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## **Cool Season Grasses**

Common Name: **Canada Wildrye** Specific Name: *Elymus canadensis* 

Life Cycle: Perennial Season of Growth: Cool

Origin: Native

Livestock Grazing Value: Good

Wildlife Value Nesting: Good Protective Cover: Fair

Food: Good

## Description:

2-5' tall, bunchgrass with wide blades and awned spike seed head resembling wheat or barley and dropping or nodding when mature. Leaves held to the stem by auricles. Spikelets in pairs, glumes straight at the base, awns more than twice as long as the lemma.

## Growing Conditions:

River banks, open ground, sandy soil



Specific Name: Poa pratensis

Life Cycle: Perennial Season of Growth: Cool Origin: Introduced

Livestock Grazing Value: Good

Wildlife Value

Nesting: Good

Protective Cover: Poor

Food: Excellent, both the foliage and seeds are used by 30 or more species of birds and

mammals.

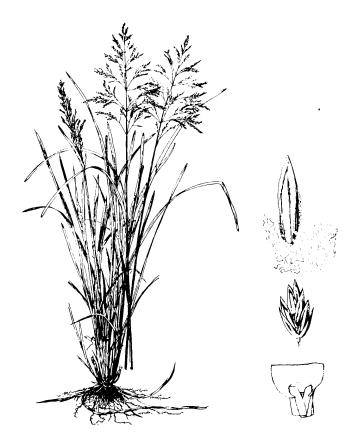
## Description:

1/2 to 2½' tall with rhizomes. Leaves basal and smooth, U-shaped, narrow, 1 to 7" long with distinct boat-shaped tip. Ligules very short, membranous and collar-shaped. Inflorescence open, spreading, pyramid-shaped panicle, 2 to 8" long, branches in whorls of 3 to 5. Spikelets contain 3 to 5 florets, awnless.

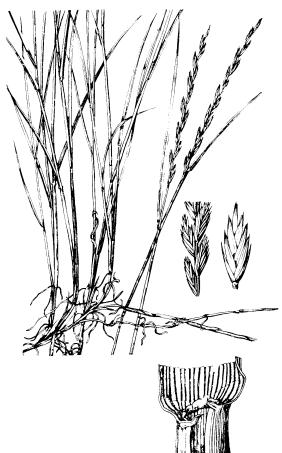
### Growing Conditions:

Found in all sites with favorable soil moisture and in overgrazed pastures.









Common Name: Japanese Bromegrass

Specific Name: Bromus japonicus

Life Cycle: Annual Season of Growth: Cool Origin: Introduced

Livestock Grazing Value: Good

Wildlife Value Nesting: Fair

Protective Cover: Poor

Food: Poor Description:

1-2½' tall, erect or spreading with stems bent at the base with swollen brown nodes and fuzzy sheaths. The panicle finally nodding with 2-6 branches in whorls, bearing several flat spikelets at the end. Spikelets often hairy or fuzzy with a distinct awn, ¼-¾" long.

Growing Conditions:

Grows in waste places and fields.

Common Name: Western Wheatgrass

Specific Name: Agropyron smithii

Life Cycle: Perennial Season of Growth: Cool

Origin: Native

Livestock Grazing Value: Good

Wildlife Value

Nesting: Good

Protective Cover: Fair

Food: Fair, 16 species of birds and mammals are known to use this plant. The principal

value is as forage.

Description:

1-3' tall, growing from gray slender creeping root stock. Blue-green stems and leaves. Leaves straight, broad, rough, strongly nerved on the upper surface and rolls inward with maturity. Flat seed head usually awnless.

Growing Conditions:

Decreases with overgrazing on upland sites in western Kansas. It generally increases with over grazing on tallgrass sites. Most abundant in moist bottomland.

Common Name: Prairie Junegrass

Specific Name: Koeleria pyramidatu (Law.) Beauv.

Life Cycle: Perennial Season of Growth: Cool

Origin: Native

Livestock Grazing Value: Good

Wildlife Value Nesting: Poor

Protective Cover: Poor

Food: Poor, occasionally used by deer and

elk.

## Description:

8 to 24" tall in small bunches, 2 to 3" in diameter. Leaves mostly basal, stems nearly leaf - less. Blades narrow 1½ to 5" long. Flat to rolled and curly when dry. Inflorescence a dense panicle 1 to 5" long. Narrow and spikelike except during spring flowering. Spikelets have 2 to 4 awnless or pointed florets.

## Growing Conditions:

Found on all range sites.

