fish & Parks. Distribution comments refer to the state of Nebraska as a whole. For illustrations of nearly all of the moth species see *A Field Guide to Moths of Eastern North America*, C. Covell, Jr., 1984, Houghton Mifflin (Plate numbers are indicated as "Pl."). Those illustrated in the *Peterson First Guide to Butterflies and Moths* (P. Opler, 1994) are marked with asterisks. Butterfly species reported from Spring Creek Prairie are underlined. Not all moth families are included. For species status statements and some additional moth groups see *The Nature of Nebraska*, P. Johnsgard, Univ. of Nebr. Press, Lincoln, 2002. Compiled by Paul Johnsgard

BUTTERFLIES

Fam. Papilionidae - Swallowtails

Pipevine Swallowtail. Eastern. P. 26, 78, 28*
Zebra Swallowtail. Eastern. P. 23, 81, 31*
Black Swallowtail. Widespread. P. 28, 82, 33*
Giant Swallowtail. Eastern. P. 38, 88, 49*
Tiger Swallowtail. Widespread. P. 20, 89, 52*
Palamedes Swallowtail. Eastern. P. 36, 91*

Fam. Pieridae – Sulphurs, Whites etc.

Checkered White. Widespread. P. 48, 85, 78*
Cabbage White. Widespread. P. 46, 97, 86*
Olympia Marblewing. Widespread. P. 56, 99, 93
Clouded Sulfur. Widespread. P. 60, 101, 97*
Orange Sulphur. Widespread. P. 60, 102, 99*
Dogface. Widespread. P. 68, 104, 107*
Cloudless Sulfur. Eastern. P. 74, 105, 109*
Dainty Sulfur. Widespread. P. 70, 108
Mexican Yellow. Widespread. P. 72, 110, 115
Little Yellow. Eastern. P. 70, 111, 117*
Sleepy Orange. Southern. P. 68, 112, 119*
Dwarf Yellow. Widespread. P. 70, 113, 121

Fam. Lycaenidae – Blues, Coppers etc.

Harvester. Southeastern. P. 80, 15, 124*
Gray Copper. Widespread. P. 82, 117, 128
Bronze Copper. Widespread. P. 88, 118, 131*
Coral Hairstreak. Widespread. P. 98, 122, 137*
Acadian Hairstreak. Widespread. P. 98, 140
Edward's Hairstreak. Few records. P. 94, 123, 142
Banded Hairstreak. Few records. P. 94, 125, 144*
Olive Hairstreak. Eastern. P. 110, 129, 148*
Henry's Elfin. Southeastern. P. 104, 130
Gray Hairstreak. Widespread P. 92, 135, 158*
Marine Blue. Widespread. P. 126, 136, 160*
Reakirt's Blue. Widespread. P. 139, 162
Eastern Tailed-blue. Widespread. P. 124, 140, 164*
Spring Azure. Widespread. P. 130, 141, 168*
Melissa Blue. Widespread. P. 134, 147, 195*

Fam. Libytheidae – Snout Butterfly

Snout Butterfly. Southern. P. 222, 147, 195*

Fam. Nymphalidae - Brush-foots

Gulf Fritillary. Few records. P 156, 149, 197*

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Comma. Widespread. P 196, 168, 261

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Hackberry Emperor. Widespread. P. 222, 184, 313*

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MOTHS

Family Sphingidae - Sphinx Moths

Subfamily Macroglossinae

Achemon sphinx Widespread Pl. 3
Ello sphinx Only Lancaster Co. P. 3
Hummingbird clearwing Scattered records. Pl. 6*
Nessus sphinx, Scattered records. Pl. 6
Obscure sphinx. 4 counties. Pl. 6
Pandorus sphinx, Scattered records. Pl. 3
Snowberry clearwing Widespread Pl. 6
Titan sphinx Scattered records. Pl. 5
Vine sphinx. Only Lancaster Co. Pl. 3
Virginia creeper sphinx. Scattered records. Pl. 6
White-lined sphinx Widespread Pl. 3

Subfamily Sphinginae

Blinded sphinx. Scattered records. Pl. 6
Carolina sphinx. Scattered records. Pl. 1, 3*
Catalpa sphinx Scattered records. Pl. 5
Elm sphinx.. Widespread Pl. 3
Five-spotted hawkmoth. Widespread Pl. 3
Great ash sphinx Widespread Pl. 4
Hagen's sphinx. 4 eastern counties. Pl. 4
Modest sphinx. Widespread Pl. 3
Pink-spotted hawkmoth. 3 counties. Pl. 3
Plebeian sphinx. 3 eastern counties. Pl. 5
Small-eyed sphinx. Scattered records. Pl. 6
Twin-spotted sphinx. Widespread Pl. 6
Vashti sphinx. Widespread Pl. 4
Walnut sphinx. Scattered records. Pl. 6
Waved sphinx. Widespread Pl. 4
Wild cherry sphinx. Scattered records. Pl. 4

Family Saturniidae - Silk Moths

Buck and Io Moths (Hemileucinae)

Io moth. 4 counties. Pl. 1, 2, 10*
Polyphemus moth. Widespread Pl. 1, 2, 9*

Giant Silkworm Moths (Saturniinae)

Cecropia silkworm. Widespread Pl. 1, 2, 10*
Luna moth. East & central. Pl. 1, 2, 9

Royal Moths (Citheroniinae)

Bicolored honey locust moth. 2 eastern counties.
Pl. 8
Rosy maple moth, Eastern counties. Pl. 8*
Royal walnut moth. Eastern counties. Pl. 1, 9

Family Arctiidae - Tiger & Lichen Moths

Lichen Moths (Lithosiinae)

Painted lichen moth. Scattered records. Pl. 12

Syntomine Moths (Syntominiinae)

Yellow-collared scape moth. Widespread Pl. 11

Tiger Moths (Arctiinae)

Arge tiger moth. 3 eastern counties. P. 14
Banded tussock moth or Pale tiger moth. 2 eastern
counties. Pl. 12
Bella moth. 4 eastern counties. Pl. 15*
Colona moth. 2 eastern counties. Pl. 15
Fall webworm moth. Scattered records. Pl. 13

Hobomok Skipper. Widespread. P. 330, 59, 425
Dun Skipper. Widespread. P. 326, 437
Eufala Skipper. Eastern. P. 352, 75, 447

Grammia speciosa (No common name). Only
Lancaster Co.

Hickory tussock moth or Hickory tiger moth. Only
Lancaster Co. Pl. 12

Isabella tiger moth or Banded woollybear.
Scattered records. Pl. 1, 14

Lecote's haploa. Scattered records. Pl. 16

Oregon cynis. Scattered records. Pl. 12

Parthenice tiger moth. 4 counties. Pl. 14

Salt marsh moth or Acrea moth. Scattered
records. Pl. 13*

Sprague's pygarctia. Scattered records. Pl. 12

Virgin tiger moth. Only Lancaster Co. Pl. 14*

Virginian tiger moth or Yellow woollybear moth.
Scattered records. Pl. 13

Owlets & Millers (Noctuidae)

Flower Moths (Heliotherinae)

Schinia citrinella. Widespread

Schinia gracilienta. Scattered records.

Schinia obscurata. Only Lancaster Co.

Schinia regia. Scattered records.

Schinia tertia. 2 counties.

Clouded crimson. Widespread Pl. 29*

Leadplant flower moth. Widespread Pl. 29

Family Notodontidae - Prominent Moths

Black-etched prominent. 3 counties. Pl. 1, 44

Black-rimmed prominent. Scattered records. Pl.
42

Clostera apicalis (No common name). Only
Lancaster Co.

Common Gluphisia. Scattered records. Pl. 43

Double-lined prominent. 3 counties. Pl. 42

Double-toothed prominent. Scattered records. Pl.
43

Drab prominent. 4 counties. Pl. 44

Elegant prominent. 3 counties. Pl. 44

Georgian prominent. 4 counties. Pl. 42

Gray furcula. 3 counties. Pl. 44

Sigmoid prominent. 3 counties. Pl. 42

Spotted datana . 3 counties. Pl. 42

Walnut caterpillar moth. Only Lancaster Co. Pl.
42

White-dotted prominent. 2 counties. Pl. 43

Date:

Weather:

Participants:

Notes:

CHECKLIST OF DRAGONFLIES AND DAMSELFLIES (ODONATA) OF NEBRASKA

Based on USGS website <http://www.npwrc.usgs.gov/resource/distr/insects/dfly/ne/toc.htm>

Species known to occur in eastern Nebraska on the basis of available records are in *italics*. Species reported from Lancaster County are underlined. Plate ("Pl.") references refer to photographs in *Dragonflies through Binoculars* (S. Dunkle, Oxford Univ. Press, 2000). Most of Nebraska's Odonata are illustrated ("P." indicates page number) in *Beginner's Guide to Dragonflies* (Nikula, Sones, Stokes & Stokes, Little, Brown & Co., 2002).

Dragonflies

Aeshnidae - Darners

- Canada Darner (*Aeshna canadensis*). Pl. 5, P. 86
Lance-tipped Darner (*Aeshna constricta*). Pl. 4
Variable Darner (*Aeshna interrupta*) Pl. 5, P. 87
Blue-eyed Darner (*Aeshna multicolor*). Pl. 5. P. 88
Paddle-tailed Darner (*Aeshna palmata*), Pl. 4.
Shadow Darner (*Aeshna umbrosa*). Pl. 4, P. 84
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Gomphidae - Clubtails

- Horned Clubtail* (*Arigomphus cornutus*). Pl. 14
Jade Clubtail (*Arigomphus submedianus*). Pl. 14
Plains Clubtail (*Gomphus externus*). Pl. 11
Cobra Clubtail (*Gomphus vastus*). Pl. 10
Pronghorn Clubtail (*Gomphus graslinellus*). Pl. 7
Sulphur-tipped Clubtail (*Gomphus militaris*). Pl. 7, P. 94
Pale Snaketail (*Ophiogomphus severus*). Pl. 16
Common Sanddragon (*Progomphus obscurus*). Pl. 15. P. 97

Riverine Clubtail (*Stylurus amnicola*). Pl. 13

Brimstone Clubtail (*Stylurus intricatus*). Pl. 12

Elusive Clubtail (*Stylurus notatus*). Pl. 13

Corduliidae – Emeralds & Baskettails

Prince Baskettail (*Epitheca princeps*). Pl. 23. P. 110

Stripe-winged Baskettail (*Epitheca costalis*). Pl. 23

Common Baskettail (*Epitheca cynosura*). Pl. 23, P. 111

Plains Emerald (*Somatochlora ensigera*). Pl. 25

Libellulidae - Skimmers

Calico Pennant (*Celithemis elisa*). Pl. 44. P. 118

Halloween Pennant (*Celithemis eponina*). Pl. 44. P. 120

Eastern Pondhawk (*Erythemis simplicicollis*). Pl. 39

Hudsonian Whiteface (*Leucorrhinia hudsonica*). Pl. 43. P. 155

Dot-tailed Whiteface (*Leucorrhinia intacta*). Pl. 43. P. 152

Widow Skimmer (*Libellula luctuosa*). Pl. 28, P. 128

Common Whitetail (*Libellula lydia*). Pl. 28. P. 126

Twelve-spotted Skimmer (*Libellula pulchella*). Pl. 29. P. 124

Four-spotted Skimmer (*Libellula*)

quadrimaculata). Pl. 29. P. 129
Blue Dasher (Pachydiplax longipennis). Pl. 39. P. 136
Wandering Glider (Pantala flavescens). Pl. 40. P. 115
Spot-winged Glider (Pantala hymenaea). Pl. 40. P. 114
Eastern Amberwing (Perithemis tenera). Pl. 38. P. 116
Blue-faced Meadowhawk (Sympetrum ambiguum). Pl. 34.
Variiegated Meadowhawk (Sympetrum corruptum). Pl. 35. P. 150
Saffron-winged Meadowhawk (Sympetrum costiferum). Pl. 35. P. 148

Cherry-faced Meadowhawk (Sympetrum internum). Pl. 36. P. 144, 149
White-faced Meadowhawk (Sympetrum obtrusum). Pl. 36. P. 144
Band-winged Meadowhawk (Sympetrum occidentale). Pl. 36. P. 149
Ruby Meadowhawk (Sympetrum rubicundulum). Pl. 36. P. 144
Yellow-legged Meadowhawk (Sympetrum vicinum) Pl. 35. P. 146
Black Saddlebags (Tramea lacerata). Pl. 40 P. 112
Red Saddlebags (Tramea onusta). Pl. 41. P. 113

DAMSELFLIES

Calopterygidae - Jewelwings

River Jewelwing (Calopteryx aequabilis). P. 43
Ebony Jewelwing (Calopteryx maculata). P. 30, 42.
American Rubyspot (Hetaerina americana). P. 44

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Spotted Spreadwing (Lestes congener), P. 48
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Sweetflag Spreadwing (Lestes forcipatus). P. 46
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Coenagrionidae - Bluets & Dancers

Paiute Dancer (Argia alberta)
***Blue-fronted Dancer (Argia apicalis)*. P. 68**
Emma's Dancer (Argia emma). P. 66
Variable Dancer (Argia fumipennis), P. 64
Powdered Dancer (Argia moesta)
Springwater Dancer (Argia plana)
Blue-ringed Dancer (Argia sedula). P. 67
Vivid Dancer (Argia vivida). P. 66

Taiga Bluet (Coenagrion resolutum). P. 61
River Bluet (Enallagma anna)
Rainbow Bluet (Enallagma antennatum)
Azure Bluet (Enallagma aspersum). P. 60
Double-striped Bluet (Enallagma basidens)
Tule Bluet (Enallagma carunculatum). P. 54
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Alkali Bluet (Enallagma clausum)
Northern Bluet (Enallagma cyathigerum). P. 56
Stream Bluet (Enallagma exsulans), P. 58
Skimming Bluet (Enallagma geminatum). P. 59
Hagen's Bluet (Enallagma hageni). P. 57
Arroyo Bluet (Enallagma praevarum)
Orange Bluet (Enallagma signatum). P. 62
Plains Forktail (Ischnura damula). P. 73
Citrine Forktail (Ischnura hastata). P. 75
Western Forktail (Ischnura perparva). P. 70
***Eastern Forktail (Ischnura verticalis)*, P. 70**
Sedge Sprite (Nehalennia irene) P. 78

Identification Guide to Eastern Nebraska's Common Dragonflies

Plate (Pl.) numbers refer to Dunkle, 2000; Page (P.) numbers refer to Nikula *et al*, 2002

- .A. Eyes **widely separated** on top of head, **tip of abdomen laterally expanded**; often perch horizontally, ca. 2" long. Gomphidae (**Clubtails**, ca 9 Nebr. spp.)
 - .A1. Brimstone Clubtail. **Mostly sulfur yellow on head and body; abdomen yellow with black spots**. Slow rivers in open country. Pl. 12
 - .A2. Common Sanddragon. **Small brown spot at base of each wing. Abdomen black with small yellow spots**. Sandy streams. Pl. 15, P. 97
 - .A3. Jade Clubtail. Eyes green, **abdomen mostly yellow with grayish green rings**. Permanent wetlands Pl. 14
 - .A4. Pale Snaketail. **Mostly pale yellow-brown**. Mostly western Nebraska, Pl. 16
 - .A5. Plains Clubtail . Rivers & streams. **Abdomen uniformly patterned yellow (spots or stripes) & black**. Pl. 11
 - .A6. Pronghorn Clubtail. Ponds & slow streams. Very similar to Plains Clubtail Pl. 8
 - .A7. Riverine Clubtail. Larger rivers. **Abdomen black except for large yellow spots at tip, front of thorax has 3-point star**. Eastern. Pl. 13
 - .A8. Sulphur-tipped Clubtail. **Abdomen tip sulfur yellow**. Ponds & slow streams. Pl. 7
- .AA. Eyes **touching** or **broadly meeting** dorsally, may perch horizontally or vertically.
 - .B. **Large (2.5-3.5")**, abdomen long, slender, brown, black, blue or red; perch by hanging vertically, constant fliers. Aeschnidae (**Darners**, ca 8 Nebr. spp.)
 - .B1. Blue-eyed Darner. Male has **sky-blue eyes** & forked cerci. Pl. 5
 - .B2. Common Green Darner. **Thorax, head & eyes green (brown in female), black forehead "target" spot**, diverse wetlands. Pl. 6, P. 80
 - .B3. Fawn Darner. Shady streams; **2 yellow spots** on each side of **brown thorax**, otherwise **dark brown**; streams; summer/fall. Pl. 5, P. 83
 - .B4 Lance-tipped Darner. Male much like Shadow Darner, but **thoracic stripes notched**. Pl. 4
 - .B5. Shadow Darner. **Mostly black, with two green/yellow) thorax stripes**, outlined in black. **Blue abdomen spots form mosaic**; summer/fall. Pl 4, P. 84
 - .B6. Variable Darner. **Black with thin blue thoracic stripes (M), or brown, with blue/green/yellow stripes (F)**; marshy ponds & slow streams. Pl. 5, P. 87
 - .C. Generally smaller species (**mostly 1.2-2.5" long**),
 - .D. Slender & dark, body metallic-colored, usually with emerald-green eyes; fast erratic flight, rarely perch. Cordulinae (**Emeralds & Baskettails**, ca. 5 Nebr. spp.)
 - D1. Common Baskettail. **Small (1.5-2")**, hind wing usually with **brown basal triangle, brown eyes**. Pl. 23, P. 111
 - .D2. Prince Baskettail. **Large (3")**, wings with **3 brown spots, green eyes**, (brown in immatures). Pl. 23, P. 110
 - .E. Never metallic-colored, often patterned wings, abdomen shorter than wing, wings often with white or dark markings. Sometimes glide while flying. Often near still water, Sexually dimorphic; eye color variable, sometimes green as in emeralds. Libellulidae (**Skimmers**, ca. 30 Nebr. spp). Skimmers are the most common Nebraska dragonflies.

- .E1 Banded wings, males with opaque white areas & white abdomen (1.7-2'')**
 - .E1a. Common Whitetail, Male with **2 brown wing bands**, otherwise **opaque white**, & **thick, white abdomen**; female with 3 dark wing bands on each wing, no white. Diverse wetlands. Pl. 28, P. 126
 - .E1b. Twelve-spotted Skimmer. Male with **3 alternating black & opaque white wing bands & white abdomen**; female with 3 similar wing bands but abdomen yellow the broad black dorsal stripe. Diverse wetlands. Pl. 29, P. 124
 - .E1c. Widow Skimmer, Abundant. Male with large basal black wing band and **large opaque white tip**, female with black wing base & clear tips, and yellow abdominal stripes on sides, black on top. Ponds & wetlands. Pl. 28, P. 128
- .E2 Banded-wing species lacking opaque white patches in males (1.2-2'')**
 - .E2a. Black Saddlebags, Rear wings with large **black basal markings**, body & abdomen mostly black. Diverse wetlands. Pl. 40, P. 112
 - .E2b. Calico Pennant. Male black with red (yellow in females) dorsal triangles, wings with dark tips, midwing spots, & large brown basal spot on hindwing. Marshes. Pl.44, P. 118
 - .E2c. Halloween Pennant. Orange & brown, wings banded & spotted with brown, eyes brown. Diverse wetlands. Pl. 44, P. 120.
- .E3 . Transparent-winged species (wings sometimes tinted) species (c. 2'')**
 - .E3a. Blue Dasher. Male with whitish abdomen, green eyes and **brown-tinted wings**. Still-water wetlands. Pl. 39,
 - .E3b. Eastern Amberwing, Males with **orange-tinted wings**, black eyes; female brown-banded or spotted wings, brown eyes & abdomen. Permanent wetlands. Pl. 38, P. 116
 - .E3c. Eastern Pondhawk. Male pale blue with **clear wings**, but pea-green face & eyes; female green with black-spotted abdomen. Quiet wetlands. Pl. 39, P. 138
 - .E3d. Four-spotted Skimmer. Wings have small black **nodal spots**; male has small dark patch at base of hindwing; abdomen **brassy gold**. Pl. 29. P. 129
 - .E3e. Spot-winged Glider, **Small dark patch** at base of hindwing, abdomen mottled gray-brown. Temporary wetlands. Pl. 40, P. 114
 - .E3f. Wandering Glider. Male brown, with **red eyes, clear wings**, yellow tapered abdomen; **female more yellow**. Temporary wetlands. Pl. 40, P. 115
- .E4 . Small red-bodied species, autumn season (1.3- 2'')**
 - .E4a. Cherry-faced Meadowhawk. **Face dark red**, abdomen red with black lateral stripe, Still wetlands. Pl. 36, P. 144, P. 113
 - .E4b. Red Saddlebags, **Rear wing has pale red basal saddle, relatively large**. Thorax & abdomen red, wings red-tinted. Diverse wetlands. Pl. 41, P. 113
 - .E4c. Ruby Meadowhawk, Eastern, temporary wetlands. Like cherry-faced but face dark brown. Pl. 36, P. 144
 - .E4d. Variegated Meadowhawk, Still wetlands. Red abdomen with **gray & yellow spots**. Pl. 35, P. 150
 - .E4e. Western (Band-winged) Meadowhawk. Shallow wetlands. **Brown band at mid-wing, pale yellow basally**. Pl. 36, P. 149
 - .E4f. White-faced Meadowhawk, Abdomen red with **black lateral stripe, face white**. Diverse wetlands. Pl. 36, P. 144
 - .E4g. Yellow-legged (Autumn) Meadowhawk, **Red abdomen, thorax & face, yellow legs**. Diverse wetlands. Pl. 35, P. 146

Common Grasshoppers, Katydid, Mantids and Walkingsticks

GRASSHOPPERS (Family Acrididae). Grasshoppers have short antennae, hind legs adapted for jumping, and sound-stridulation by males is common. # = Species illustrated and described by Otte, 1981(#) or Otte, 1984.(##), * = Species illustrated and described by Phadt (1994). @ = Species described and illustrated by Capinera *et al.* (2004), with text page numbers indicated. ** = species illustrated in *Insects in Kansas* (Salsbury & White, 2000).

Slant-faced Grasshoppers (face slants back from the vertical, short wings, most species stridulate)

Big-headed Grasshopper. *Aulocara eliotti*. West & central, shortgrass prairies, common.*#@ 59
Handsome Grasshopper. *Syrbula admirabilis*. Mainly eastern Nebraska, dry uplands.#@ 75
Lively Mermiria Grasshopper. *Mermiria picta*. Widespread, in tall grasses.*@ 69
Marsh Meadow Grasshopper. *Chorthippus curtipennis*. Widespread; in tall, moist grasses.*#@ 63
Obscure Grasshopper. *Opeia obscura*. Widespread across state, in shortgrass prairies.*#@ 69**
Pasture Grasshopper. *Orphulella speciosa*. Widespread, short to medium grassy areas. #@ 72
Short-winged Green Grasshopper. *Dicromorpha viridis*. Widespread, in varied grassy areas.#@ 65
Short-winged Toothpick Grasshopper. *Pseudopomela brachyptera*. Widespread, taller prairies.#@ 73
Sprinkled Broad-winged Grasshopper, *Chloaltis conspersa*. Widespread, dry upland woods.##@62
Spotted-wing Grasshopper. *Orphulella pelidna*. Widespread across state, many habitats.#@ 70
Two-striped Mermeria Grasshopper. *Mermiria bivittata* Widespread, in taller grasses.*#@ 68**
Velvet-striped Grasshopper. *Eritetrix amplex*. Widespread, in all grassy areas.*@ 66

Band-winged Grasshoppers (hind wings are barred and often colorful, produce noise in flight)

Autumn Yellow-winged Grasshopper. *Arphia xanthoptera*. Eastern, grassy fields, woodland edges.##@ 80 (wings yellow to orange with black band, large)
Blue-legged Grasshopper. *Metator pardulinus*. Widespread, in many grassy habitats.@ *## 95 (wings yellow to orange or rose. with black band, blue hind legs)
Dusky Grasshopper. *Encoptolophus costalis*. Widespread, in prairies and open grassland.*##@ 90 (wings white with gray band.. blue hind legs)
Haldeman's Grasshopper *Paradallophora haldemani*. Mainly western, weedy or sandy prairie.##96 (wings bright orange to rose, with black band)
Kiowa Rangeland Grasshopper. *Trachyrhachys kiowa*. Widespread, on bare gravelly ground.*##102@** (wings yellow with dark gray band)
Northern Green-striped Grasshopper. *Chortophaga viridifasciata*. Widespread, short grasses.*##@ 82 (wings white to yellow, with gray band, hind legs bluish)
Northwestern Red-winged Grasshopper. *Arphia pseudonietana*. Widespread; tall grasses.##@ 79 (wings red or bright orange.with black tip)
Carolina Grasshopper. *Dissoteira carolina*. Widespread and common, on open roadsides.##*@ 88** (wings black with mottled yellow tip)
Wrinkled Grasshopper. *Hippiscus ocelote*. Widespread, in pastures and weedy prairies.##@ 92 (wings yellow to pink, with black band)

Spur-throated Grasshoppers (a spur is present between the front legs, no stridulation or noisy flight)

Cudweed Grasshopper. *Hypochlora alba*. Widespread; mainly west & central,cudweed sage.*@ 114
Dawson's Spur-throated Grasshopper. *Melanoplus dawsoni*. Widespread, many habitats.*@121
Differential Grasshopper. *Melanoplus differentialis*. Widespread, common, lush vegetation*@**122

Keeler's Spur-throated Grasshopper. *Melanoplus keeleri*. Widespread, pastures, woods.*@ 128
 Large-headed Grasshopper. *Phoetaliotes nebrascensis*. Widespread throughout, taller grasses.*@ 141
 Meadow Purple-striped Grasshopper. *Hesperotettix viridis*. West and central, grasslands.*@ 113
 Migratory Grasshopper. *Melanoplus sanguinipes*. Widespread throughout state, irruptive.*@** 137
 Narrow-winged Spur-throated Grasshopper. *Melanoplus augustipennis*. Widespread, in sand.*@ 115
 Little Pasture Spur-throated Grasshopper *Melanoplus confusus*. Widespread, many habitats..*@ 119
 Red-legged Grasshopper. *Melanoplus femurrubrum*. Widespread, common, thick vegetation.*@** 124
 Two-striped Grasshopper. *Melanoplus bivittatus*. Widespread and common, tall grasses.*@** 117
 Western Green-grass Grasshopper. *Hesperotettix speciosus*. Common, weedy areas.@ 113

Lubber Grasshoppers (heavy-bodied species with short wings; flightless, males may stridulate)
 Plains Lubber. *Brachystola magna*. Mainly west and central Nebraska, drier grasslands.*@ 148**

KATYDIDS (Family Tettigonidae). Katydids have very long antennae, the female's ovipositor is long & blade-like, and song-stridulation is highly developed. Species list based on Capinera *et al.* (2004), and excludes a few marginal Nebraska species. Species illustrated by him are indicated by @ symbol, and text page. ** = species illustrated in *Insects in Kansas* (Salsbury & White, 2000).