Common Name: Scribner Dichanthelium

Specific Name: Dichanthelium oligosanthes var.

scribnerianum

Life Cycle: Perennial Season of Growth: Cool

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value Nesting: Poor

Protective Cover: Poor

Food: Fair

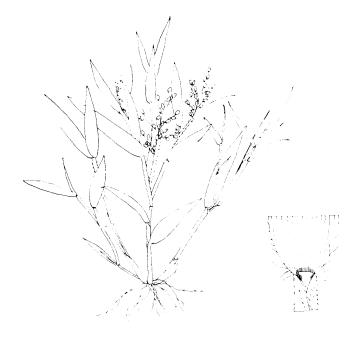
#### Description:

10-25" tall, small bunchgrass with stems usually smooth but can be slightly hairy; and if so, the hairs grow parallel to the stem. The leaf blades are 2-5" long and ½-½" wide, spear shaped with fine short hairs on the underside. The sheath has distinct parallel veins and is covered with fine stiff hairs growing from small bulbs or papilla. The seed head is an open, irregularly shaped panicle with spikelets borne on the end of the seed branches and sub-branches. The seed coat is lined and may have a few scattered hairs.

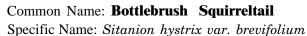
#### Growing Conditions:

Found on all sites.









Life Cycle: Perennial

Season of Growth: Cool

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value Nesting: Fair

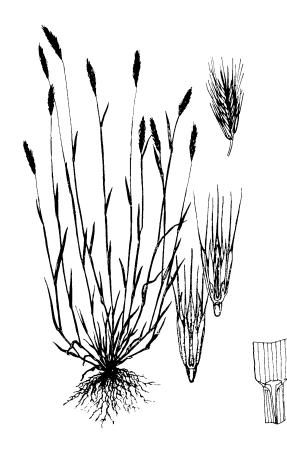
Protective Cover: Poor

Food: Poor Description:

6 to 18" tall bunchgrass. Leaves smooth to hairy on blades and sheaths, narrow blades, rolled or flat with raised veins. Ligule short, membranous, collar-shaped and irregular. Auricles narrow and vary from short to long. Inflorescence bristly, densely enclosed in upper leaf sheath. Spikelets have 2 to a few florets.

Growing Conditions:

Found on dry upland sites.



Common Name: **Little Barley** Specific Name: *Hordeum pusillum* 

Life Cycle: Annual Season of Growth: Cool

Origin: Native

Livestock Grazing Value: Poor

Wildlife Value Nesting: Poor

Protective Cover: Poor

Food: Poor, seeds seldom used by birds and

only occasionally by small mammals.

Description:

5-15" tall with stems growing from small tufts. Leaf blades are quite flat, growing erect and straight until near maturity. There are no auricles at the junction of the leaf blade and the sheath as in other species of Hordeum. The inflorescence is a dense, bristly spike from <sup>3</sup>/<sub>4</sub>-2" long, usually yellowish in color.

Growing Conditions:

It invades some rangeland rapidly when

grasses are grazed short.

Common Name: **Sixweeks Fescue** Specific Name: *Festuce octoflora* 

Life Cycle: Annual Season of Growth: Cool

Origin: Native

Livestock Grazing Value: Poor

Wildlife Value
Nesting: Poor

Protective Cover: Poor

Food: Poor Description:

3 to 20" tall with shallow roots. Leaves sparingly pubescent, narrow, rolled, erect, 1 to 3" long. Ligule short, membranous, and collar-shaped. Inflorescence narrow, compact panicle ½ to 3" long. Spikelets 7 to 13 narrow florets. Glumes are narrow and short awned.

Growing Conditions:

Found on all range sites in bare areas.



## **Warm Season Grasses**

Common Name: Indiangrass
Specific Name: Sorghastrum nutans

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value

Nesting: Excellent

Protective Cover: Excellent

Food: Good, seeds used by numerous songbirds and small mammals, foliage and stems

used by a variety of mammals.

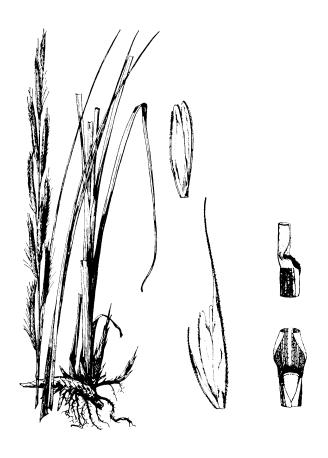
Description:

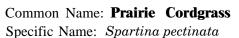
3-6' tall stems growing from short scaly rhizomes. The nodes are fuzzy. The leaf blades are wide and long with a long ligule which resembles rabbit ears when dry. The panicle is 8-12" long and bronze to yellow in color. The awns are about 1/2" long, once bent and closely twisted to the first bend. Decreases with heavy grazing. Produces high yields when managed in pure stand. Also a heavy seed producer.

Growing Conditions:

Deep, moist soils







Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value

Nesting: Good, especially valuable to some marsh birds such as red-winged blackbird.

Protective Cover: Excellent, remains standing

rotective Cover. Excellent, remai

erect throughout the winter.