True Katydids (forewings broad, ballooned out & leaf-like, antennae stiff)
 Common True Katydid. *Pterophylla camelifolia*. Eastern Nebraska; arboreal, in tree crowns. @ 155
False Katydids (hindwings longer than forewings, wings variably leaf-like)
 Fork-tailed Bush Katydid. *Scudderia furcata*. Throughout state, old field & roadsides. 163**
 Oblong-winged Katydid. *Amblycorypha oblongifolia*. East & central, forest understory.@159
 Texas Bush Katydid. *Scudderia texensis*. Throughout state, old field & roadsides. @ 163
Cone-headed Katydids (head lengthened into a cone shape, usually very long wings and antennae)
 Nebraska Conehead. *Neoconocephalus nebrascensis*. Eastern Nebraska, wet grassy areas. @ 170
 Robust Conehead. *Neoconocephalus robustus*. Throughout state, moist upland prairies. @ 170
 Round-tipped Conehead. *Neoconocephalus retusus*. Southeastern, grassy or weedy areas. @ 170
 Sword-bearing Conehead. *Neoconocephalus ensiger*. Throughout state, wet grassy areas. @ **170
Meadow Katydids (forewings narrow, not ballooned out as in true katydids, very long antennae)
 Common Meadow Katydid. *Orchelimum vulgare*, Throughout, abundant in pastures & fields. @178**
 Gladiator Meadow Katydid. *Orchelimum gladiator*. Throughout state, in meadows. 178**
 Long-spurred Meadow Katydid. *Orchelimum silvaticum*. Throughout, in deciduous trees. @ 178
 Slender Meadow Katydid. *Conocephalus fasciatus*. Throughout, common in many habitats. @ 181
 Straight-lanced Meadow Katydid. *Conocephalus strictus*. Throughout, in dry grasslands. @ 182
Predaceous Katydids (forewings reduced and hidden by dorsal shield, rather short antennae)
 Haldeman's Shieldback. *Pediocetes haldemanni*. Throughout state, in many habitats.@ 186
 Mormon Cricket. *Anabrus simplex*. Throughout state, in scanty vegetation..@187**

MANTIDS (Family Mantidae), Mantids have a distinctive "praying" posture. ** = species illustrated in *Insects in Kansas* (Salsbury & White, 2000).

Carolina Mantid. *Stagmomantis carolina*. Southeastern corner of state.**
 Chinese Mantid. *Tenodera aridifolia*. Introduced, eastern Nebraska.

WALKINGSTICKS (Family Phasmatidae). Walkingsticks all closely resemble twigs. ** = species illustrated in *Insects in Kansas* (Salsbury & White, 2000).

Northern Walkingstick. *Diaperomera femorata*. Eastern edge of state.**

Prairie Walkingstick. *Diaperomera velei*. Common and widespread.**

CRICKETS (Family Gryllidae). Crickets have long antennae, the female's ovipositor is usually needle-like, and song-stridulation is highly developed. Species list based on Capinera *et al.* (2004). Species illustrated by him are indicated by @ symbol. ** = species illustrated in *Insects in Kansas* (Salsbury & White, 2000).

Field Crickets (typical crickets, including house crickets)

Fall Field Cricket. *Gryllus pennsylvanicus*. Throughout state, in grassy fields. @194**

House Cricket. *Acheta domesticus*. Throughout state, around humans. @196**

Spring Field Cricket. *Gryllus veletis*. Eastern Nebraska, grassy fields. @195

Ground Crickets (small species closely resembling field crickets, but less than 13 mm. long)

Allard's Ground Cricket. *Allonemobius allardi*. Throughout state, in grassy areas @.200

Striped Ground Cricket. *Allonemobius fasciatus*. Throughout state, in grassy areas. @200

Tree Crickets (pale green & delicate-bodied crickets, semiarboreal or arboreal)

Broad-winged Tree Cricket. *Oecanthus latipennis*. Eastern Nebraska, forest edges and shrubs.@
207

Four-spotted Tree Cricket. *Oecanthus quadripunctatus*. Throughout, on herbaceous plants.@
208**

Narrow-winged Tree Cricket. *Oecanthus niveus*. Eastern Nebraska, in forest edges and
shrubs.@ 205

Snowy Tree Cricket. *Oecanthus fultoni*. Throughout state, in forest edges and shrubs.@ 205**

Mole Crickets (forelegs modified for digging, heavy dorsal shield present)

Northern Mole Cricket. *Neocurtilla hexadactyla*. East and central, edges of wetlands.@ 212**

PART 4

Identification Illustrations of Grassland Plants

(Illustrations are from Hitchcock (1950), and U. S. Dept. of Agriculture (1970), with some leaf detail sketches added from *The Identification of Certain Native and Naturalized Grasses by their Vegetative Characters*, by S. S. Clark, J. A. Campbell & W. Shevkenek (1950), Canada Dept. of Agriculture Pub. 762. Taxa are listed in alphabetic order by generic and specific names)

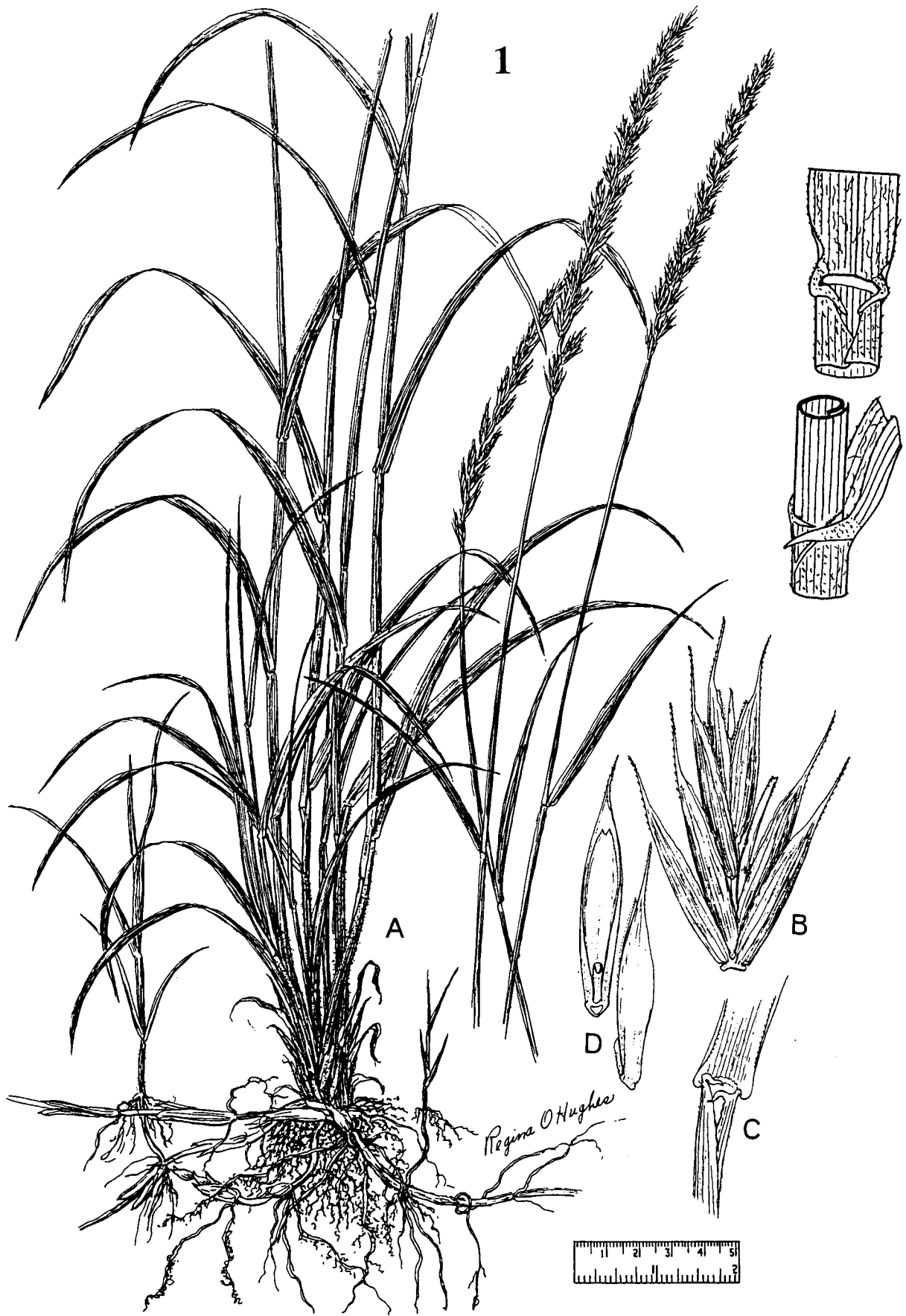
Common Prairie Grasses–Poaceae (Including Weedy Species)

1. Quackgrass, *Agropyron repens*
2. Big bluestem, *Andropogon gerardii*
3. Little bluestem. *Schizachyrium (Andropogon) scoparium*
4. Prairie threeawn, *Aristida oligantha*
5. Wild oats, *Avena fatua*
6. Side-oats grama, *Bouteloua curtipendula*
- 7a. Blue grama, *Bouteloua gracilis* & hairy grama, *Bouteloua hirsuta*
8. Japanese brome, *Bromus japonica*
9. Buffalo grass, *Buchloe dactyloides*
10. Bluejoint, *Calamagrostis canadensis*
11. Prairie sandreed, *Calamovilfa longifolia*
12. Longspine sandbur, *Cenchrus longispinus*
13. Large crabgrass, *Digitaria sanguinalis*
14. Barnyardgrass, *Echinochloa crusgalli*
15. Goosegrass, *Eleusine indica*
16. Canada wildrye, *Elymus canadensis*
17. Stinkgrass, *Eragrostis cilianensis*
18. Purple lovegrass, *Eragrostis spectabilis*
19. Fowl mannagrass, *Glyceria striata*
20. Foxtail barley, *Hordeum jubatum*
21. Little barley, *Hordeum pusillum*
22. Nimblewill, *Muhlenbergia schreiberi*
23. Witchgrass, *Panicum capillare*
24. Fall panicum, *Panicum dichotomiflorum*
25. Switchgrass, *Panicum virgatum*
26. Reed canarygrass, *Phalaris arundinacea*
27. Kentucky bluegrass, *Poa pratensis*
28. Giant foxtail, *Setaria faberi*, yellow foxtail, *Setaria glauca*, & green foxtail, *Setaria viridis*
29. Indiangrass, *Sorghastrum nutans*
30. Johnsongrass, *Sorghum halepense*
31. Prairie cordgrass, *Spartina pectinata*
32. Tall dropseed, *Sporobolus asper* & prairie dropseed, *Sporobolus heterolepis*
33. Sand dropseed, *Sporobolus cryptandrus*
34. Porcupine grass, *Stipa spartea*

Some Common Grassland Wildflowers (all Various Weedy Species) .

Taxa are in the same sequence as in earlier lists. Illustrations are from *Selected Weeds of the United States*, U.S. Dept. of Agriculture (1970), & *Nebraska Weeds*, Nebraska Dept. of Agriculture (1947).

35. Queen Ann's lace ("Wild carrot"). *Daucus carota*
36. Common milkweed. *Asclepias syriaca*
37. Whorled milkweed. *Asclepias verticillata*
38. Common yarrow. *Achillea millefolium*
39. Oxeye daisy. *Chrysanthemum leucanthemum*
40. Bull thistle. *Cirsium vulgare*
41. Curly-top gumweed. *Grindelia squarrosa*
42. Common sunflower. *Helianthus annuus*
43. Prickly lettuce. *Lactuca serriola*
44. Canada goldenrod. *Solidago canadensis*
45. Field (Perennial) sow thistle. *Sonchus arvensis*
46. Goat's beard. *Tragopogon dubius*
47. Baldwin("Western") ironweed. *Vernonia baldwinii*
48. Hoary cress. *Cardaria draba*
49. Western snowberry ("Buckbrush") *Symphoricarpos occidentalis*
50. Catchfly. *Silene noctiflora*
51. Hedge bindweed. *Calystegia sepium*
52. Field bindweed. *Convolvulus arvensis*
53. Purple (Lambert) locoweed. *Oxytropis lambertii*
54. Common evening primrose. *Oenothera biennis*
55. Yellow wood sorrel. *Oxalis stricta*
56. Pennsylvania smartweed. *Polygonum pensylvanicum*
57. Sulphur cinquefoil. *Potentilla recta*
58. Wild rose. *Rosa arkansana*
59. Hoary vervain. *Verbena stricta*
60. Common mullein *Verbascum thapsus*

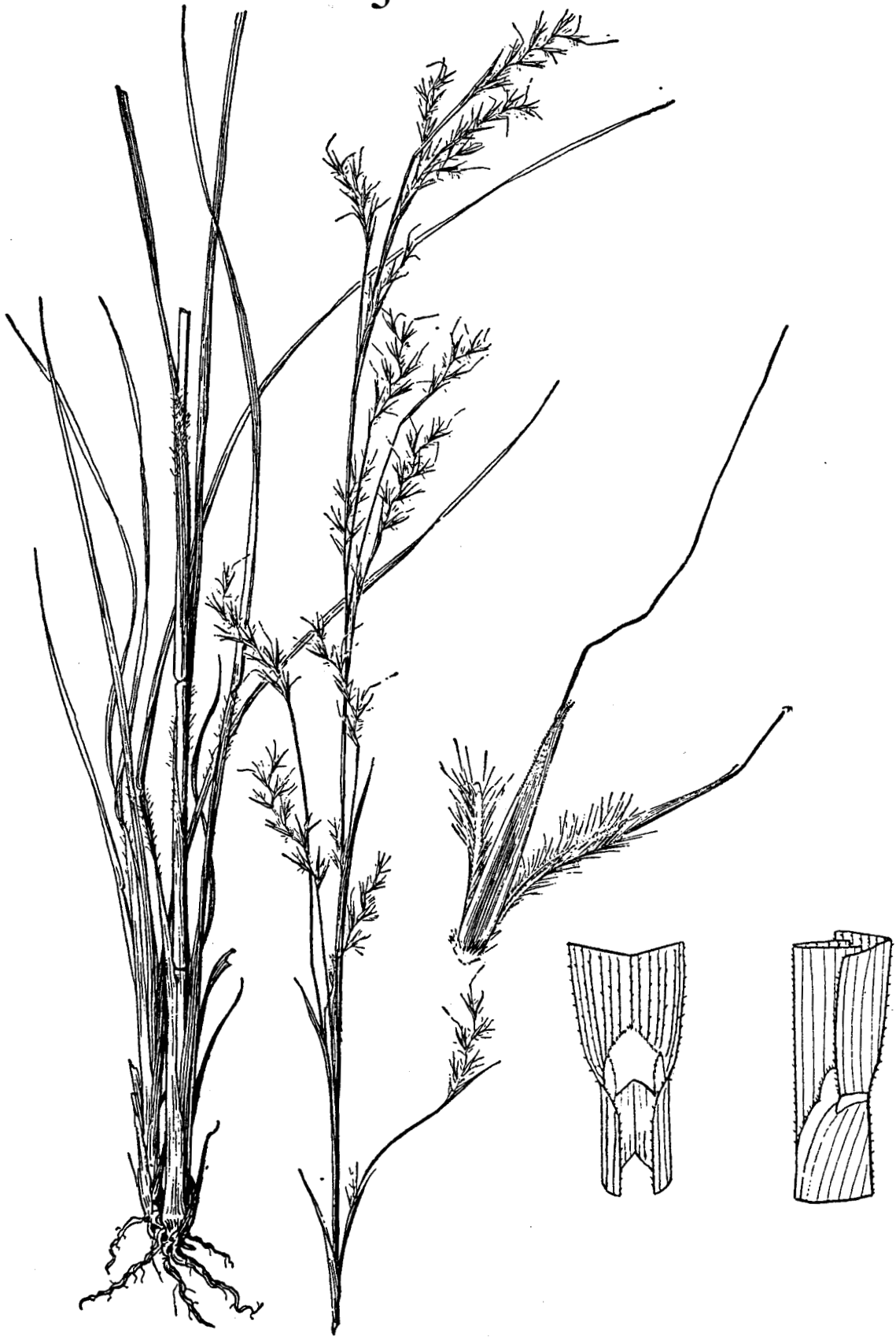


Agropyron repens (L.) Beauv. Quackgrass. A, Habit— $\times 0.5$; B, spikelet— $\times 3$; C, ligule— $\times 2.5$; D, florets— $\times 3.25$.



Andropogon gerardi. Plant, $\times \frac{1}{2}$; pair of spikelets, $\times 5$. (Amer. Gr. Natl. Herb. 255,

3



Andropogon scoparius. Plant, $\times \frac{1}{2}$; pair of spikelets, $\times 5$. (Amer. Gr. Natl. Herb. 268, D. C.)



Aristida oligantha. Plant, $\times \frac{1}{2}$; glumes and floret, $\times 2$. (Fitzpatrick 21, Iowa.)

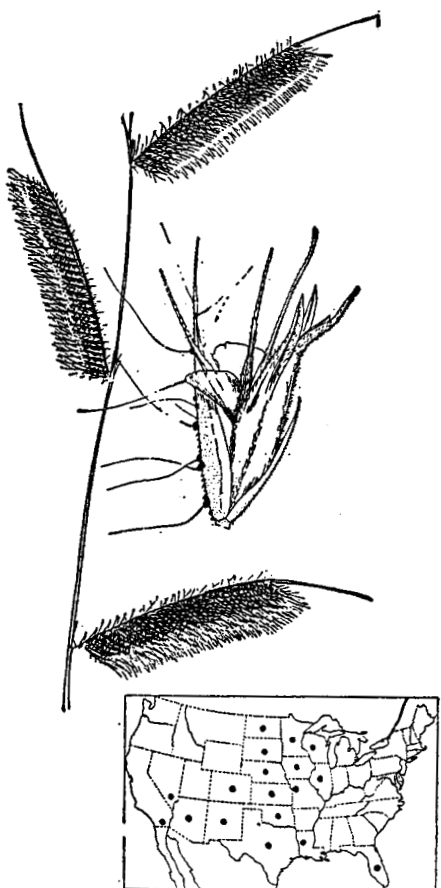


Avena fatua L. Wild oat. A, Habit— $\times 0.5$; B, spikelet— $\times 2$; C, florets, 3 views— $\times 3.5$.

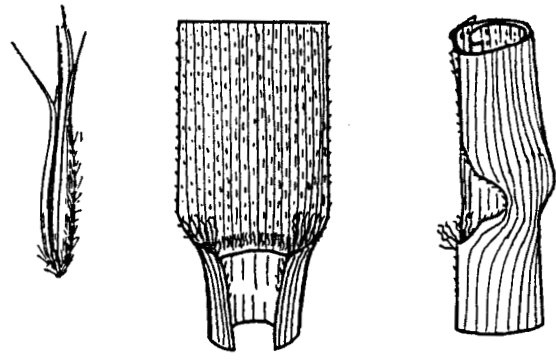
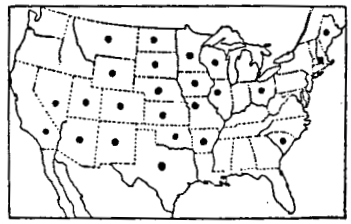
6



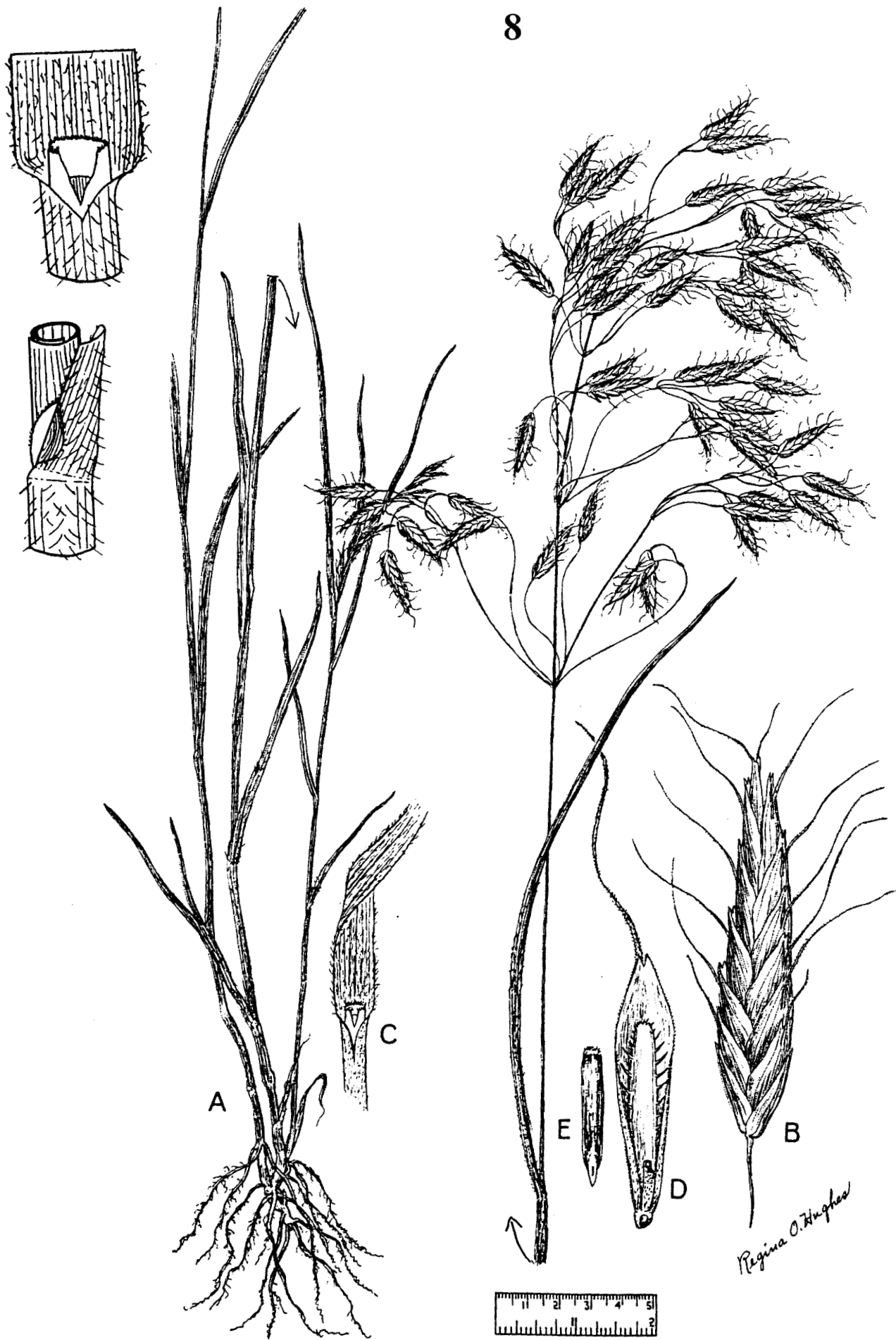
Bouteloua curtipendula. Plant, $\times \frac{1}{2}$; spikelet and florets, $\times 5$. (Chase 5408, Colo.)



Bouteloua hirsuta. Panicle, $\times 1$; spikelet, $\times 5$. (Griffiths 3371, Ariz.)



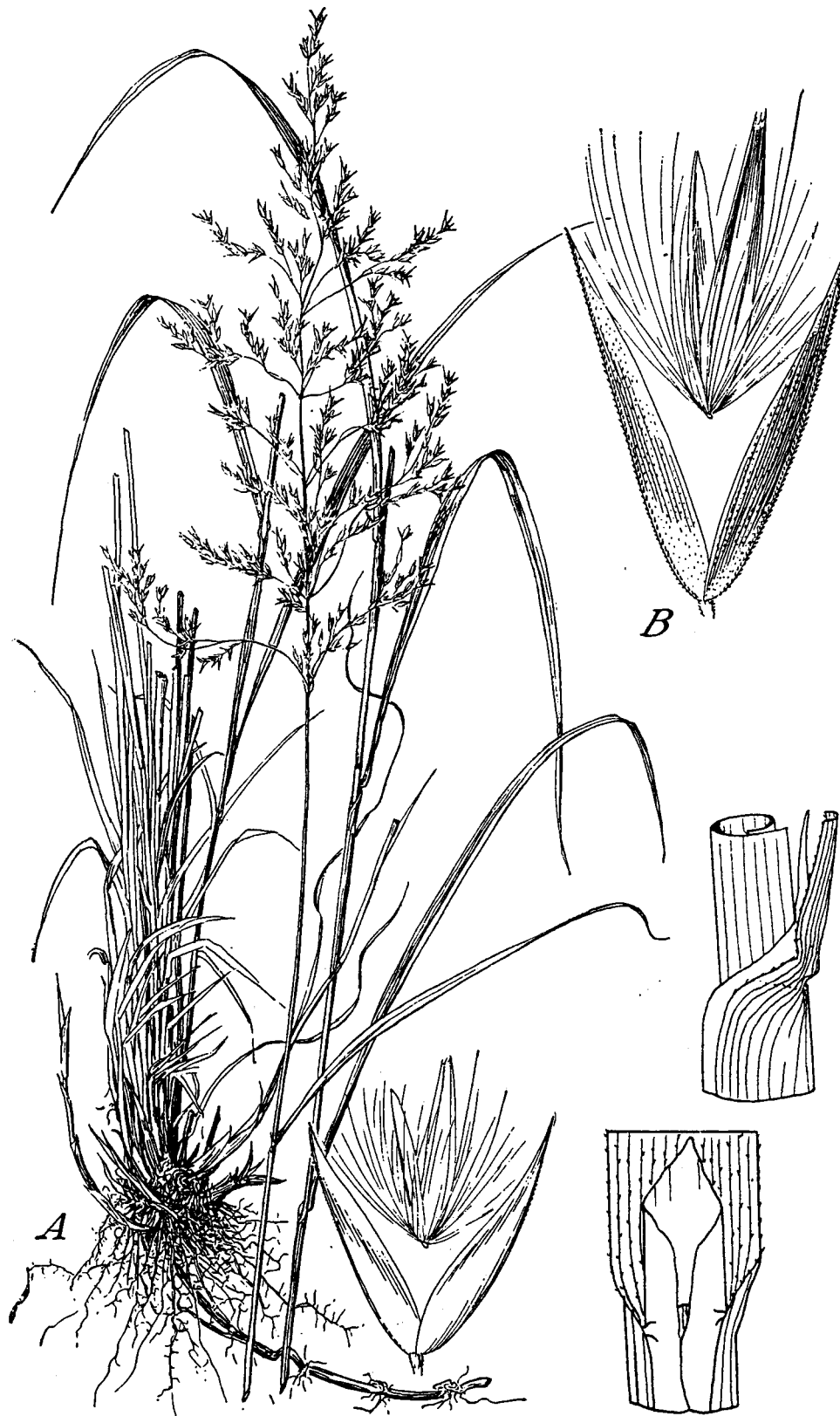
Bouteloua gracilis. Plant, $\times \frac{1}{2}$; glumes and florets, $\times 5$. (Amer. Gr. Natl. Herb. 384, Nev.)



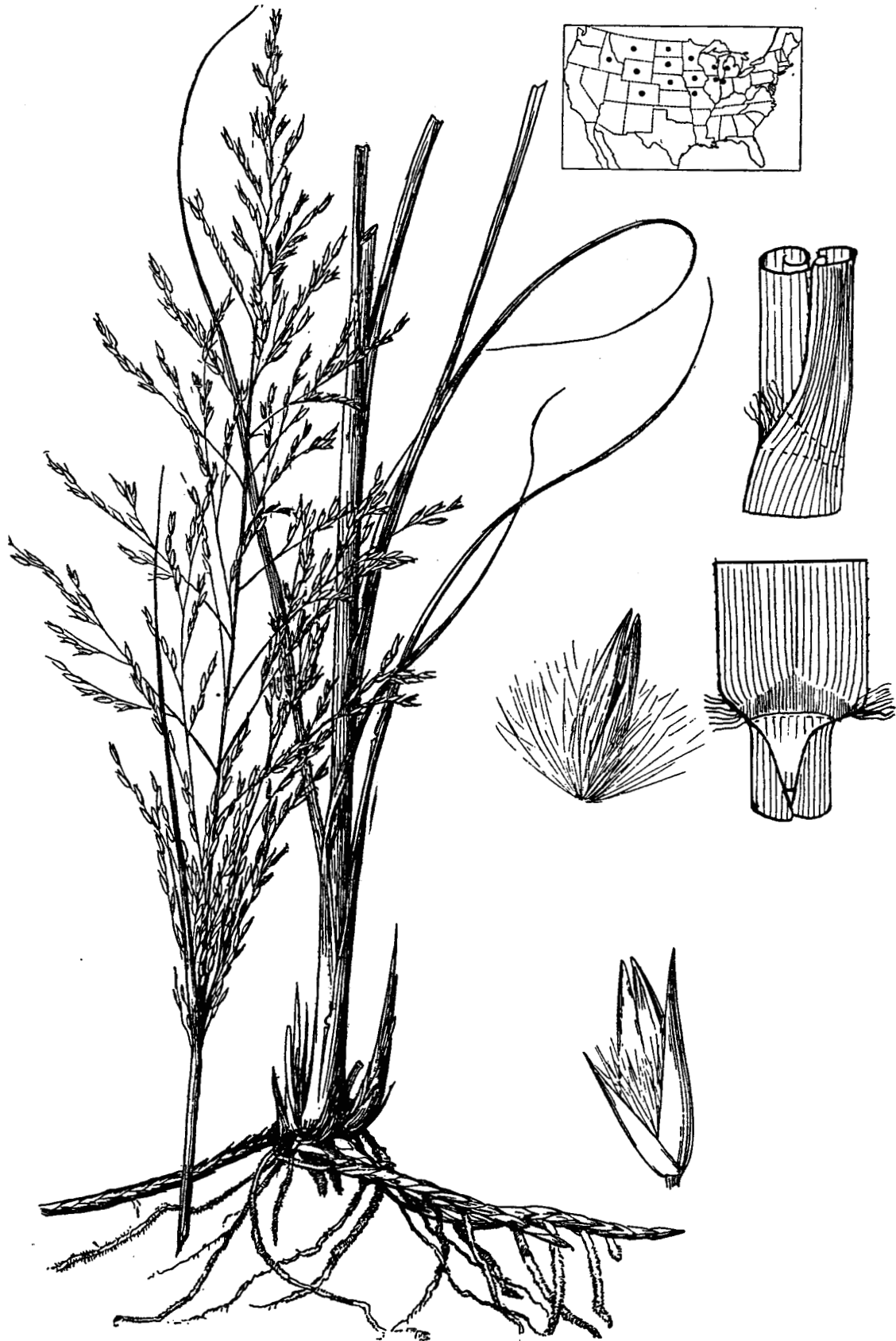
Bromus japonicus Thunb. Japanese brome. A, Habit— $\times 0.5$; B, spikelet— $\times 3$; C, ligule— $\times 2$; D, floret— $\times 5$; E, caryopsis— $\times 5$.



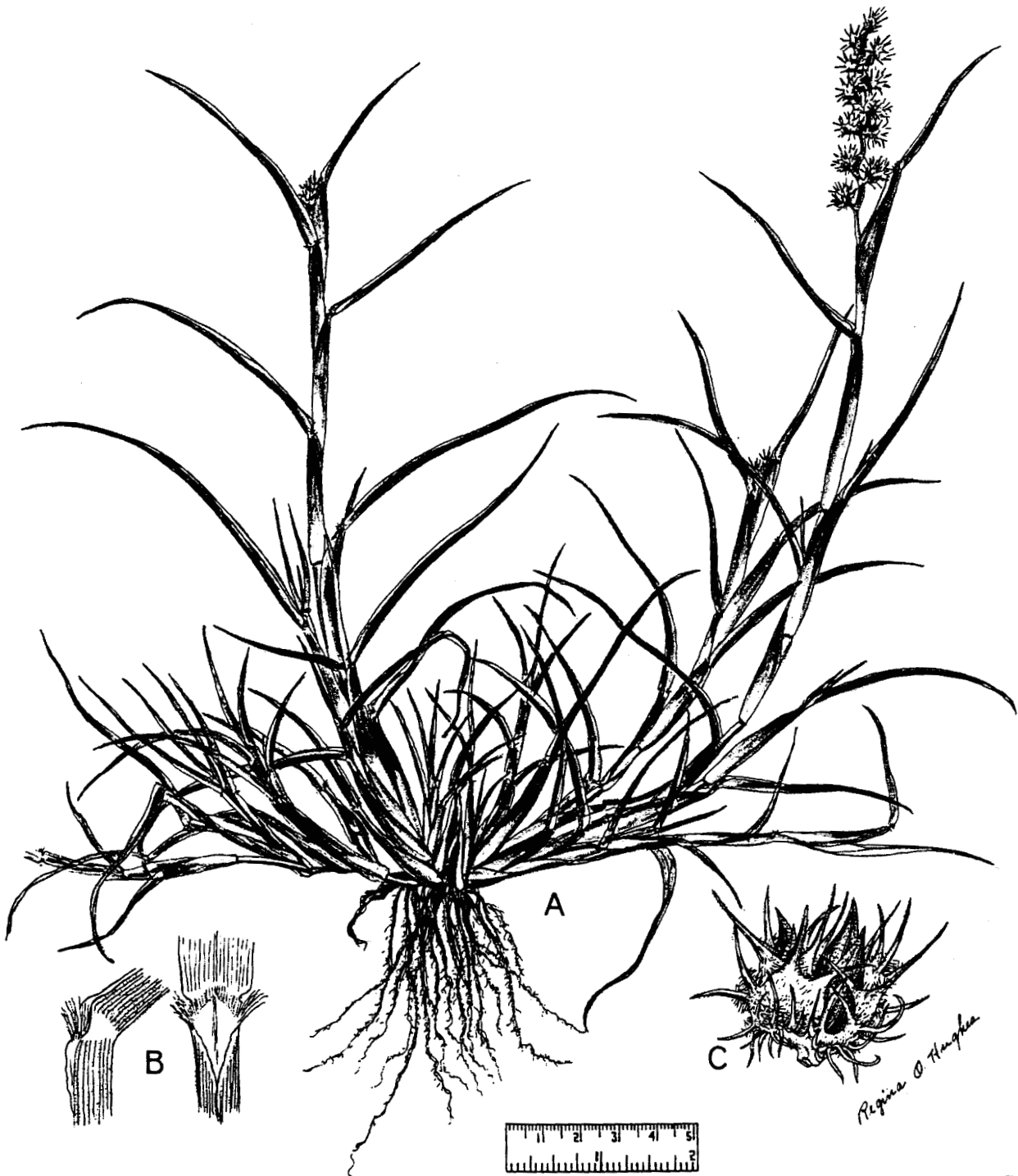
Buchloë dactyloides. Pistillate and staminate plants, $\times \frac{1}{2}$; pistillate spike and floret, $\times 5$; staminate spikelet, $\times 5$. (Ruth 156, Tex.)



A, *Calamagrostis canadensis*. Plant, $\times \frac{1}{2}$; glumes and floret, $\times 10$. (Chase 5077, Mont.) B, *scabra*, $\times 10$. (Pringle, N. H.) C, Var. *macouniana*, $\times 10$. (Pammel 891, Minn.)



Calamovilfa longifolia. Plant, $\times \frac{1}{2}$; spikelet and floret, $\times 5$. (Babcock, Ill.)



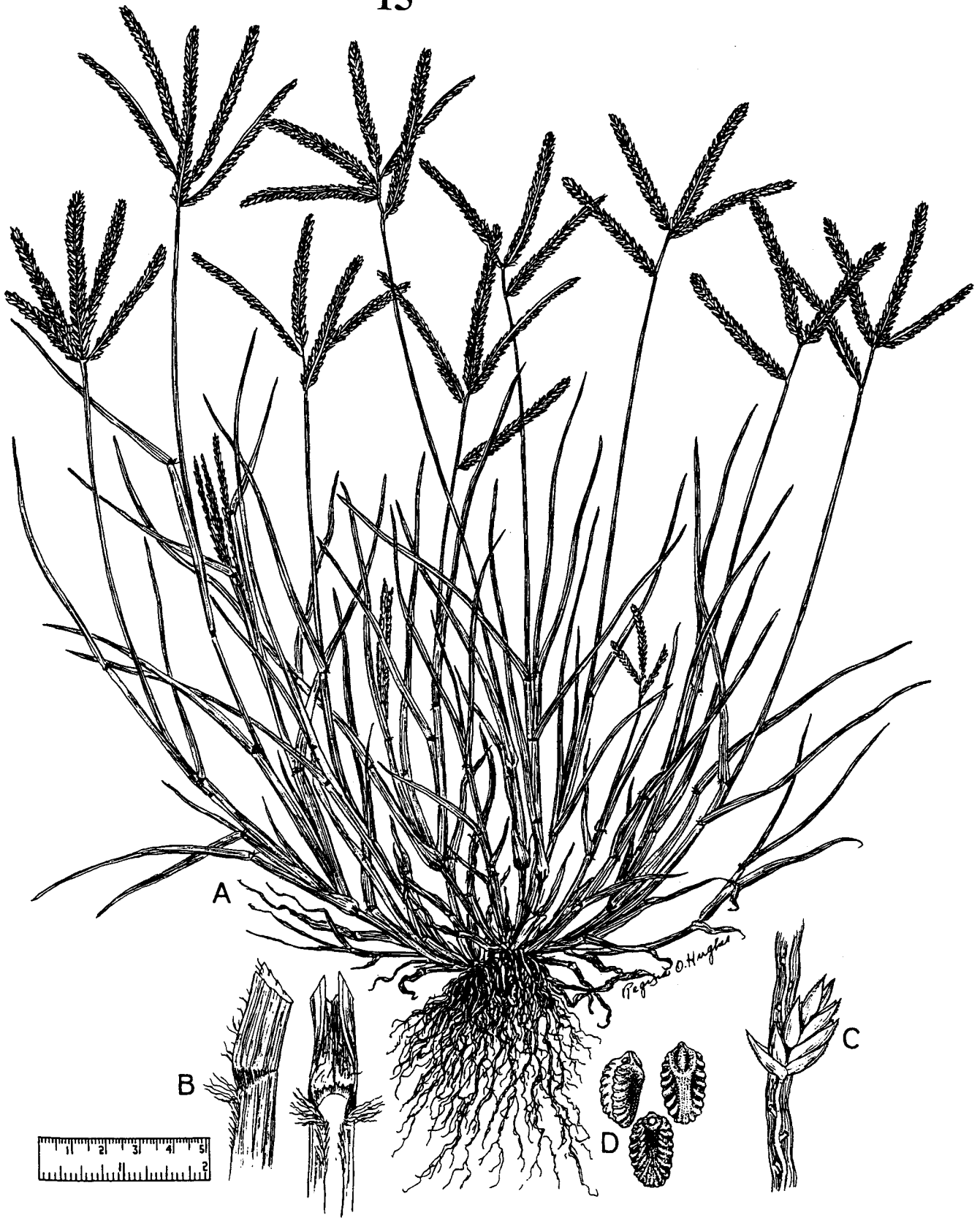
Cenchrus longispinus (Hack.) Fern. Longspine sandbur. A, Habit— $\times 0.5$; B, ligules— $\times 5$; C, bur— $\times 4$.



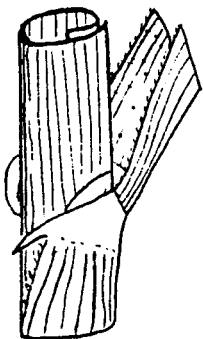
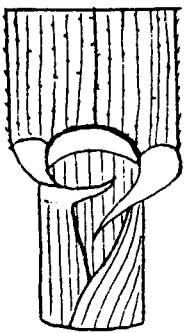
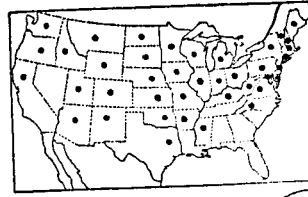
Digitaria sanguinalis (L.) Scop. Large crabgrass. A, Habit— $\times 0.5$; B, florets, front and back views— $\times 5$; C, caryopsis— $\times 6$.



Echinochloa crus-galli (L.) Beauv. Barnyardgrass. A, Habit, forma *longiseta* (Trin.) Farw.—× B, spikelet—× 2.5; C, ligule—× 2.5; D, florets—× 4; E, caryopses—× 4; F, spike, var. *mitis* (Pursh) Pe-
term.—× 0.5; G, floret of awnless variety—× 4.



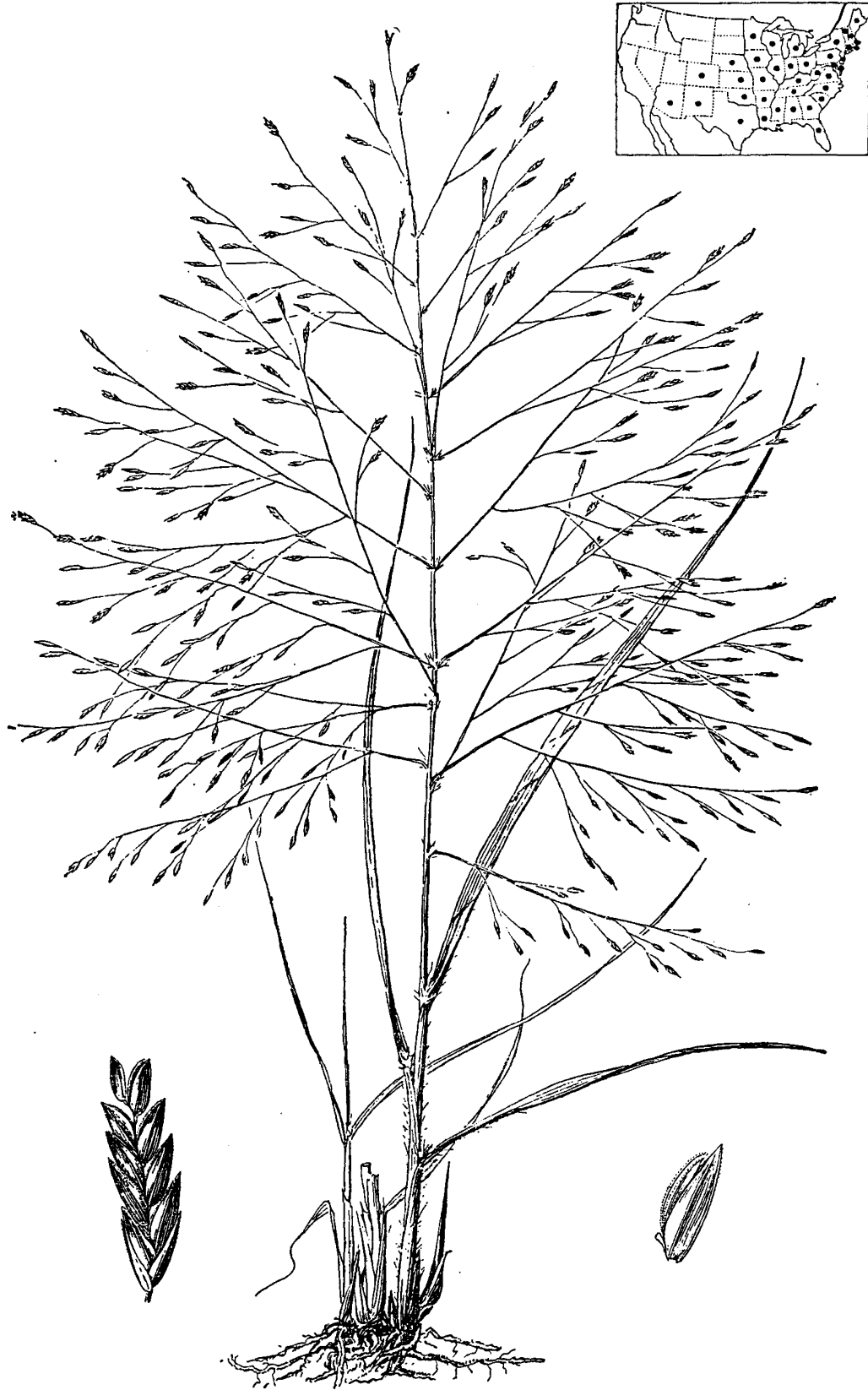
-*Eleusine indica* (L.) Gaertn. Goosegrass. A, Habit— $\times 0.5$; B, ligules— $\times 2.5$; C, spikelet— $\times 3$; D, caryopses— $\times 12.5$.



Elymus canadensis. Plant, $\times \frac{1}{2}$; spikelet and floret, $\times 5$. (Lansing 3240, Mich.)



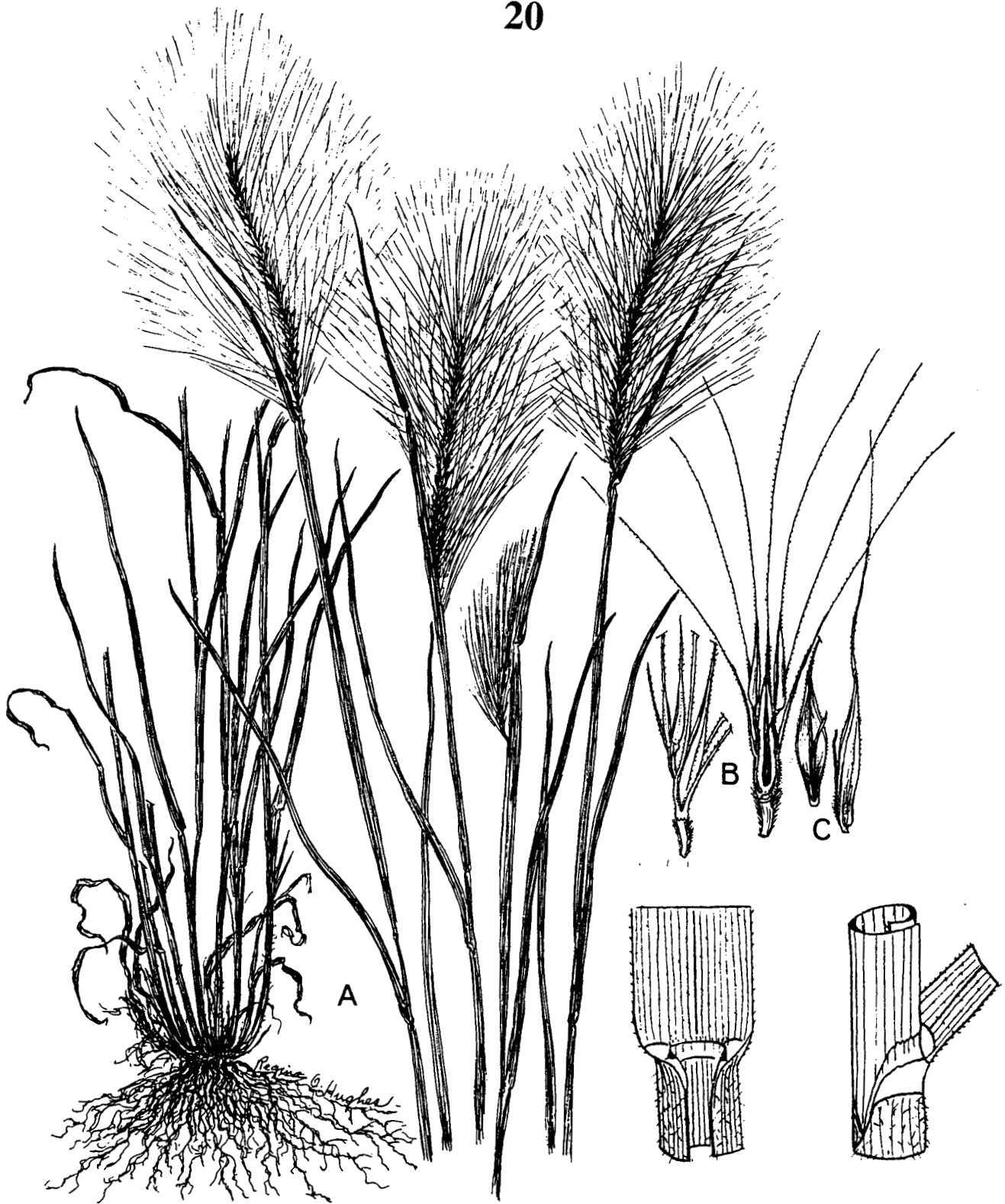
Eragrostis cilianensis. Plant, $\times \frac{1}{2}$; spikelet, $\times 5$; floret, $\times 10$. (Schuetze 155.)



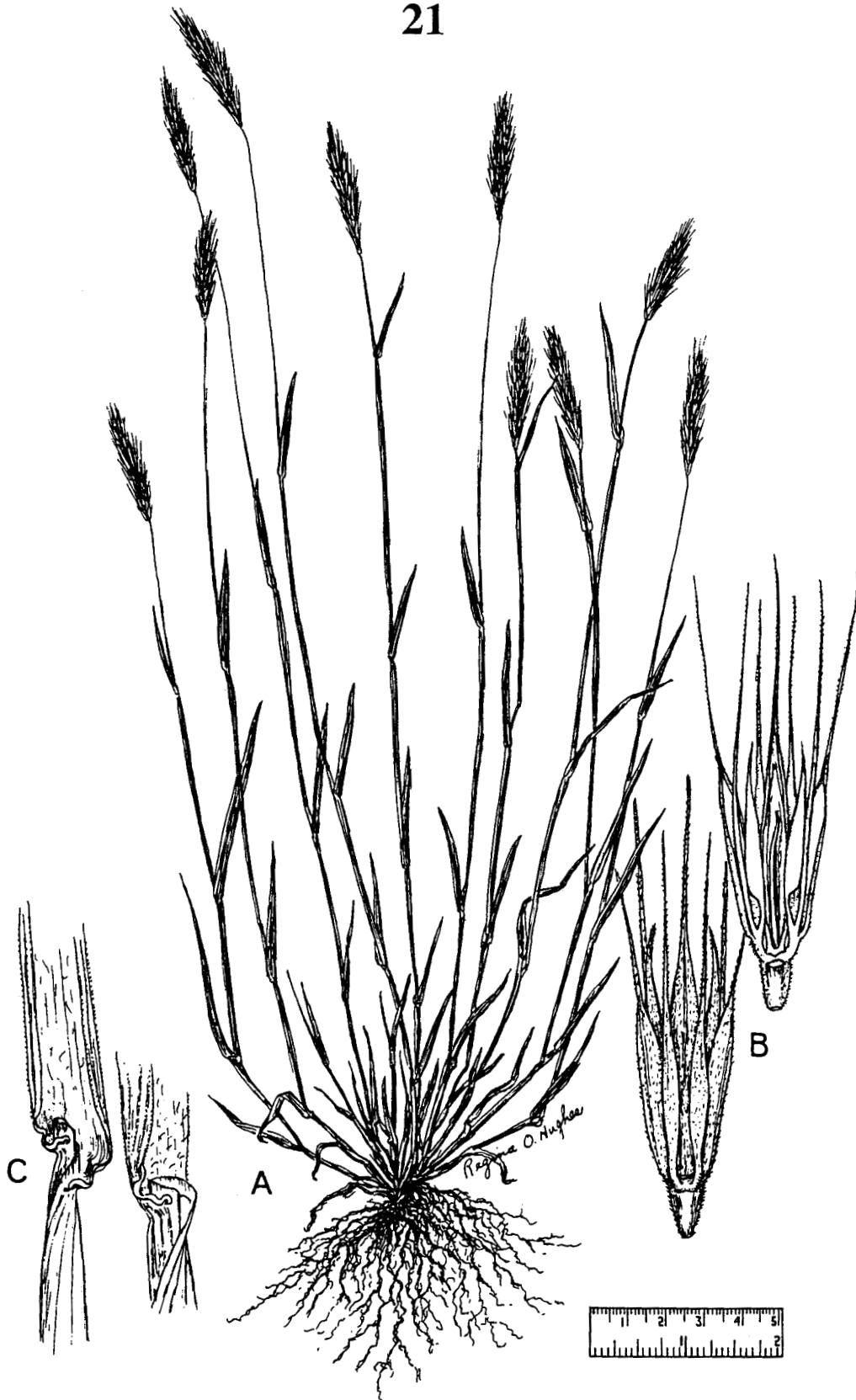
Eragrostis spectabilis. Plant, $\times \frac{1}{2}$; spikelet, $\times 5$; floret, $\times 10$. (Hitchcock 7849, Md.)



Glyceria striata. Plant, $\times \frac{1}{2}$; spikelet, $\times 5$; floret, $\times 10$. (V. H. Chase 60, Ill.)



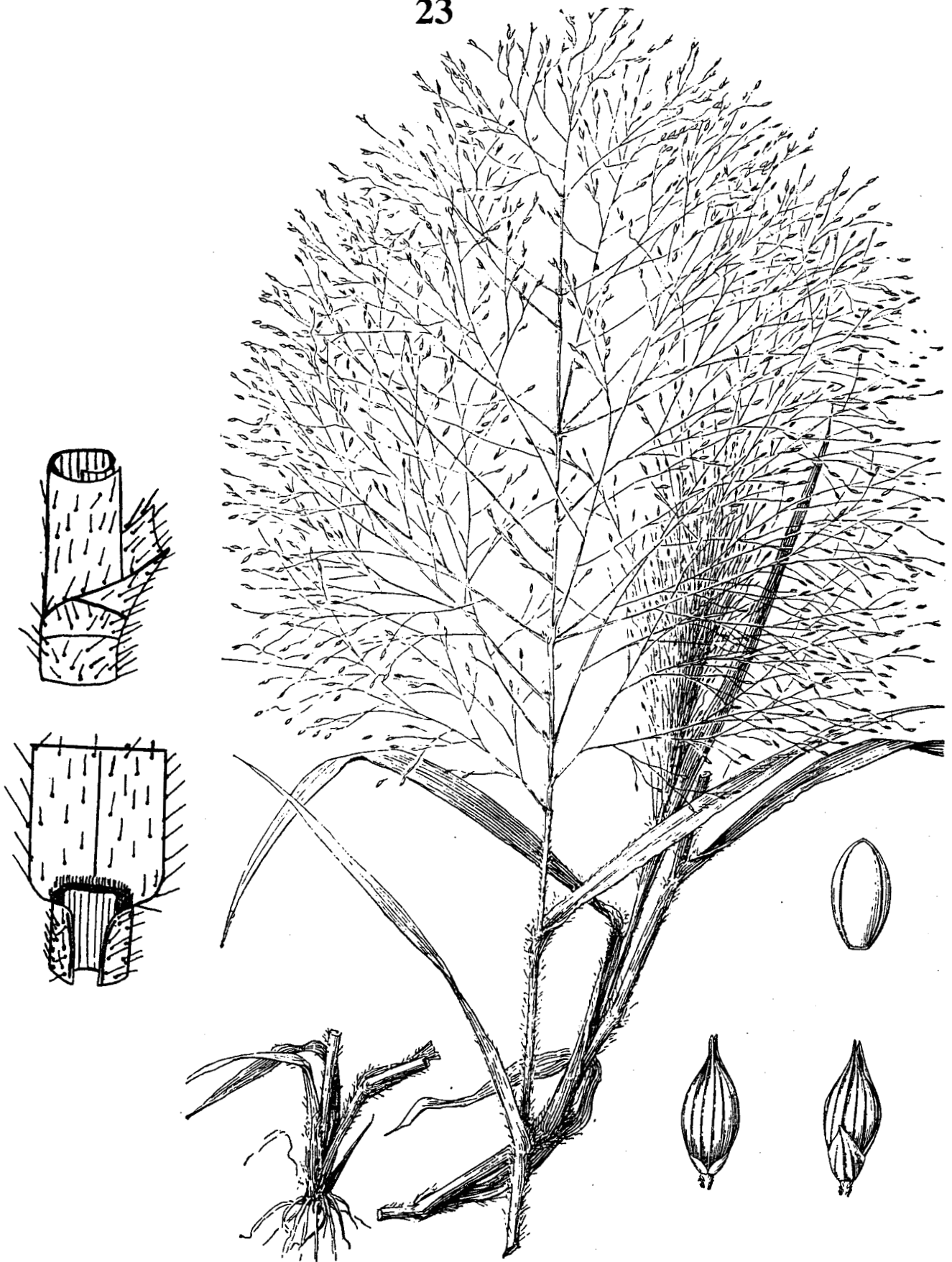
Hordeum jubatum L. Foxtail barley. A, Habit— $\times 0.5$; B, spikelets, side and face views— $\times 2.5$; C, florets— $\times 2.5$; D, ligules— $\times 2.5$; E, caryopsis— $\times 5$.



Hordeum pusillum Nutt. Little barley. A, Habit— $\times 0.5$; B, spikelets— $\times 4$; C, ligules— $\times 5$.



Muhlenbergia schreberi J. F. Gmelin. Nimblewill. A, Habit— $\times 0.5$; B, ligules— $\times 2.5$; C, part of spikelet to show glumes— $\times 17.5$; D, florets— $\times 17.5$.



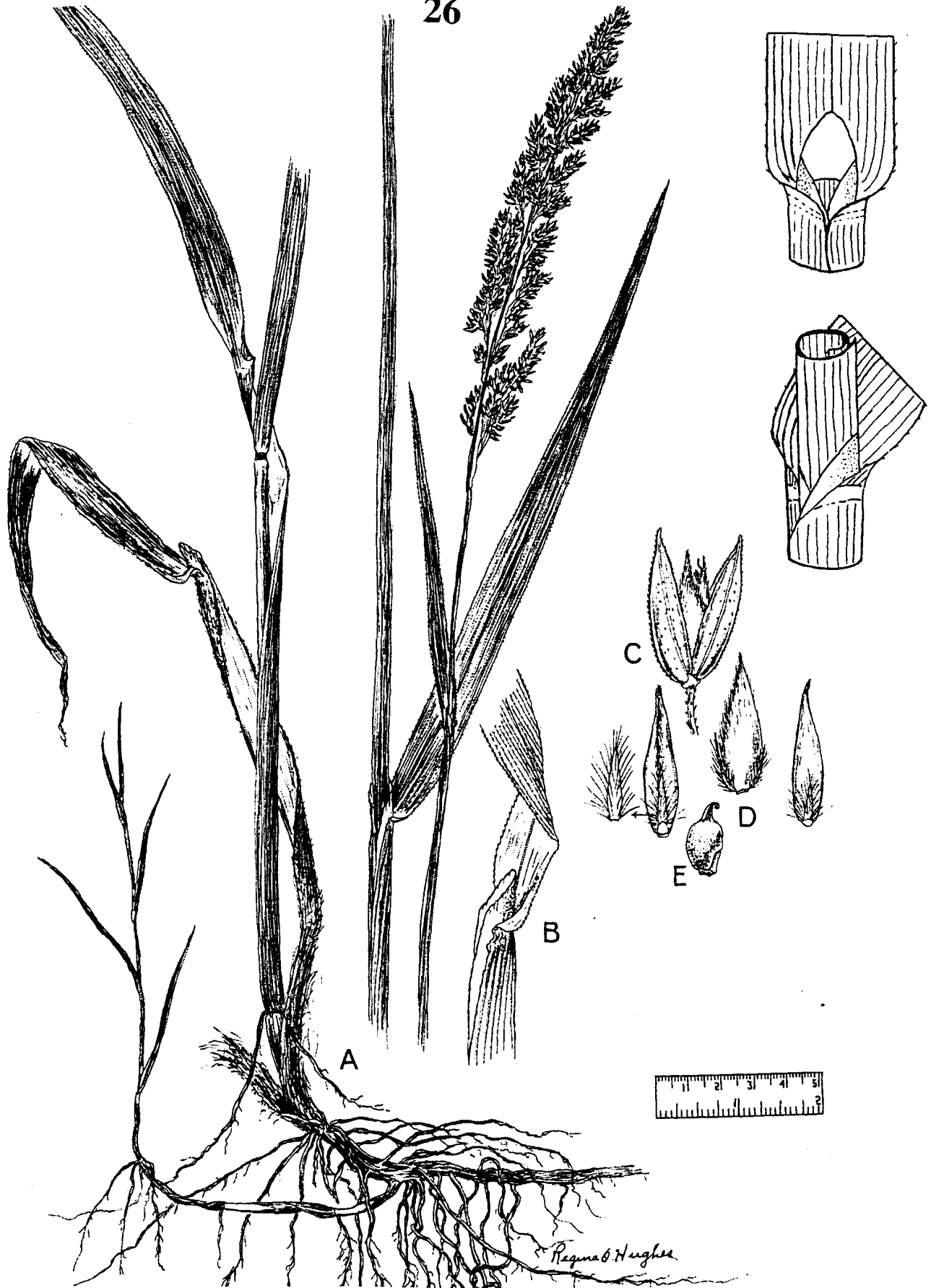
Panicum capillare. Plant, $\times \frac{1}{2}$; two views of spikelet, and floret, $\times 10$. (V. H. Chase 774.)



Panicum dichotomiflorum Michx. Fall panicum. A, Habit— $\times 0.5$; B, spikelet, showing the dichotomous florets— $\times 7.5$; C, ligule— $\times 4$; D, caryopses— $\times 7.5$.



Panicum virgatum. Plant, $\times \frac{1}{2}$; two views of spikelet, and floret, $\times 10$. (V. H. Chase, Ill.)



Phalaris arundinacea L. Reed canarygrass. A, Habit— $\times 0.5$; B, ligule— $\times 1.5$; C, spikelet— $\times 5$; D, florets— $\times 5$; E, caryopsis— $\times 5$.

27



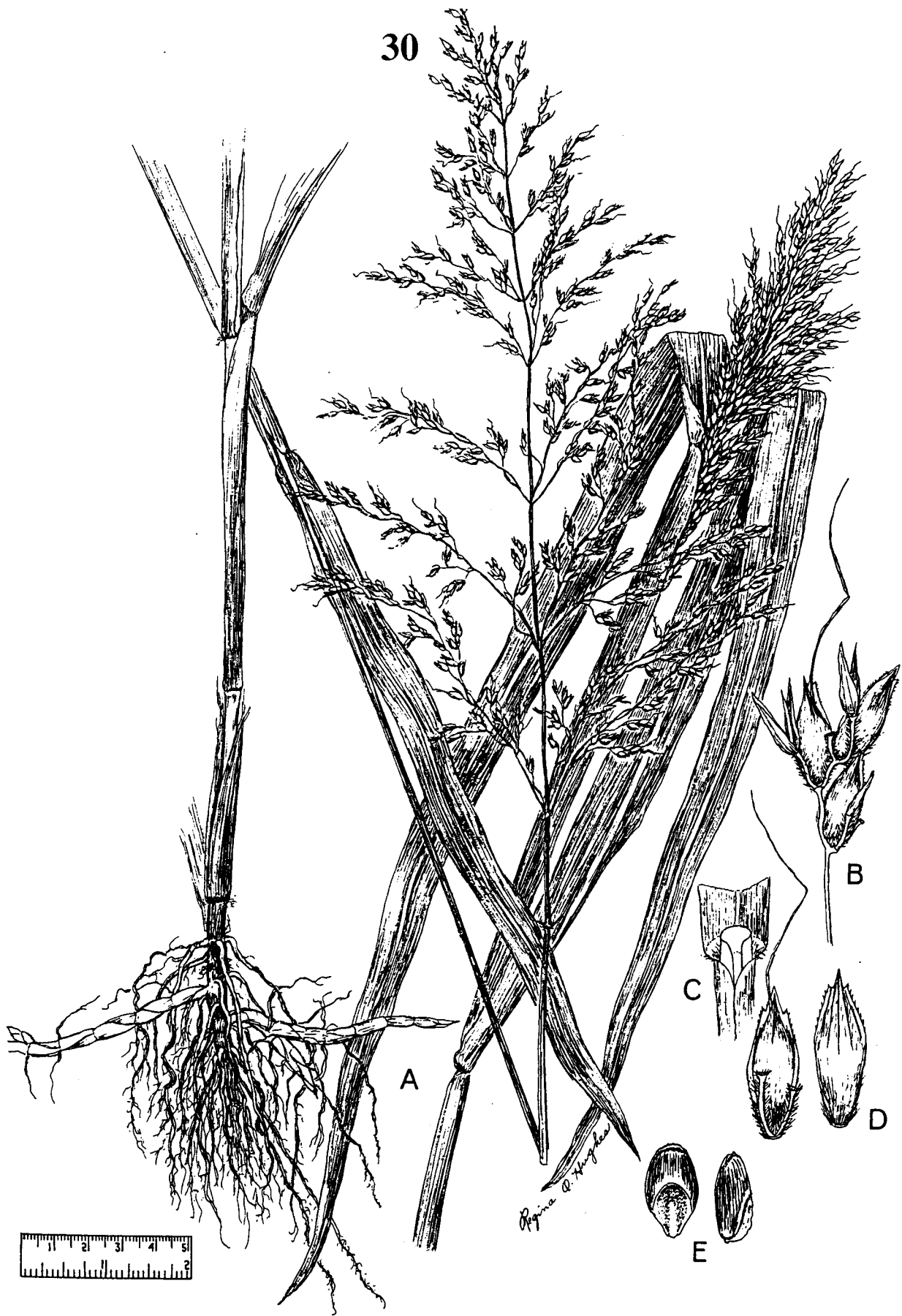
Poa pratensis. Plant, $\times \frac{1}{2}$; spikelet, $\times 5$; floret, $\times 10$. (Williams, S. Dak.)



A, *Setaria faberi* Herrm. Giant foxtail. a, Habit— $\times 0.5$; b, spikelet, showing subtending bristles— $\times 5$; c, ligule— $\times 1.5$; d, caryopses— $\times 5$. B, *Setaria viridis* (L.) Beauv. Green foxtail. a, Habit— $\times 0.5$; b, spikelet— $\times 5$; c, ligule— $\times 1.5$; d, caryopses— $\times 5$. C, *Setaria glauca* (L.) Beauv. Yellow foxtail. a, Habit— $\times 1$; b, spikelet— $\times 5$; c, ligule— $\times 1.5$; d, caryopses— $\times 5$.



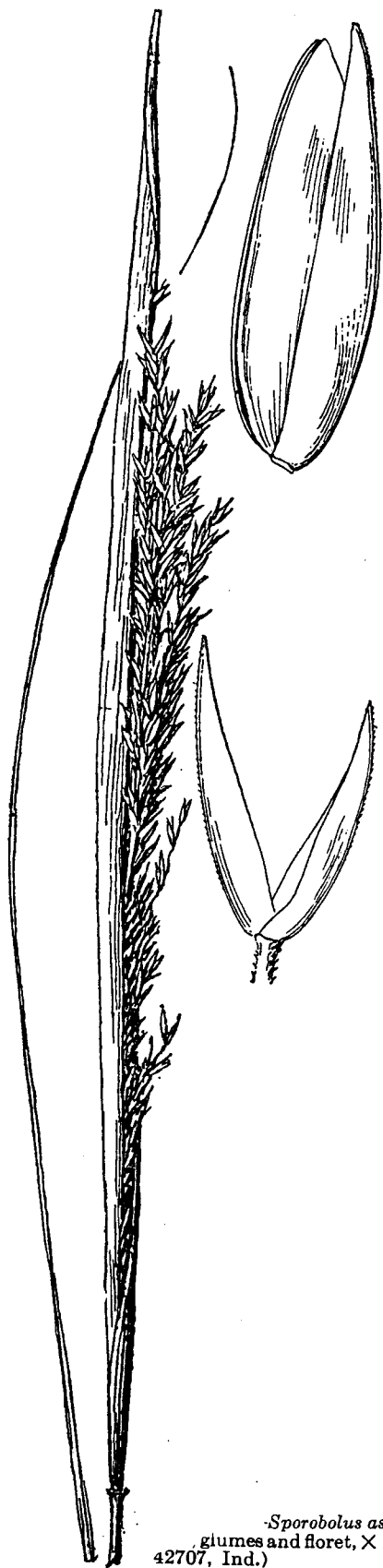
-*Sorghastrum nutans*. Plant, $\times \frac{1}{4}$; spikelet with pedicel and rachis joint, $\times 5$. (Deam, Ind.)



Sorghum halepense (L.) Pers. Johnsongrass. A, Habit— $\times 0.5$; B, spikelet— $\times 4$; C, ligule— $\times 1.5$; D, florets— $\times 5$; E, caryopses— $\times 5$.



Spartina pectinata. Plant, $\times \frac{1}{2}$; spikelet and floret, $\times 5$. (Worthern, Mass.)



Sporobolus asper.
glumes and floret, X 10.
(42707, Ind.)



Sporobolus heterolepis. Plant, X 1;
spikelet and floret with
caryopsis and split palea,
X 10. (McDonald, Ill.)



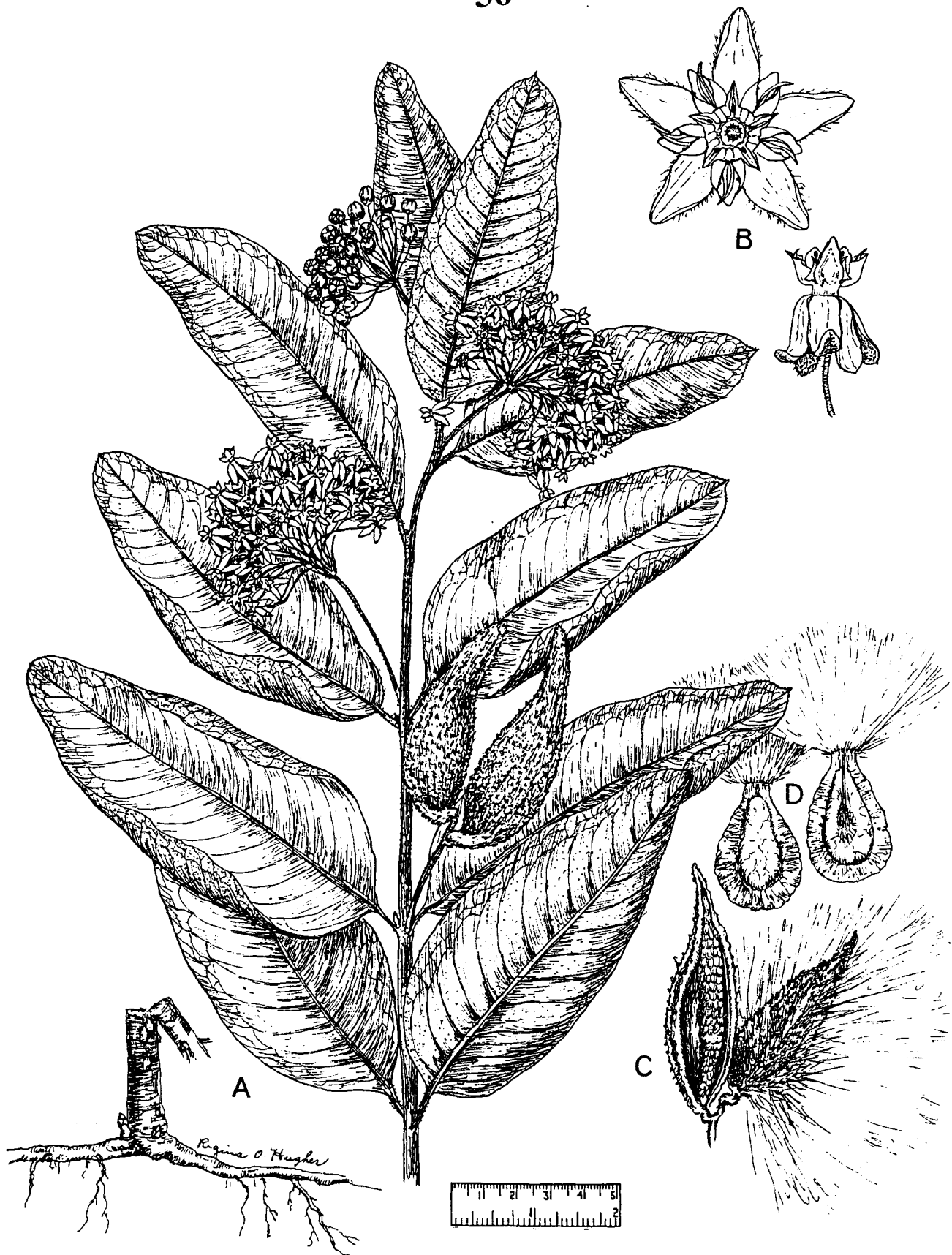
Sporobolus cryptandrus. Plant, $\times \frac{1}{2}$; glumes and floret, $\times 10$. (Shear 253, Nebr.)



Stipa spartea. Plant, $\times \frac{1}{2}$; glumes and floret, $\times 2$. (McDonald 16, Ill.)



Daucus carota L. Wild carrot. A, Habit— $\times 0.5$; B, flowers— $\times 5$; C, schizocarp— $\times 5$; D, cross section of fruit, showing 2 mericarps— $\times 3$.



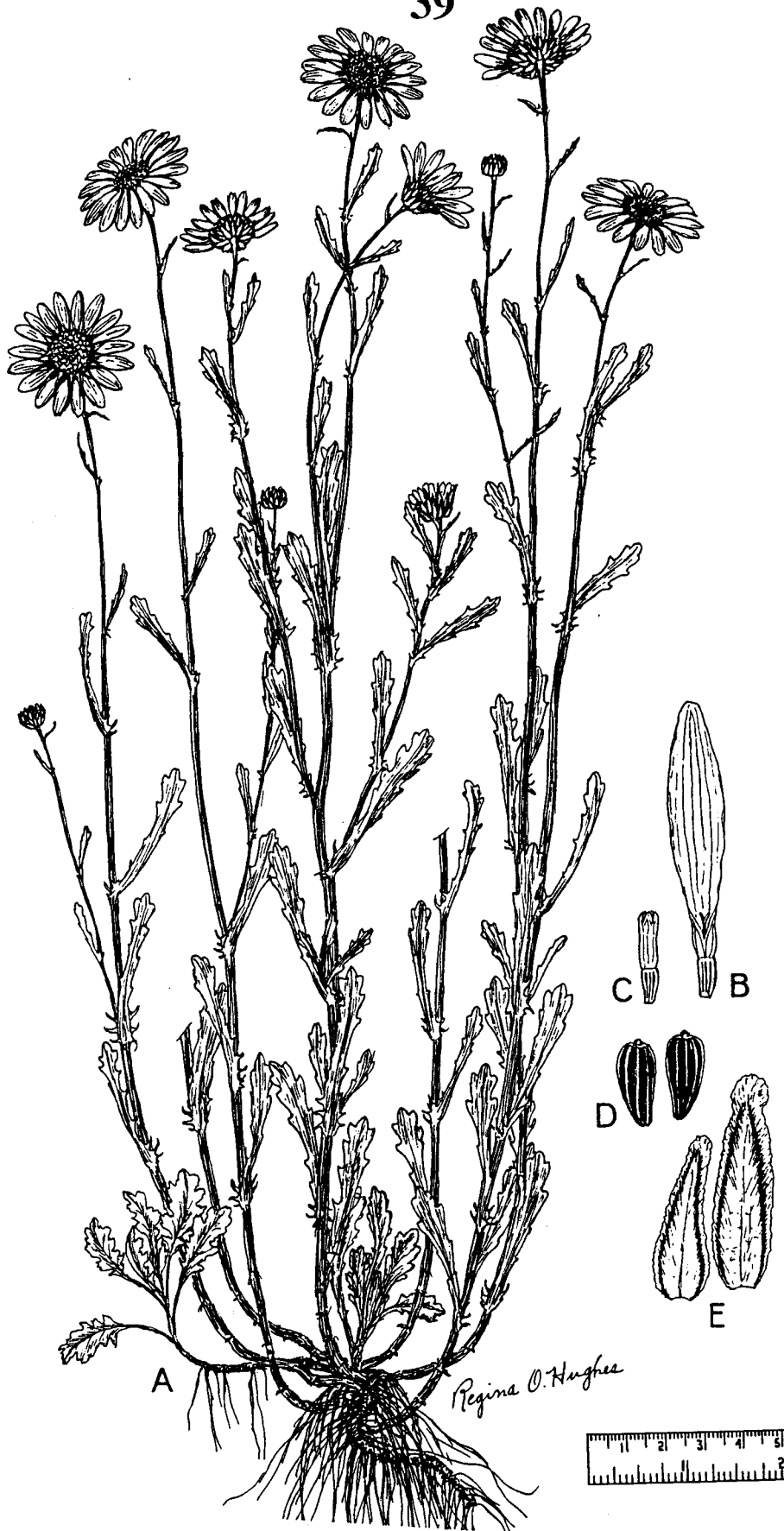
Asclepias syriaca L. Common milkweed. A, Habit— $\times 0.5$; B, flower, upper view— $\times 3.5$; side view— $\times 2$; C, follicles— $\times 0.5$; D, seeds with coma— $\times 3$.



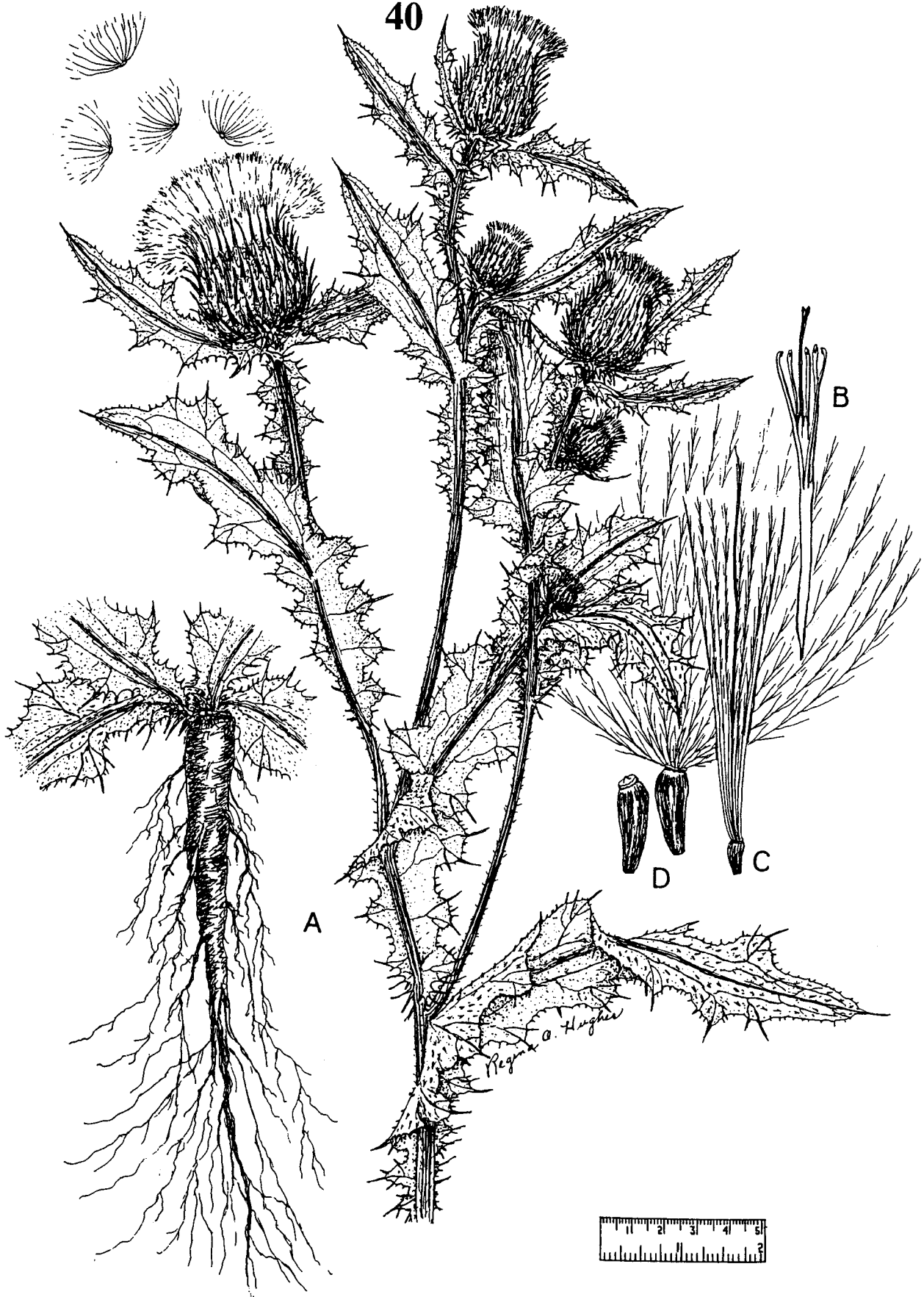
Asclepias verticillata L. Eastern whorled milkweed. A, Habit— $\times 0.5$; B, enlarged leaves, showing revolute margins— $\times 1.5$; C, flower— $\times 3.5$; D, seed— $\times 4$; d, seeds with coma— $\times 1$.



Achillea millefolium L. Common yarrow. A, Habit— $\times 0.5$; B, enlarged leaves and stem— $\times 5$; C, flower head— $\times 4$; D, female and male flowers— $\times 5$; E, seeds— $\times 6$.



Chrysanthemum leucanthemum L. var. *prinnatifidum* Lecoq & Lamotte. Field oxeye-daisy. A, Habit
 · B, ray flower— $\times 2.5$; C, disk flower— $\times 2.5$; D, achenes— $\times 7.5$; E, involucral bracts— $\times 5$.



Cirsium vulgare (Savi) Tenore. Bull thistle. A, Habit— $\times 0.5$; B, flower— $\times 5$; C, immature fruit— $\times 1.75$; D, achenes— $\times 3.5$.



Gunweed. Showing top of plant and root.

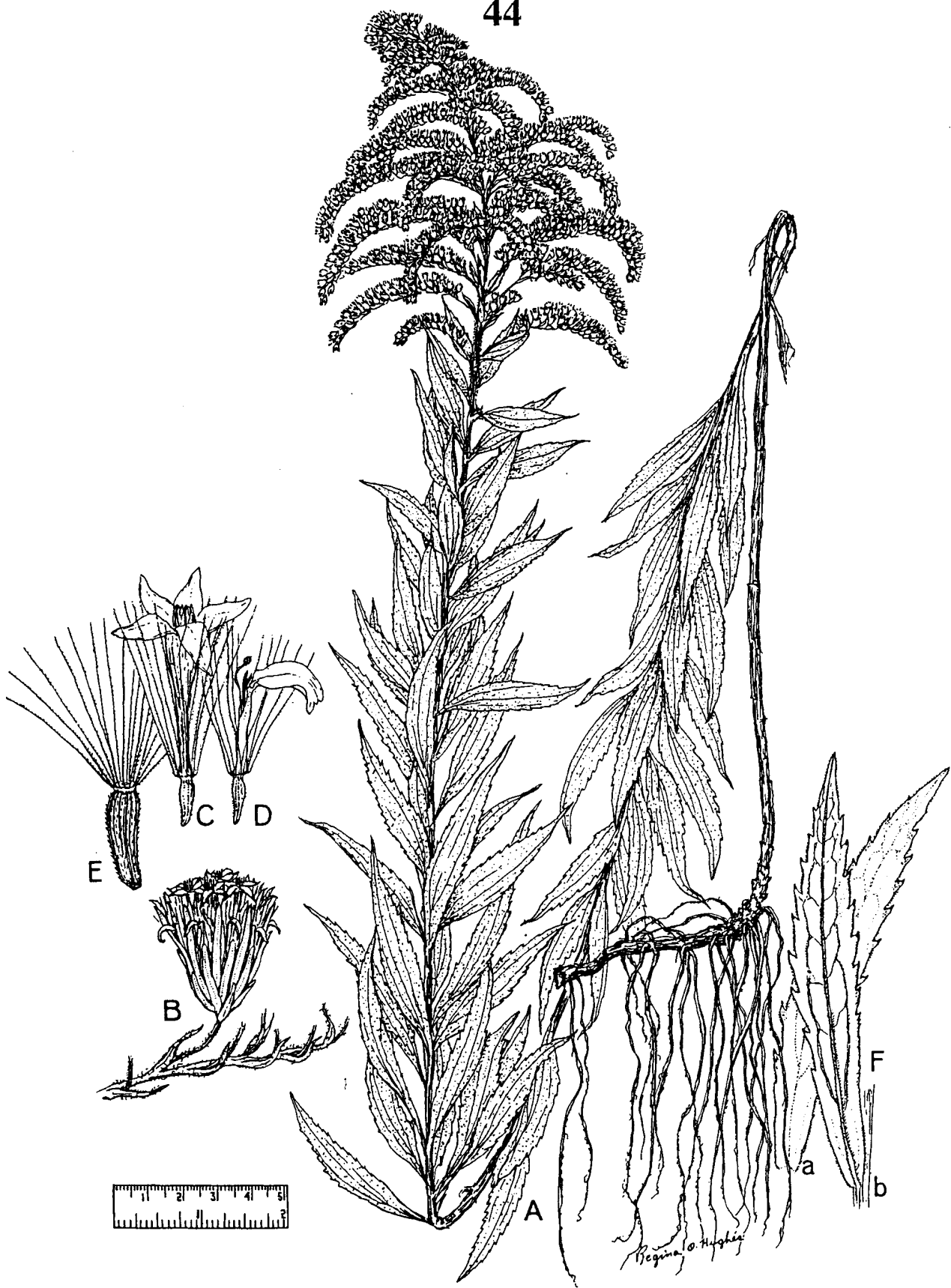


Helianthus annuus L. Sunflower. A, Habit— $\times 0.5$; B, ray flower— $\times 2$; C, disk flower— $\times 2.5$; D, achenes, 2 views— $\times 1.5$.



Regina O. Hughes

Lactuca serriola L. Prickly lettuce. A, Habit— $\times 0.5$: a, upper part of plant— $\times 0.5$: b, lobed lower leaves— $\times 0.5$: c, linear upper leaves— $\times 1.5$: d, root— $\times 1.5$ B, flower heads— $\times 3$; C, achenes— $\times 8$.



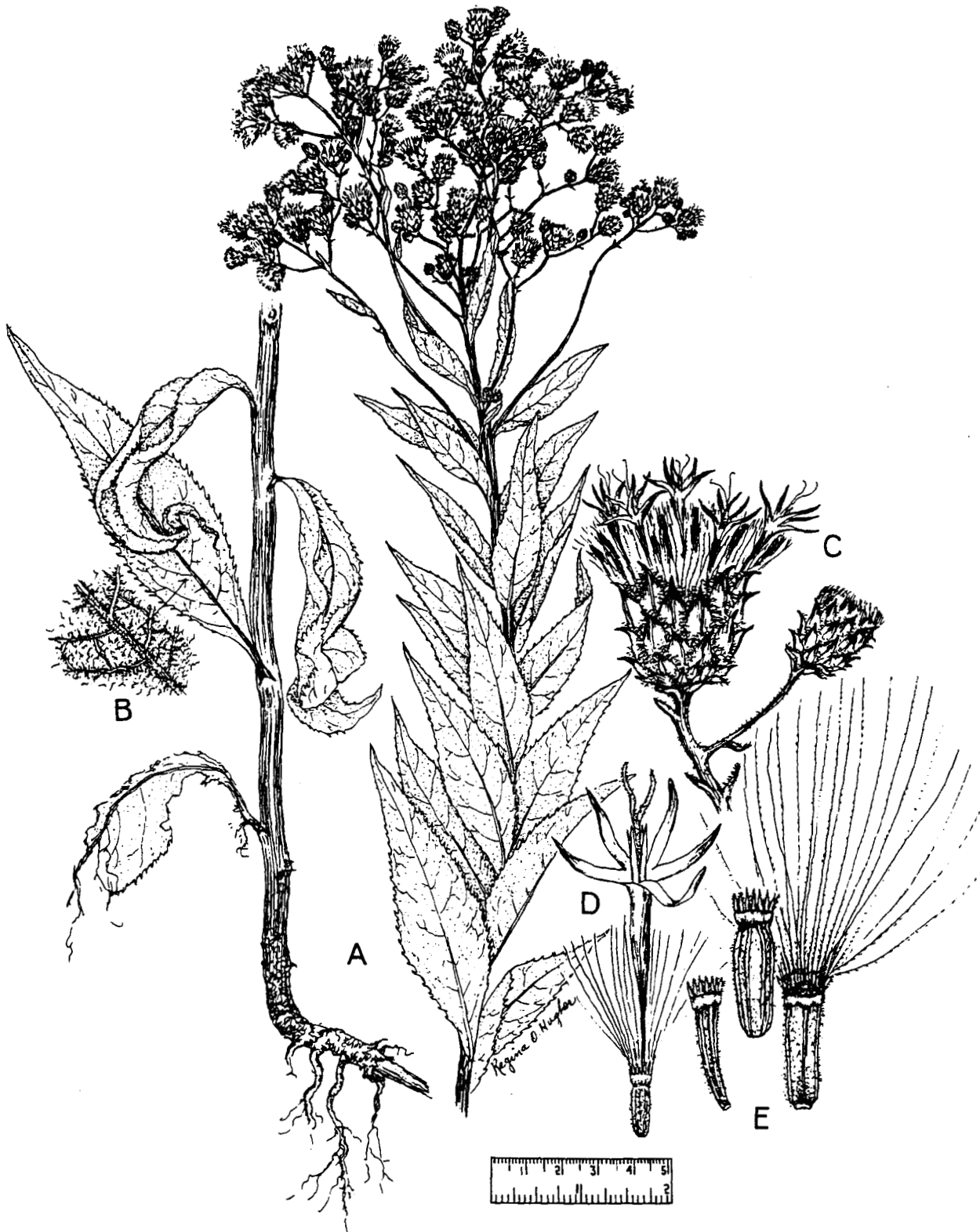
Solidago canadensis L. Canada goldenrod. A, Habit— $\times 0.5$; B, flower head— $\times 5$; C, disk flower— $\times 12.5$; D, ray flower— $\times 12.5$; E, achene— $\times 12.5$; F, leaves— $\times 1$; a, upper surface; b, lower surface.



Sonchus arvensis L. Perennial sowthistle. A, Habit— $\times 0.5$; B, achene— $\times 7.5$.



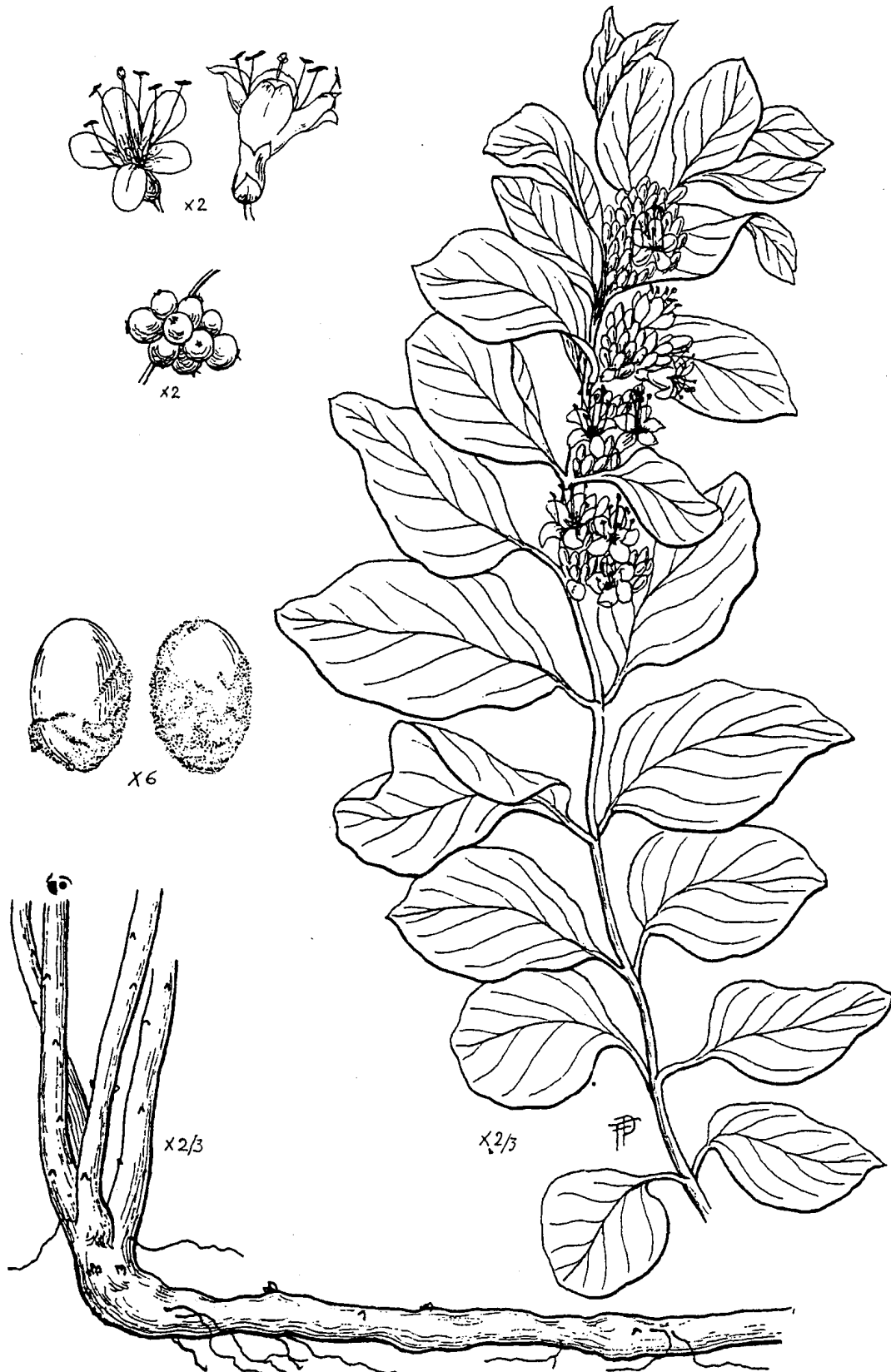
Yellow goatsbeard. Showing root, stem, with a ripe and a flowered head, and enlarged flowers and seed.



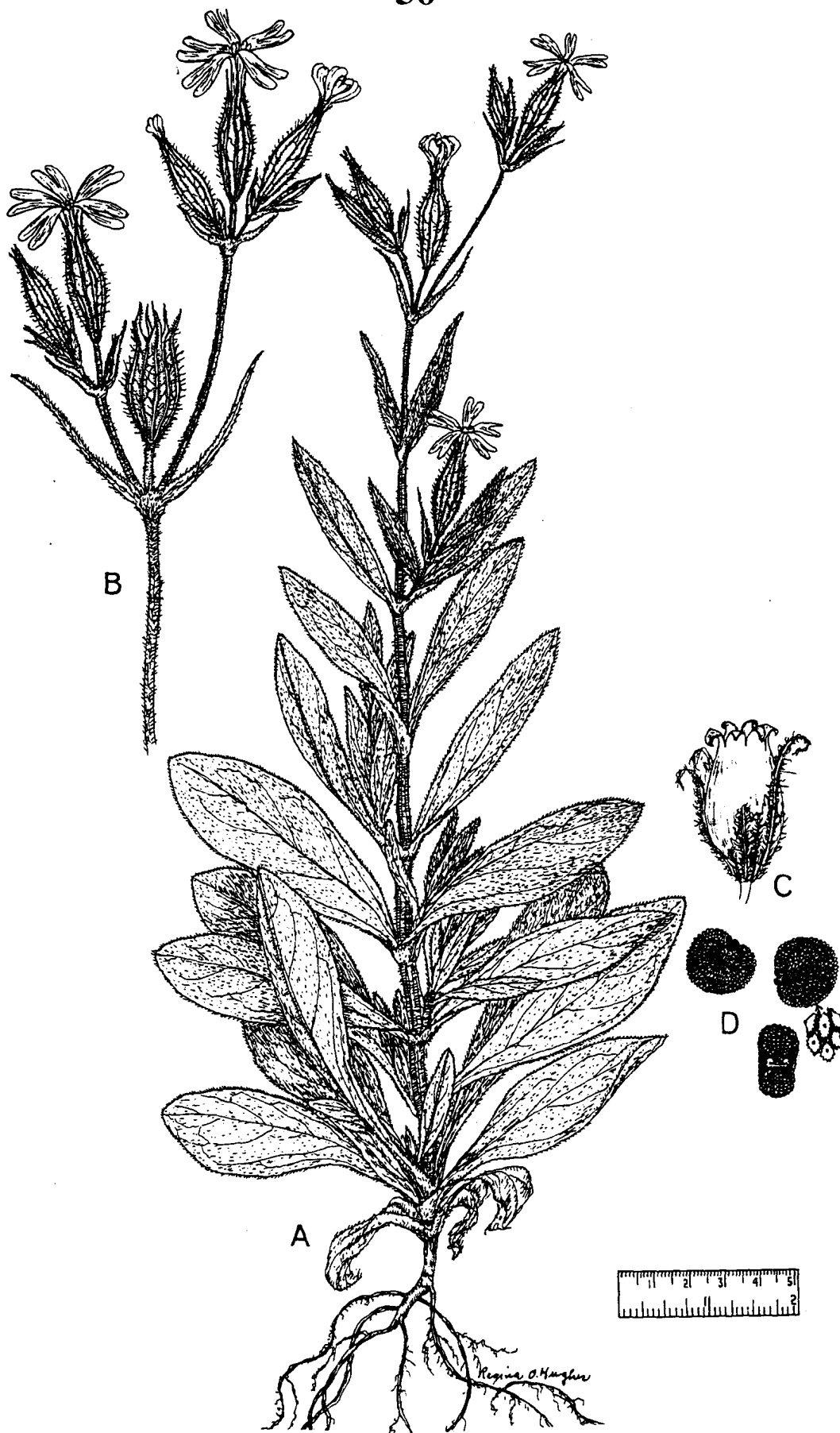
Vernonia baldwinii Torr. Western ironweed. A, Habit— $\times 0.5$; B, tomentose underside of leaf, enlarged; C, flower head— $\times 3$; D, single flower— $\times 6$; E, achenes— $\times 6$.



Cardaria draba (L.) Desv. Hoary cress. A, Habit— $\times 0.5$; B, flower— $\times 7.5$; C, silicle— $\times 5$; D, seeds— $\times 7.5$.



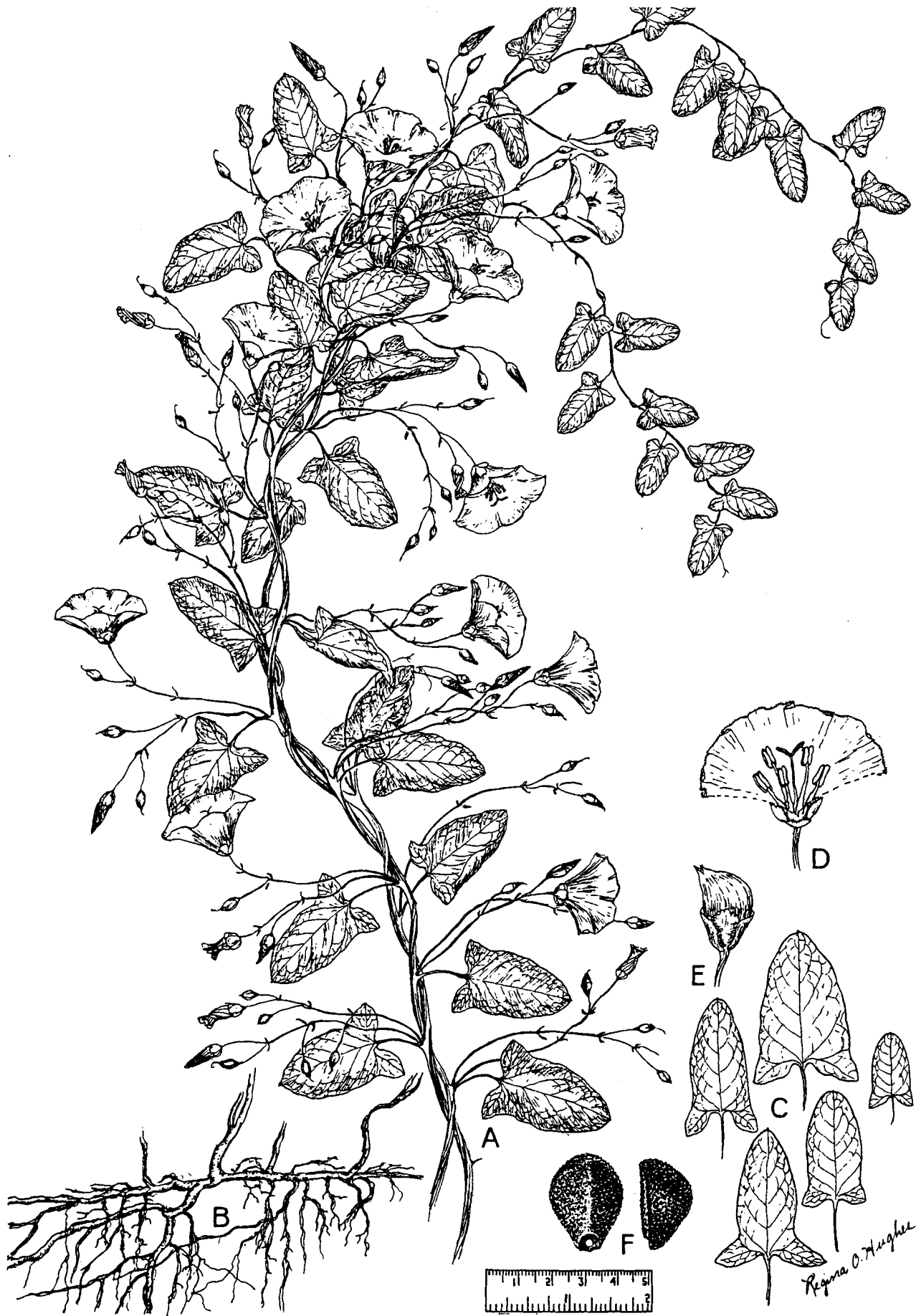
Buckbrush. Showing root stem, enlarged flowers, berries, and seed.



Silene noctiflora L. Nightflowering catchfly. A, Habit of young plant— $\times 0.5$; B, upper part of mature plant— $\times 1$; C, capsule— $\times 1.5$; D, seeds— $\times 7.5$.



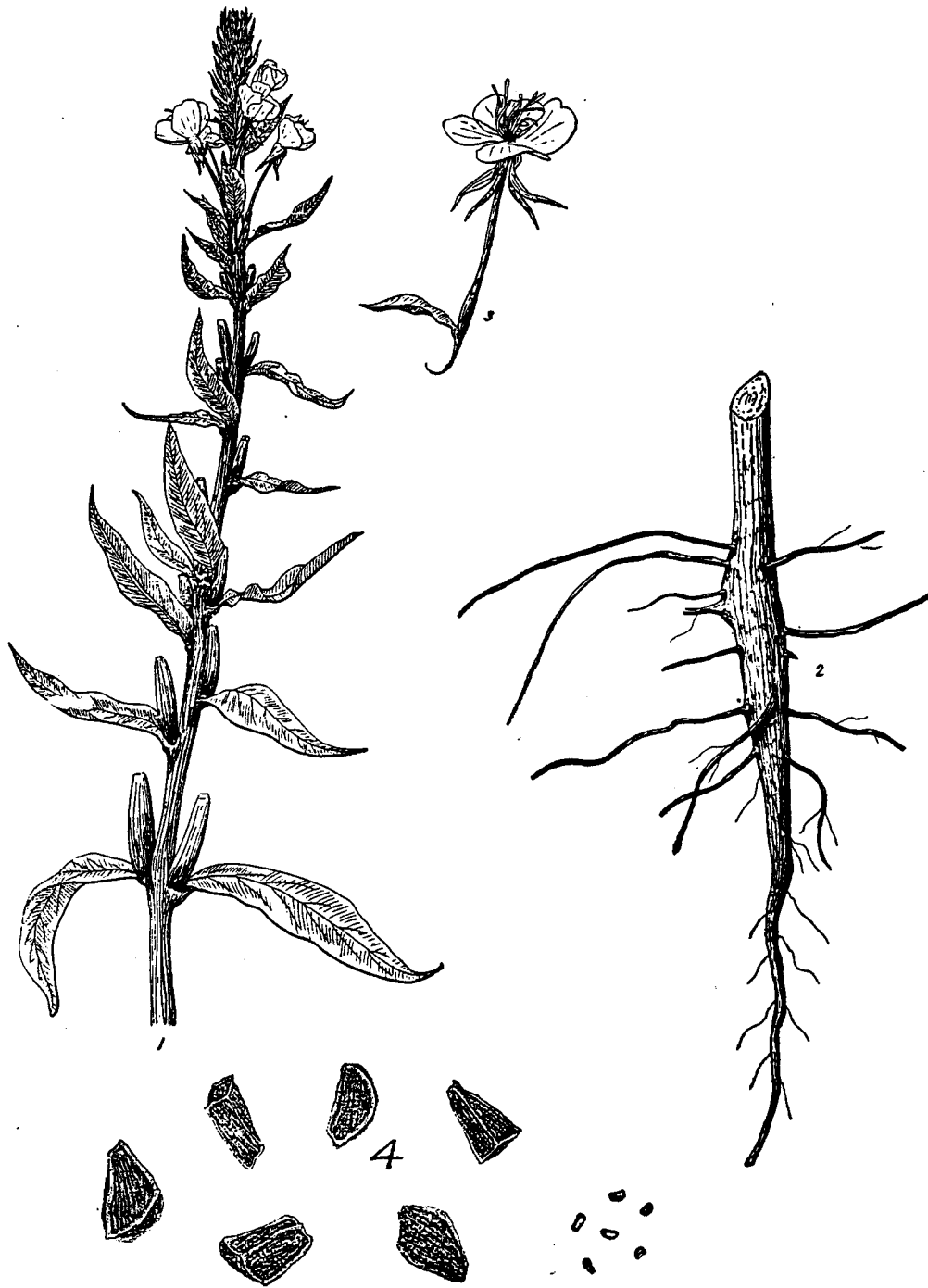
Convolvulus sepium L. Hedge bindweed. A, Habit— $\times 0.5$; B, rootstock— $\times 0.5$; C, diagram of flower, showing structure— $\times 0.25$; D, seeds— $\times 2.5$.



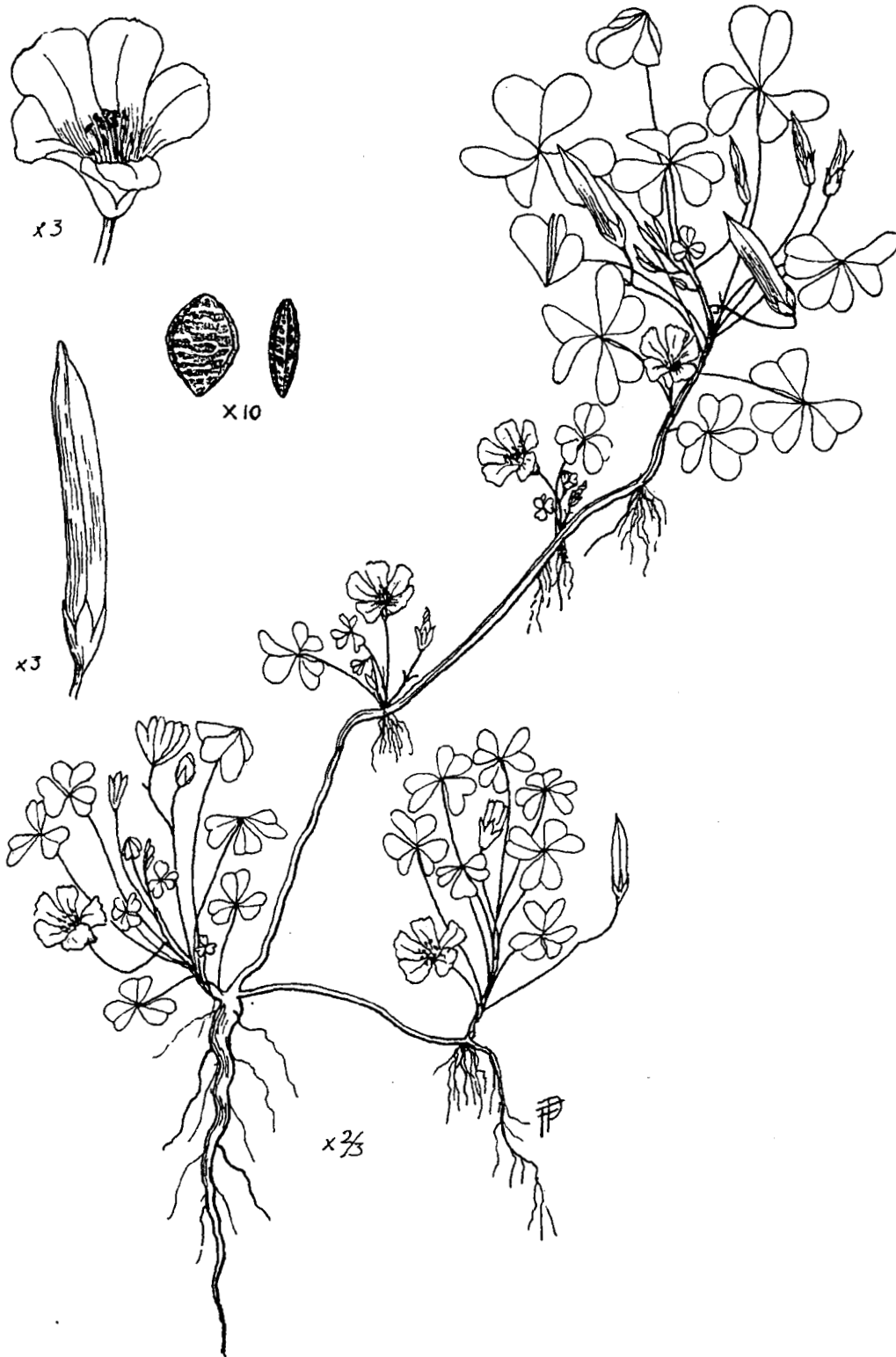
Convolvulus arvensis L. Field bindweed. A, Habit— $\times 0.5$; B, rootstock— $\times 0.5$; C, leaf variation < 0.5 ; D, flower, showing 5 stamens of unequal length— $\times 1$; E, capsule— $\times 3$; F, seeds— $\times 4$.



Oxytropis lambertii Pursh. Lambert crazyweed. A, Habit— $\times 0.5$; B, enlarged leaves— $\times 1$; C, flower spike— $\times 0.5$; D, flower— $\times 1$; E, legumes— $\times 1$; F, seeds— $\times 4$.



Evening primrose. Showing top of plant, root system



Yellow Woodsorrel. Showing plant and enlarged seed capsule, flower and seeds.



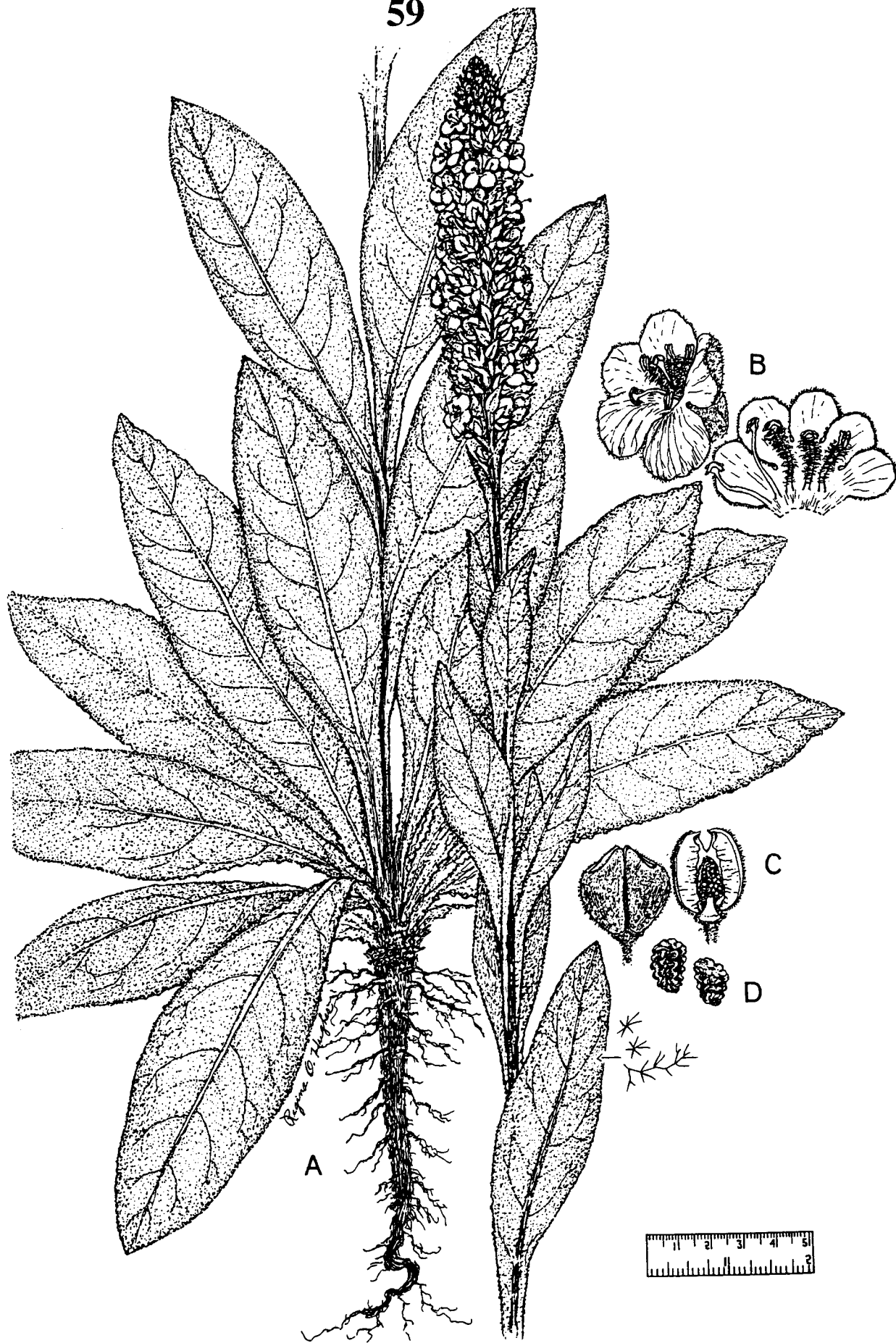
Polygonum pennsylvanicum L. Pennsylvania smartweed. A, Habit— $\times 0.5$; B, spike— $\times 2.5$; C, achenes— $\times 4$.



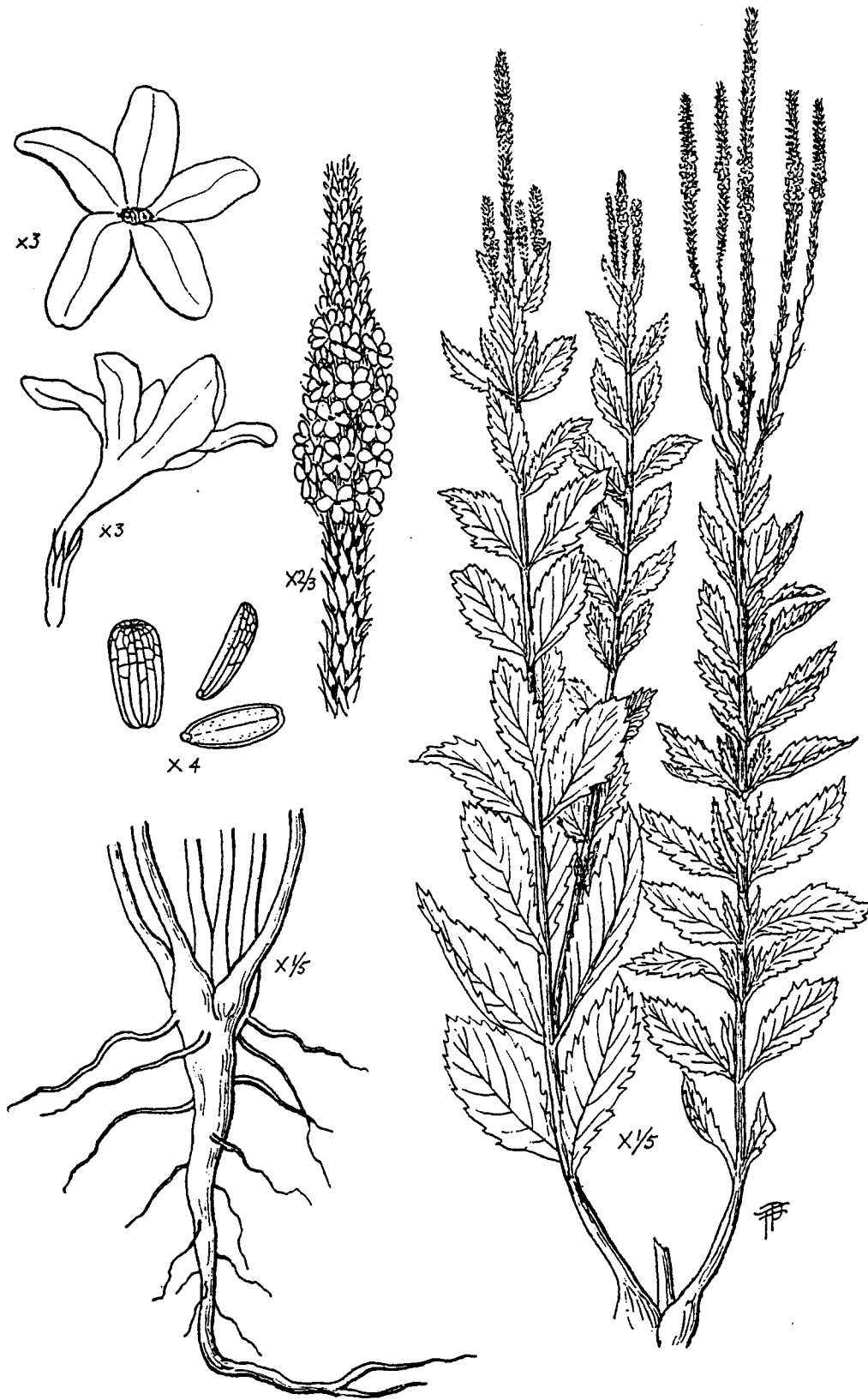
Potentilla recta L. Sulfur cinquefoil. A, Habit— $\times 0.5$; B, base of leaf showing stipules— $\times 2$; C, flower and calyx— $\times 1.5$; D, achenes— $\times 10$.



Wild rose. Showing the plant, root, and enlarged seed.



Verbascum thapsus L. Common mullein. A, Habit— $\times 0.5$; B, flowers— $\times 2$; C, capsules— $\times 2$; D, seeds— $\times 12.5$.



Hoary vervain. Showing stem, root, and enlarged flower head, flowers, and seed.

Part 5: Locations of Important Tallgrass Prairie Preserves



Drawing by P. Johnsgard: Western Prairie Fringed Orchid

Remnant Prairies in Nebraska and Adjacent States

Persons wanting to observe tallgrass prairie birds and native plants should consider visiting some of the following tallgrass prairies. Nearly all Nebraska prairies are mapped and described in "Tallgrass Prairies of Nebraska," a leaflet produced in 2006 by the Nebraska Wildlife Federation (402/477-1008). Most are mapped and described in greater detail in my *Nebraska Bird-finding Guide*. Wildlife management areas (W.M.A.s) are Nebraska Game & Parks sites and are free-access. Lat./long. coordinates are shown for these state-owned sites. Some sanctuaries charge entry fees, and state parks and state recreation areas require daily or annual park entry permits. Conservation Easement sites require permission from the owner to visit, as do some of The Nature Conservancy (TNC) and Prairie Plains Resource Institute (P.P.R.I) sites. Visitors should respect both the plant and animal life of these fragile sites, which often contain rare, threatened or endangered species.

Eastern Nebraska Prairies

Antelope County

Grove Lake W.M.A 2009 acres, mostly mixed-grass upland and Sandhills prairie and riparian hardwoods along East Verdigre Creek. A stand of tallgrass prairie on sand and gravel is located 100 yards NE of parking area. 402/370-32374. Lat./Long.: 42.34718/-98.09651

Boone County

Olson Nature Preserve. 112 acres. Olson Nature Preserve. 112 ac. of Sandhills prairie and oak woodlands, Located 8 miles NW of Albion on Hwy 14, then west 1 mile. For further information contact Prairie Plains Resource Institute, 402/694-5535, or www.prairieplains.org.

Buffalo County

Lillian Annette Rowe Sanctuary & Iain Nicolson Audubon Center. Located 2 miles south of Gibbon 1-80 exit and 2 miles west, on Elm Island Road (just S of Platte River bridge). Area ca. 1,250 ac. Six miles of river frontage, with 420 acres of native prairie and 220 acres of restored prairie. 308/468-5282.

Pearl Harbor Survivor's Preserve. 320 acres. Virgin prairie and cropland. North of Riverdale. For further information contact Prairie Plains Resource Institute, 402/694-5535, or www.prairieplains.org.

Butler County

Don and Helen Horacek Tallgrass Prairie. 7.5 acres. Conservation Easement. Located 2 miles W and 1 mile N of Brainard (northeast corner of section 13, south side of road). **For permission to visit** call Donald Horacek, 402/545-2238.

Kevin and Donna Petrzilka Tallgrass Prairie. 22 acres. Conservation Easement. Located 1 mile N and 2 miles E of Loma (northeast corner of section 36, west side of road). **For permission to visit**, call Kevin Petrzilka, 402/ 545-2050.

Linwood Hill Cemetery Prairie. 21 acres. Conservation Easement. An upland prairie located 0.5 mile S of Linwood, directly E of Linwood Cemetery (section 1, south side of road). **For permission to visit**, call Alden Kment, 402/352-3548.

Cass County

Robert Hike Tallgrass Prairie. 8.8 acres. Conservation Easement. Located 7 miles W and 2 miles N of Plattsmouth. (section 11, east side of road). **For permission to visit** call Robert Hike, 402/298-8259.

Cedar County

Wiseman W.M.A. Virgin upland prairie on ridges and hilltops. Located 1 mile N and 5 miles E of Wynot. Located just south of the Missouri River, this 365-acre area includes steep wooded loess bluffs of bur oak, and grassy ridges. 402/370-3374. Lat./Long.: 42.75643/-97.09508

Colfax County

Clarence and Ruth Fertig Tallgrass Prairie. 43 ac. Conservation Easement. Located 3 miles E and 1 mile S of Richland, or 4 miles W and 3 miles S of Schuyler (section 26, west side of road). **For permission to visit**, call Ruth Fertig, 402-352-8467.

Frank L. and Lillian Pokorny Memorial Prairie. 40 acres. 20 acres of virgin tallgrass prairie and a 20-acre restoration. Located 2.5 miles W of Highway 15 at "P" Road (about 11 miles N of Schuyler). Information at Prairie Plains Resource Institute, www.prairieplains.org or 402/694-5535.

Dixon County

Buckskin Hills W.M.A. Located 2 miles W and 2 miles S of Newcastle. Some virgin prairie is present in 340 acres of grassland and woods and a 75-acre lake. 402/370-3374. Lat./Long.: 42.626/-96.92536

Ponca State Park (892 acres) & Elk Point Bend WMA. Located 3 mi. N. of Ponca. Small stands of virgin prairie are present on ridges and hilltops. Mostly forested with mature stands of bur oak, walnut, hackberry and elms. Park entry permit required. 402/755-2284, Lat./Long.: 42.60962/-96.71727

Douglas County

Allwine Prairie Preserve. 160 acres. Located 12 miles NW of Omaha. From I-680 in west Omaha drive W on W. Dodge Road to 144th St, turn N and go to State St, then W 0.5 mile to preserve entrance. **For permission to visit** call the Dept. of Biology, UN-O, 402/554-2641.

Boyer Chute National Wildlife Refuge. 3,500 acres. Includes ca. 2,000 ac. of re-seeded prairie & riparian woods. Three mi. E. of Ft. Calhoun on County Rd. 34, along the Missouri River. 712/642-4121.

Bauermeister Prairie. 40 acres. Owned by City of Omaha, and part of Zorinsky Park (738 acres). The east park entrance is on 156th St, midway between Q St. and W. Center Road. There are two marked entrances from 156th St. Go to the S entrance and follow the park road to some parking areas near its end. The prairie lies S and W, beyond an arm of Zorinsky Lake, via a walking trail. URL: www.nwo.usace.army.mil/htm/Lake-Proj/mssouririver/zorinsky.html

Jensen Prairie. 13 acres, about half virgin prairie, half restored. Located at 6720 Bennington Road, near the intersection of 72nd St. and Highway 36 (or 72nd & McKinley). **Obtain permission to visit** from the Audubon Society of Omaha (402/445-4138). URL: www.audubon.org/jensen-prairie.htm

Neale Woods Nature Center. About 30 acres of restored loess prairie, and 520 acres of hardwoods. Fontenelle Nature Association, 14323 Edith Marie Ave, Omaha (402/731-3140). Admission fee.

Stolley Prairie. 24 acres. Owned by City of Omaha (Northwest Park). Located along the E side of 168th St, midway between Blondo and Dodge St.

Fillmore County

Clyde and Thomas Gewache Tallgrass Prairie. 11.5 ac. Conservation Easement. Go 2.5 miles W of Ohioa, then 0.5 mile N (section 2, west side of road). **For permission to visit** call Ray Nichols, 402/759-4052.

Gage County

Homestead Prairie. Located 4.5 miles W of Beatrice on Highway 4, Homestead National Monument. Ca. 100 ac. of restored prairie on a historic homestead site. Includes a 2.5 mile trail through riparian wooded habitats and restored prairie. A local plant list is available. 402/223-3514.

Wildcat Creek Tallgrass Prairie. 32 acres of low meadow. Located 5 miles S, 1 mile W, and 1 mile S. of Virginia, then W 0.25 mile on dirt road. Or, drive 2 miles W and 5 miles N of Liberty, then 0.25 mile W (section 4, on north side of road). Owner: Wachiska Audubon, 402/488-9032.

Hall County

Platte River Whooping Crane Trust. About 1.5 mi. S. of I-80 Alda exit, on Whooping Crane Dr. About 6,400 acres of native and re-seeded wet meadows. **Permission to visit required**; 303/384-4633.

Hamilton County

Griffith Prairie and Farm. 390 acres of loess prairie and Platte River frontage. Drive 4 miles W of Hwy. 14 from Marquette corner, then 1 mile N. Owned by Prairie Plains Resource Institute, 402/694-5535, or www.prairieplains.org. Permission to visit needed.

Lincoln Creek Prairie and Hiking Trail. Located in Aurora.; 16 acres of tallgrass prairie and prairie restorations. The trail goes through a prairie restoration site. Owned by Prairie Plains Resource Institute, 402/694-5535, or www.prairieplains.org

Marie Ratzlaff Prairie Preserve. 40 acres of upland prairie (30 virgin acres). Located 6 miles S of the Hampton I-80 exit, west side of road. Owned by Prairie Plains Resource Institute, 402/694-6635, or www.prairieplains.org. Permission to visit not needed.

Jefferson County

Rock Creek Station State Historical Park. 550 acres. Virgin tallgrass prairie on hilltops, and wooded ravines Six miles E of Fairbury, Park entry permit required. 402/729-5777. Lat./Long.: 40.11012/-97.05809

Rock Glen W.M.A. 706 ac. Nearly 500 ac. of virgin upland and restored prairie. Located 7 miles E and 2 miles S of Fairbury, or 4 miles NE of Endicott 402/749-7650. Lat./Long.: 40.09797/-97.06266

Rose Creek W.M.A. About 200 ac. of oak savanna, 8 mi. SW of Fairbury. 402/749-7650. Lat./Long.: 40.07596/-97.23664

Johnson County

Ivan A. and Ivan F. Lamb Tallgrass Prairie. 5 acres. Located 3 miles W and 2 miles S of Sterling (northeast corner of section 5, west side of road). Owner: Wachiska Audubon, 402/488-9032

Kendall and Lisa Shuster Prairie. 4.8 acres. Located 4 miles E and 0.5 mile S of Elk Creek (section 28, west side of road). **For permission to visit**, call Kendall Shuster, 402/335-7345.

Louis and Grace Bentzinger Tallgrass Prairie. 13.5 acres. Conservation Easement. Located 0.75 mile N of Cook, or 9 miles S of Syracuse, via Hwy 50 (northeast corner of section 4, west side of road). **For permission to visit**, call Louis D. Bentzinger, 402-864-7531.

Knox County

Bohemia Prairie W.M.A. Nearly 600 acres of virgin prairie, with some woods and two ponds. From Verdigre go 5 mi. W. on Hwy 84, then 5 mi. N. 402/370-3374. Lat./Long.: 42.6761/-98.12892

Greenvale W.M.A, About 70 acres of virgin prairie among Middle Verdigre Creek. woodlands. Located 10 miles W and 3 miles S of Verdigre. 402/370-3374. Lat./Long.: 42.54032/-98.2204

Niobrara State Park. 1,632 acres. Grasslands and riparian woods, at W edge of Niobrara. State park entry permit required, ask at Park Office for prairie sites. 402/857-3373. 42.74998/-98.06724

Lancaster County (Cemeteries at Emerald, Firth and Roca have small areas of prairie that are also worth visiting.)

Audubon Spring Creek Prairie. 807 acres, with about 600 acres of prairie. Drive 3 miles S from the western edge of Denton; entrance gate on E side of road. Native tallgrass prairie uplands, some small wetlands, including a spring, and riparian woods, The plant list exceeds 300 species. Owner: Audubon Nebraska, 402/797-2301, or <http://www.springcreekprairie.org/>

Branched Oak S.R.A. About 200 acres of virgin prairie, plus re-seeded prairie. 13 miles NE of Lincoln, 4 miles W of Raymond. Some good prairie occurs south of the dam near the main south entrance. State park entry permit required, 402/783-3404. Lat./Long.: 40.97945/-96.87038

Capital Beach Saline Wetlands. About 30 acres. The site of a historic saline lake, the east edge of Capital Beach still supports a saline marsh habitat and associated low prairie. Enter Westgate Blvd from Sun Valley Blvd, then W on W. Industrial Lake Drive to parking area. Owned by Lower Platte South N.R.D.: <http://www.lpsnrd.org/docs/Recreation/Wetlands.htm#Lincoln>

Henry Wulf Tallgrass Prairie. 5 acres. Conservation Easement, Wachiska Audubon. Located seven miles E of 84th and O St. in Lincoln, or two miles W of Eagle. On south side of Hwy 34. **For permission to visit** call W. S. Heavey, Sr, 402/333-6411

Henry Wulf Tallgrass Prairie. 5 acres. Conservation Easement, Wachiska Audubon. Located seven miles E of 84th and O St. in Lincoln, or two miles W of Eagle. On south side of Hwy 34. **For permission to visit call W. S. Heavey, Sr., 402/333-6411**

Highway 77 (Hike) Prairie. About 20 acres of upland prairie and woods. Located on the NE corner of Hwy 77 and Hickman Road junction, about 10 miles S of Lincoln city limits. Mostly on private property.

Little Salt Fork Marsh and Little Salt Creek W.M.A. 336 acres (combined acreage). From W. 1st. St. in northwest Lincoln (near Exit 401 of I-80), go N 6 miles to Raymond Road. The preserve is at the NW corner of Raymond Road and W. 1st. St. The state-owned WMA is 1/4 mile S on east side of W. 1st. St. Saline wetlands and alkaline grasslands. For preserve information, contact The Nature Conservancy, 402/342-0282: <http://nature.org/wherewework/northamerica/states/nebraska/preserves/art280.html>

Nine Mile Prairie. 240 acres. Drive 4 miles W on West O St. in Lincoln, then go N on Northwest 48th St. to W. Fletcher Road, and 1 mile W. Walk S from the parking area to the prairie. The total plant list exceeds 390 species URL: http://snrs.unl.edu/wedin/nefieldsites/NineMile/nine_mile_prairie.htm

Pawnee Lake State Recreation Area. Several acres of native prairie on E. side, just south of Superior St. 2 miles N and 1/5 mi. W of Emerald. State park entry permit required, 402/783-3404.

Pioneer's Park. 626 acres. A nature trail extends SW from the Chet Ager Nature Center into restored and native prairie. The Prairie Center has restored prairie and a native plant garden. A third area of fine prairie is located E of the golf course (W of the parking area near the elk statue). Lincoln municipal park., located SW of West Van Dorn and Coddington Ave. 402/441-7895.

Wilderness Park. A 7-mile stretch of riparian woodland along Salt Creek, on SW side of Lincoln. Includes a small area of prairie on sandstone outcrops at the W. edge of park, 0.2 mi. S. of Pioneers Blvd., and E. side of S. 1st. St., Stands of mature bur oak and hickory, especially at the S end, and riparian forest, with about 20 miles of trails. Lincoln municipal park, 402/441-7895.

Madison County

Oak Valley W.M.A 640 acres. Mixed virgin prairie and bur oak draws. Hardwood forest along Battle Creek, and prairie uplands. Located 2.5 mi S., 1/2 mi. W. of Battle Creek. 402/675-4020. Lat./Long.: 41.95285/-97.62501

Merrick County

Bader Memorial Park. Located at the W end of the Chapman (Platte River) Bridge. Consists of prairie plus 0.75 mile of Wood River and 0.5 mile of Platte River frontage. Includes about 120 acres of grassland (some under restoration), as well as riparian forest and shrubland. Admission fee.

Nance County

Sunny Hollow W.M.A. 160 ac. of wet virgin prairie, plus two marshes and a "dugout" wetland. Located 5 miles S, 1 mile W. of Genoa, via country roads. Lat./Long.: 41.37685/-97.73845

Olson Nature Preserve. 112 ac. of sandhill and tallgrass prairie and oak woodlands, 9 mi. NW of Albion., & 1 mi. W. Property of Prairie Plains Resource Institute (402/386-5540 or 402/694-5535).

Nemaha County

Berg Prairie. Lorin, Leva and Laverne Berg. 8 acres of floodplain prairie. Located 7 miles N of Johnson (NW part of section 6, east side of road). For permission to visit call Lorin Berg, 402/264-3605.

Otoe County

Henry Dieken Tallgrass Prairie. 12.6 acres. From western end of Unadilla drive 1.5 miles S on Highway 2, then 0.75 mile W (section 15, south side of road). Owner: Wachiska Audubon, 402/488-9032.

Pawnee County

Burchard Lake W.M.A. About 400 acres of rolling prairie over limestone. Drive 3 miles E of Burchard, then 1 mile N; or go E 3 miles on Highway 4 from the junction of Hwys. 99 and 4 (junction at 3 miles N of Burchard), then 1.5 miles S. 402/471-0641. Lat./Long.: 40.16796/-96.30309

Clarence Wolters Tallgrass Prairie. 40 acres. Conservation Easement. Located 3 miles E and 3.5 miles N of Steinauer (section 3, east side of road, opposite a country church). **For permission to visit** call Leona Wolters, 402/335-2723 or 335-3420.

Elmer Klapka Farm. 35 acres of prairie in 400 acres of farmland and pasture. Located 2.5 miles S of eastern side of Table Rock, sections 9 & 16. The native prairie areas are scattered among brome-dominated pastures. Owner: Wachiska Audubon, 402/488-9032.

Pawnee Prairie W.M.A. 1,120 acres of prairie. Located 8 miles S of Burchard via Hwys 8 and 99, and 1 mile east. Also accessible by driving 10 miles S of Burchard and 1 mile E. The prairie is to the east of these access points. Lat./Long.: 40.03365/-96.32675

Verlyn Beethe Tallgrass Prairie. 24 acres. Conservation Easement. Located 8.5 miles S of Tecumseh, along Highway 50, or 1 mile S of Clarence Wolters Prairie (SE corner of section 10, east side of road). **For permission to visit** call Verlyn Beethe, 402/488-9032.

Platte County

Wilkinson W.M.A. About 80 ac. of wet virgin prairie, plus upland grassland and wetlands. Five miles W and 1 mile N of Columbus, off Highway 81. 402/370-3374. Lat./Long.: 41.50423/-97.49384

Richardson County

Fricke Cemetery Prairie. 5.2 acres. Located about 10 miles northeast of Falls City (go N on US 73 to westward turn about 6 miles N of town, then go E 3.5 miles and N 0.5 mile (section 7, west side of road). **For permission to visit** call Fred Thiges, 402/245-5371.

Indian Cave State Park. About 40 ac. of virgin prairie on hilltops and hay meadows in SE part of park, and also along Trail 10 from top of bluffs to the Adirondack shelter. Diverse wooded habitats and flora of southern affinities. The park is about 80 percent mature hardwood forest, with the rest grassland. Park entry free. 402/883-2575. 40.264/-95.56964

Rulo Bluff Preserve. 445 acres. Ridgetop tallgrass prairie savanna and hardwood forest on high loess bluffs. Located about 1.5 mi S and 4 mi. E. of Rulo, Nebraska, along the southwest shore of the Missouri River. Very steep terrain; **for permission to visit** contact The Nature Conservancy (402/342-0282): <http://nature.org/wherewework/northamerica/states/nebraska/preserves/art280.html>

Saline County

Dwight and Shirley Fictum Tallgrass Prairie. 18 acres. Conservation Easement. Located 4 miles W and 3.5 miles S of Wilber (NE corner of section 3, on west side of road). **For permission to visit** call Dwight Fictum, 402/ 821-2018.

Richard R. Kasl Tallgrass Prairie. 7.5 acres. Conservation Easement. Located 2 miles N and 2 miles W of Wilber, or about 8 miles S of Crete, on Hwy. 101, then 2.5 miles W (section 5, on north side of road). **For permission to visit** call R. R. Kasl, 402/821-2619.

Saunders County

Adrian Blatny Tallgrass Prairie, About 35 acres. Conservation Easement. Located on the east side of the Butler/Saunders county line. Reached by driving 1 mile E of Linwood along Linwood Road, turning N, and driving about 1 mile along the county line (section 18, east side of road). **For permission to visit** call Arian Blatny, 402/641-7944.

Madigan Prairie (23 acres), and Red Cedar Recreation Area (120 acres). Native and re-seeded grasslands. Located between Valparaiso & Weston. Red Cedar is 6 miles N., 2 miles W. of Valparaiso (402/476-2729) The Valparaiso cemetery has a small area of prairie that is worth visiting. Madigan is 1 mile E of the Butler Co. line, and 2 miles S of Rte 92. Lower Platte South N.R.D:

http://snrs.unl.edu/wedin/nefieldsites/Madigan%20Prairie/madigan_prairie.html,

Otoe Creek (Storm) Prairie. 21 acres. Located one mile N, one mile E, and 0.5 mile N (on dirt road) of Yutan (section 24, east side of road). Owner: Wachiska Audubon, 402/488-9032.

Phil & Anna Brey Tallgrass Prairie. 11 acres. Conservation Easement. Located 6 miles W and 1.5 miles N of Ceresco (section 21, east side of road,). **For permission to visit** call Philip Brey, 402/784-0215.

Bur Oak W.M.A. Mostly mature bur oak woods, with about 40 ac. of prairie in oak savanna. Located 5 miles E of Seward along US 84. 402/471-0641. 40.89722/-96.99995

Twin Lakes W.M.A. 1,300 acres, about 600 acres of grasslands, two lakes, marshes, wooded bottomlands and upland prairie. Located 0.5 mile N and 0.5 mile W of I-80 Pleasant Dale exit. The best prairie is SW of the smaller lake, on W side of WMA. 402/471-0641 Lat./Long.: 40.83408/-96.9534

Stanton County

Wood Duck W.M.A. Located about 2 miles S and 4 miles W of Stanton. Virgin prairie on sand-gravel soils, and restored prairie. Also riparian wooded habitats and oxbow lakes bordering the Elkhorn River, on 668 acres. 402/370-3374. Lat./Long.: 41.93084/-97.31538

Thayer County

Meridian W.M.A. 190 acres. Virgin tallgrass and mixed-grass prairie. Located 3.5 miles N of Gilead. 402/749-7650. Lat./Long.: 40.20321/-97.40511

Washington County

Cuming City Cemetery. 11 acres. From the intersection of US 30 and 75 in Blair go N 3.5 miles on Highway 75 to County Road 14. Turn left and go 600 ft. to cemetery entrance (on left). Downer, Dana College URL:

<http://www.panesu.org/subject/markers/Cuming-City-Cemetery-and-Nature-Preserve>

DeSoto National Wildlife Refuge. About 1900 ac. of restored prairie among riparian woods, an oxbow lake and wetlands. Five miles E. of Blair on Hwy 30. 712/642-4121. Entrance fee.

Fort Atkinson State Historical Park. 157 acres. Includes some restored prairie. East of Fort Calhoun. Ph. 402/468-5611,

Wayne County

Thompson-Barnes W.M.A. 18 ac. of restored prairie. From Wayne go 3.5 mi. N. on Hwy 15, and 1 mi. W. 402/370-3374. Lat./Long.: 42.30442/-97.04216.

Iowa Prairies (see Mutel, 1989, Adelman & Schwartz, 2001, and Winckler, 2004, for additional sites)

Des Moines County.

Caylor Prairie. 160 acres. Located southwest of Spirit Lake on County Rd. M28., wet and dry prairie. Contact DNR, 515/281-3891, or 515/281-3891.

Fremont County

Waubonsie State Park, 1,209 acres. Iowa Dept. of Natural Resources. Hilltop, ridge and bluff prairies and oak forests. Located of Iowa Hwy 2, 2 miles west of U.S. 275, and 5 miles east of I-29. Enter via Iowa Hwy 239.

Harrison County.

Murray Hill Scenic Area. Drive west from Pisgah 4.7 miles on County Road F-20 to a steep-east facing bluff, with a path leading through native prairie to the top of Murray Hill, and perhaps the best panoramic view of Loess Hills vegetation and the Missouri Valley.

Howard County.

Hayden Prairie. 240 acres. State preserve & National Natural Landmark. Located 4 miles west on Highway 9 from the junction of Hwy 9 and US 63, then north on County Rd. V26 for 4.5 miles. Contact Iowa DNR, 515/281-3891.

Jasper County

Neil Smith (Walnut Creek) National Wildlife Refuge. 8,654 acres of restored prairie near Prairie City, 20 miles east of Des Moines. Bison and other native species are being re-introduced. Contact USFWS, 515/994-2415.

Monona County

Loess Hills Wildlife Area and Sylvan Runkel State Preserve. 2,900 acres. Iowa Dept. of Natural Resources. Extensive prairies and woodlands. From Onawa take County Rd. L-12 north 6.8 miles (or 1.5 miles beyond junction with L-14); turn east (across Little Sioux R.) on Nutmeg Ave, and then south, following ""Public Access"" signs (via winding graveled 178th St.) for 2.5 miles to central parking lot. Sylvan Runkel State Preserve is across the road to the north. From Castana, drive State Hwy 175 3.5 miles to west. Ridgetop prairie and oak forest. 712/458-2428.

Preparation Canyon State Park, 346 acres. Iowa Dept. of Natural Resources. Located 5 miles southwest of Moorhead, via State Highway 183 and county road. Ridgetop prairie and oak forest, 712/458-2428.

Turin Loess Hills Nature Preserve. 220 acres. Iowa Dept. of Natural Resources. Bluff, hillside and ridgetop prairies plus woodlands. Located 1.5 miles north of Turin via Lapenteur Memorial Road. 515/281-3891.

Plymouth County

Five Ridge State Preserve. 790 acres, Plymouth Co. Conservation Board (712/947-4270). Ridgetop & hillside prairie, plus woodlands. From Stone State Park go north on Hwy 12 6 miles, then take County Road K-18 northeast for 3.5 miles, then west 1 mile on dirt road (260th Ave.) which is ca. 0.5 mile south of County Rd. C43. Walk in 0.8 mile.

Broken Kettle Grasslands. 3,000 acres, owned by The Nature Conservancy. Hillside prairie and oak woodlands. From I-29 in Sioux City take Hwy 12 (Exit 151) north about 10 miles to County Rd. K18, continue on Hwy 12 for 4 miles to Butcher Rd, then east about 1 mile. The office is on SR 12, 0.5 mile north of Butcher Road (712/568-2596).

Pottawattamie County.

Hitchcock Nature Center. 1003 acres. Pottawattamie Co. Conservation Board. Dry prairie, bur oak savanna and oak forest. From Crescent go north on Old Lincoln Highway for 5 miles to Page Lane, then follow signs (712/545-3283).

Woodbury County

Sioux City Prairie. 157 acres, Woodbury Co. Conservation Board(712/258-0838). Hillside prairie. Located in northwestern Sioux City; access from, Brier Cliff College parking lot, at northwest border of prairie, or enter from Talbot Rd, on west side of prairie. Stone State Park (157 acres) and Mount Talbot State Preserve (90 acres, Iowa Dept. of Natural Resources) are nearby. Stone State Park is 4 miles north via Hwy 12 (I-29 Exit 151); Mt. Talbot is north of park on Rock River Rd. Both sites have some prairie.

Kansas

Butler County

El Dorado State Park. 8,000 ac. Ph. 306/321-7170. Northeast of El Dorado, on the edge of the Flint Hills. Kansas Dept. of Wildlife & Parks.

Flint Hills Tallgrass Prairie Preserve. 2,200 ac. Ph 785/233-4400. A Flint Hills TNC prairie preserve on the Butler-Greenfield county line. For permission to visit, call The Nature Conservancy office in Topeka.

Chase County

Tallgrass Prairie National Preserve (ca 11,000 acres) is located two miles north of Strong City in the heart of the Flint Hills. This preserve was created in 1996 in a partnership between the National Park Service and the National Park Trust. Contact information: Tallgrass Prairie National Preserve, PO Box 585, Cottonwood Falls, KS 66845 (Ph. 316/273-6034). URL: <http://www.nps.gov/tapr/home.htm>

Geary County

Konza Prairie. 8,616 ac. Ph. 913/272-5115. A major tallgrass prairie preserve in the Flint Hills, located near Manhattan. A major research station (tallgrass and mixed-grass prairie), purchased by The Nature Conservancy and managed by Kansas State University's Division of Biology. Fourteen miles of trails are open daily from dawn until dusk, conditions permitting. See Zimmerman (1993) and Reichman (1987).

Other Major Midwestern Tallgrass Prairie Preserves

South Dakota

Samuel H. Ordway Jr. Memorial Prairie Preserve (Owned by The Nature Conservancy). 7,800 ac., NE. Ph. 605/439-3475 or 701/222-8464. Located near Leola. Tallgrass prairies and wetlands, the largest tallgrass prairie in South Dakota.

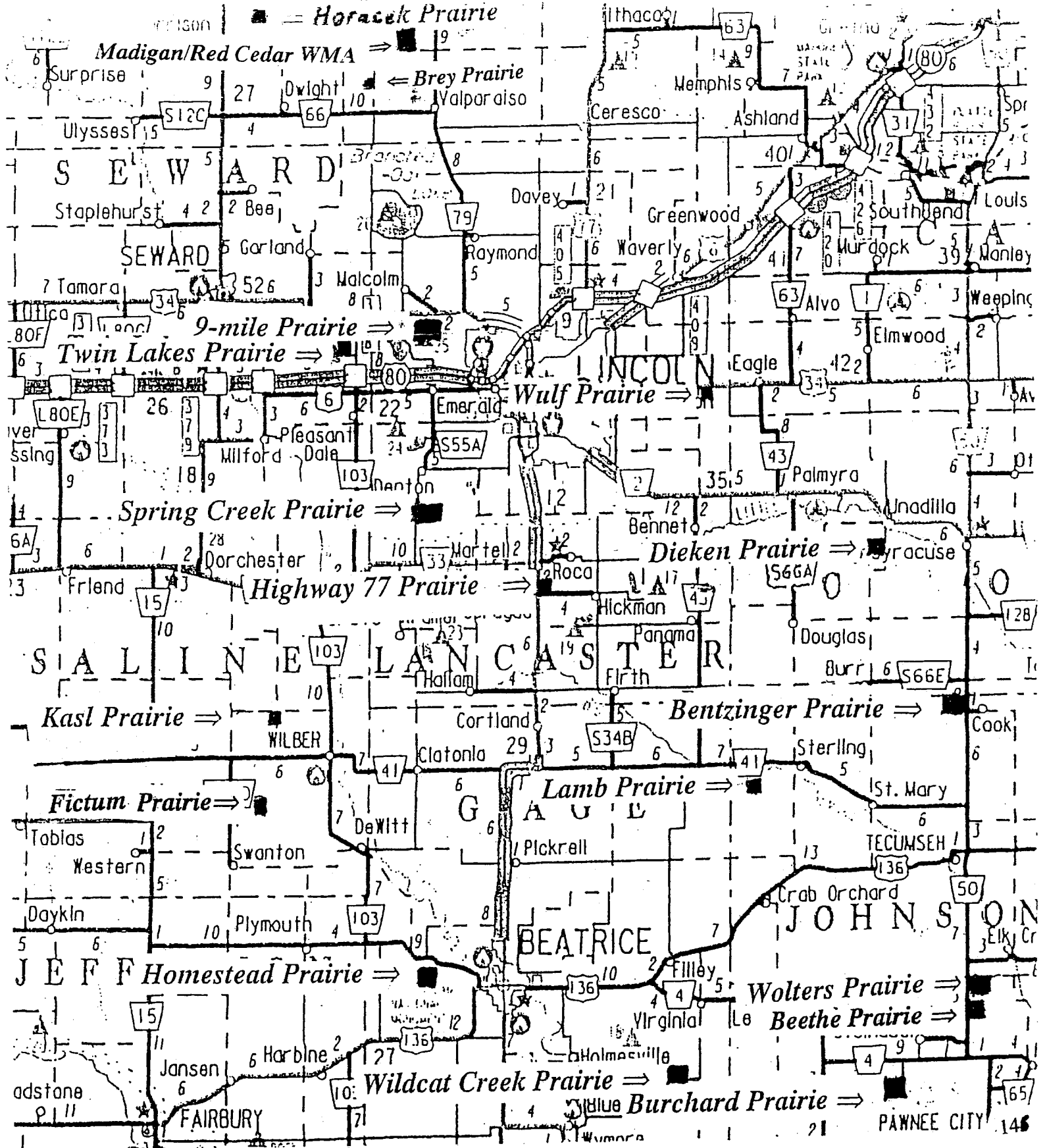
North Dakota

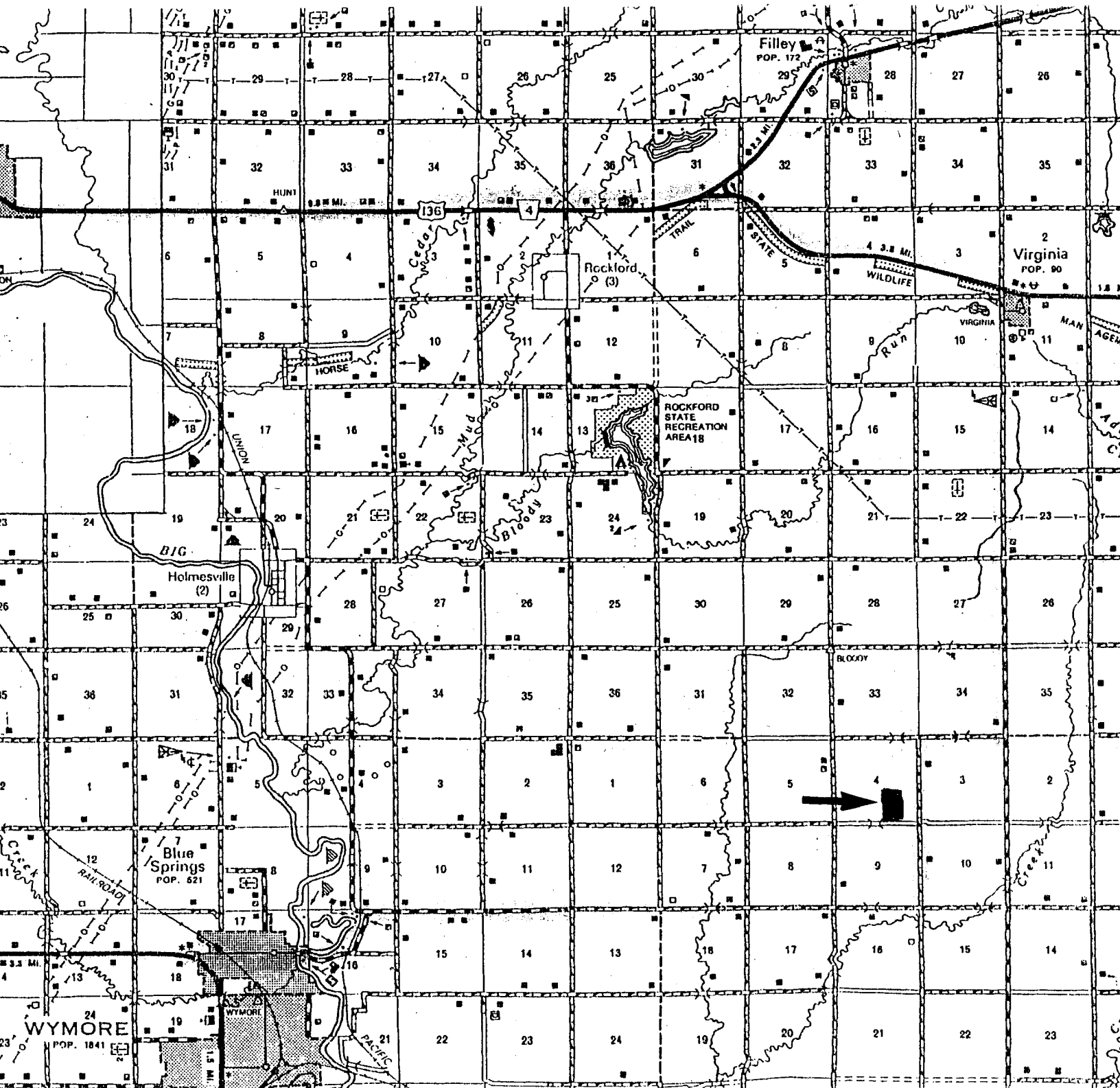
Sheyenne National Grassland. 70,180 ac., SE. Ph. 701/683-4342. Sheyenne Ranger District, P.O. Box 946, 701 Main St., Lisbon, ND 58054. Located in Richland County, near Lisbon. Sandhills tallgrass prairie and riverine hardwoods on a sandy glacial-age delta of the Sheyenne River; the largest area of federally owned tallgrass prairie in the U.S.A. Chapman *et al.* (1998) described this and other Red River Valley prairie sites in North Dakota, Minnesota and Manitoba,

For lists and descriptions of other tallgrass prairies, see Adelman & Schwartz (2001), Jones & Cushman (2004), Johnsgard (2001), Madson (1993, 1995), Mutel (1989) and Winkler (2004).

Some Tallgrass Prairie Locations in Southeastern Nebraska

Note: Prairie locations and sizes as shown here are not exact; many of these sites are conservation easements, and require permission from the landowner to visit.





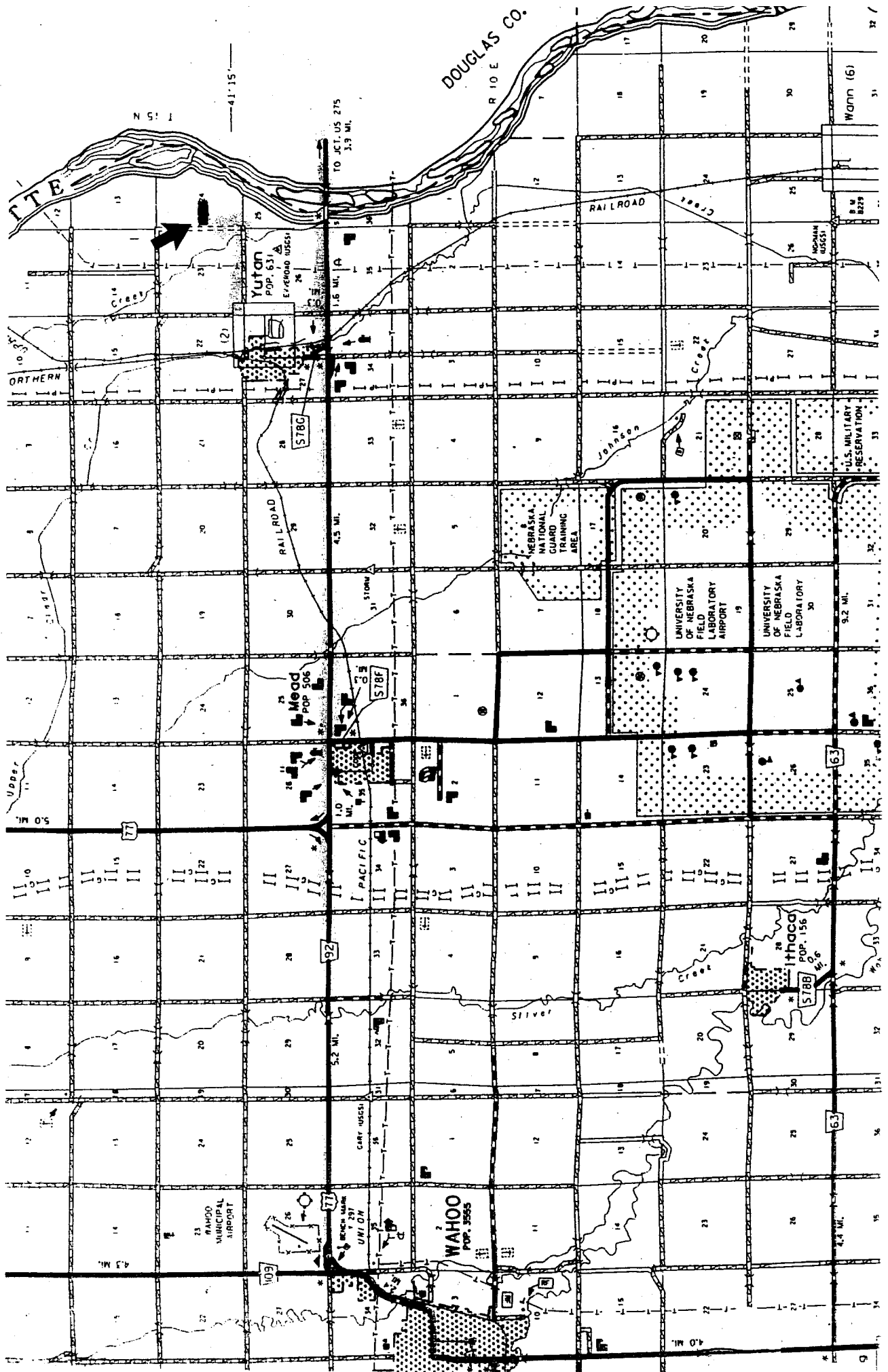
Saunders County

Kenneth Storm or Yutan Prairie

Owners: Wachiska Audubon Society, Lincoln NE.

Lowland prairie, approximately 21 acres

Approximately 1 mile north, 1 east and 1/2 north of Yutan NE.

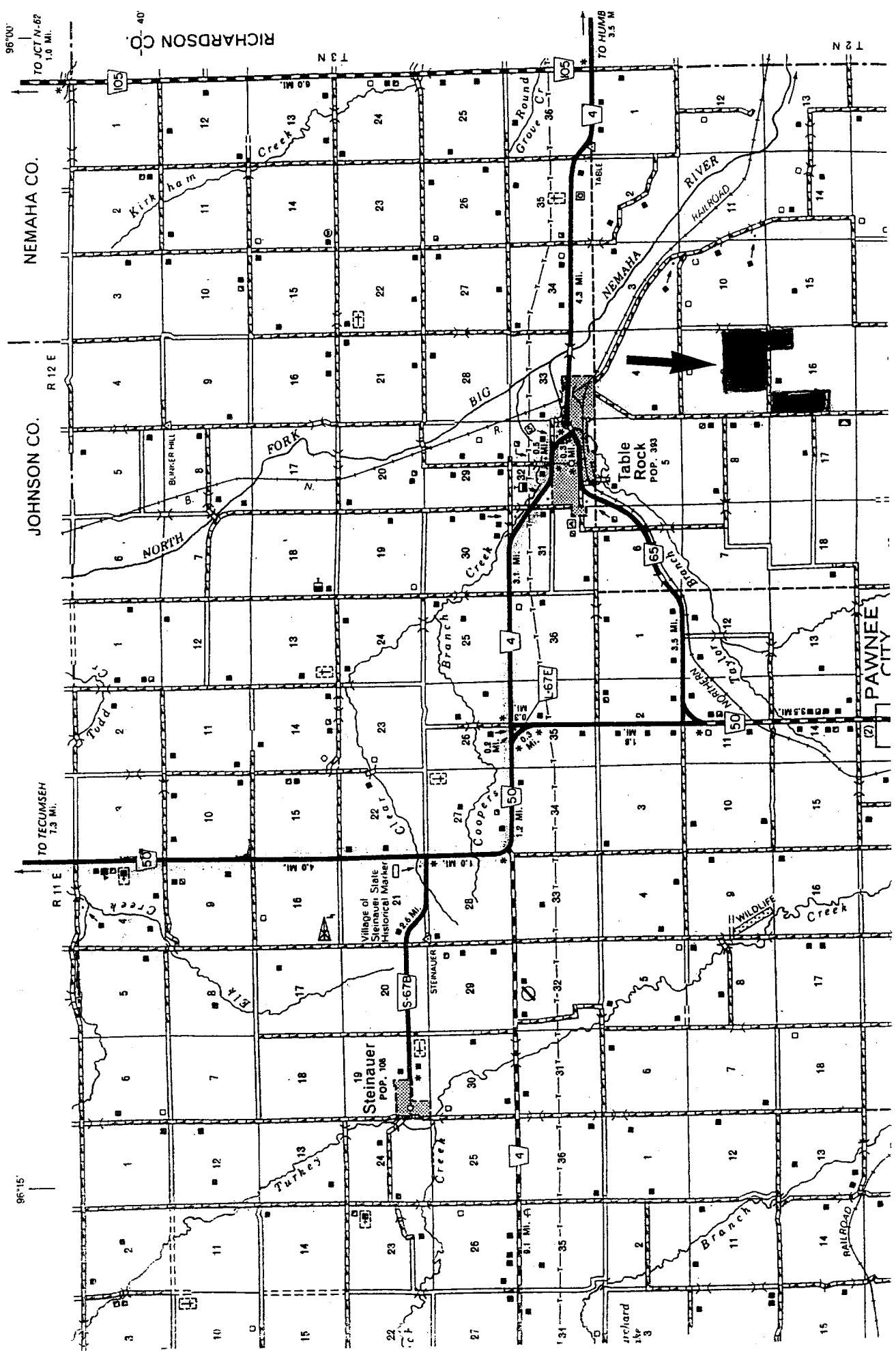


Elmer Klapka Farm

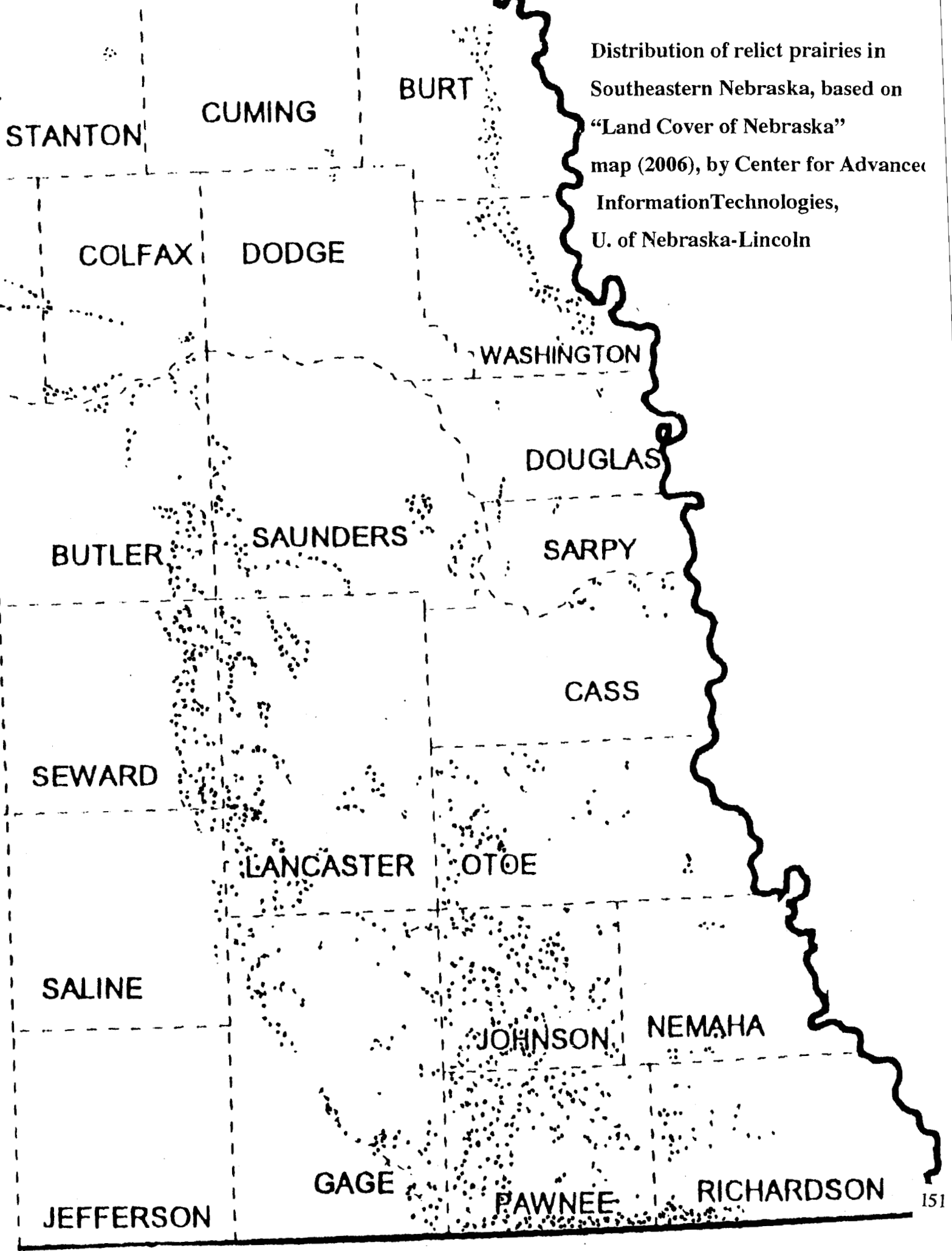
Owner: Wachiska Audubon Society

Upland prairie and cropland, approx. 400 acres

Approximately 2 miles south of Table Rock, NE.

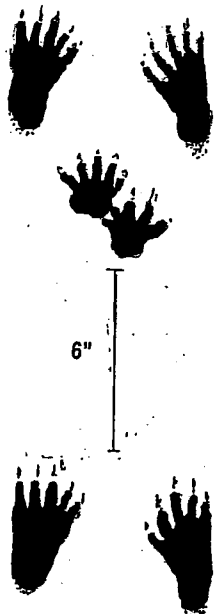
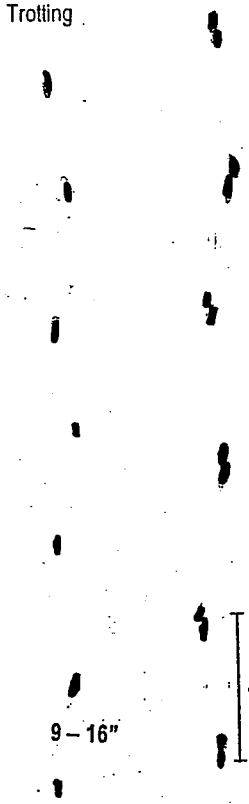


Distribution of relict prairies in
Southeastern Nebraska, based on
"Land Cover of Nebraska"
map (2006), by Center for Advanced
Information Technologies,
U. of Nebraska-Lincoln



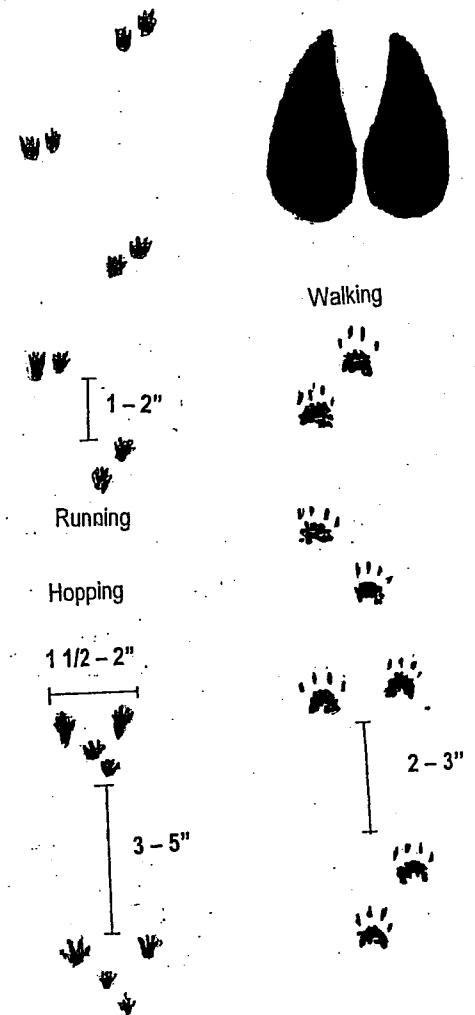
Part 6: References

Coyote Trotting Walking



Raccoon

White-tailed Deer

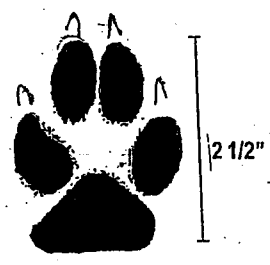


Walking

Running

Hopping

2-3"



Virginia Opossum



13-lined Ground Squirrel

Hopping



4-7"



2"

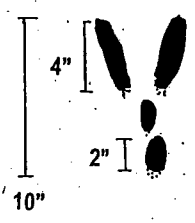


3/4 - 2"



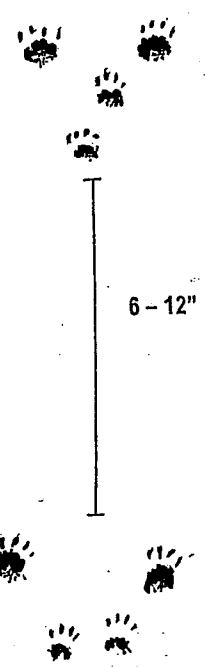
4-5"

Striped Skunk



10"

Eastern Cottontail



6-12"

White-footed Mouse

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