Food: Fair Description:

5-8' tall, coarse, robust, forming dense mat of thick, woody rhizomes. Leaves and sheaths smooth and prominently veined, blades flat and wide (1/4 to 5/8") at base and rolled near tip, blades 8 to 24" long with strongly backed margins. Ligule a fringe of hairs about 1/16" long. Inflorescence is a spike, 6 to 16" long with 5 to 20 spikes on each seedstalk, up to 40 spikelets arranged alternately in two rows along rachis.

## Growing Conditions:

Found on sites that receive extra water and on seepy areas.



Common Name: **Prairie Sandreed**Specific Name: Calamovilfa longifolia

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value

Nesting: Good

Protective Cover: Good

Food: Good

Description:

2-5' tall, with long, scaly rhizomes. Leaf blades long and stiff, flat to rolled, tapered to pointed tips, smooth. Hairs on inside of collar. Ligules of short hairs. Inflorescence an open panicle 6 to 12" long. Spikelets 1/5 to 1/3" long with single floret.

Growing Conditions:

Commonly found on sandy soils, but also on deep medium textured soils.

Common Name: **Eastern Gamagrass** Specific Name: *Tripsacum dactyloides* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value Nesting: Good

Protective Cover: Good

Food: Good, large seed is used by numerous

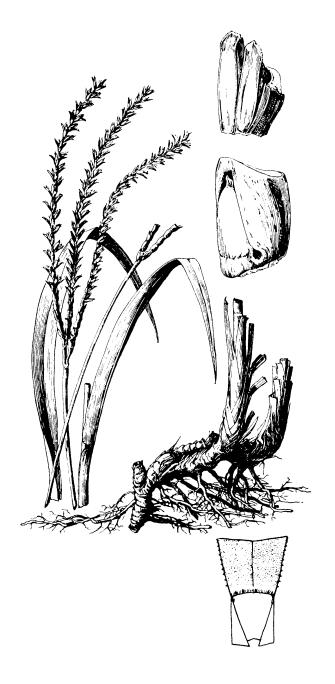
species of birds and small mammals.

#### Description:

3-8' tall, robust stems which are flattened at the purplish base and growing from stout, scaly rhizomes (resembling white grubs). The blades are 1/3-1" wide with rough and sharp margins. The inflorescence with 1-3 spikes, sometimes a foot long, has male spikelets above and female spikelets below. The male spikelets are in pairs fitting into the hollows of the seed stem. The female spikelets are oval and hard, breaking into bony joints. This grass is closely related to corn, but it has both male and female parts in the same spike. A good grass to grow in pure stands and manage as a pasture grass.

### Growing Conditions:

Grows in fertile bottomland, swamps, and along streambanks. It encroaches on fertile uplands under good management.





Common Name: **Big Bluestem** Specific Name: *Andropogon gerardi* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value

Nesting: Good, however, it becomes very

dense if not managed properly.

Protective Cover: Good, stands well through-

out the winter.

Food: Fair, plants used by small mammals and antelope, seeds used by prairie chickens

and some songbirds.

## Description:

3-6' tall, slender stems growing from short rootstock. The lower sheaths and leaves usually are fuzzy and very hairy. The seed heads usually come out in a three spike-like inflorescence resembling a turkey foot. The ligule extends across the leaf collar. It is preferred by cattle and decreases with overgrazing. Matures seed in fall. The most abundant grass in the tallgrass prairie.

## Growing Conditions:

Deep, fertile soils but grows on shallow, gravelly ridges and near limestone ledges during wet periods.

Common Name: **Sand Bluestem** Specific Name: *Andropogon hallii* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value Nesting: Good

Protective Cover: Good, stands well.

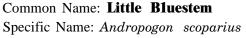
Food: Fair, plants used by small mammals, seeds used by prairie chickens and songbirds.

#### Description:

3 to 6' tall with long creeping rhizomes. Leaves are light green to bluish, prominently veined with broad white midrib on upper surface, smooth. Ligule 1/8 to 1/4" membranous, rounded and irregularly toothed. Inflorescence three racemes, very hairy giving seedhead a golden to white or grayish color.

#### Growing Conditions:

Commonly found on sandy soils.



Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value

Nesting: Excellent, used extensively by upland

game- and songbirds. Protective Cover: Good

Food: Fair, plants used by deer, antelope, and small mammals. Seeds are utilized by some

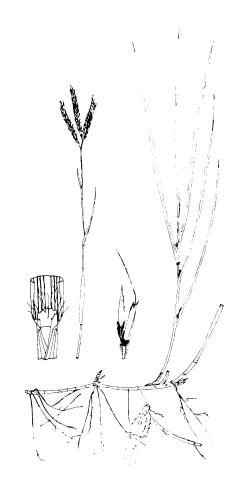
songbirds.

#### Description:

2-3' tall bunchgrass with flattened sheaths, blades and stems purplish to bluish-green, turning leathery brown at maturity. The inflorescence has small fuzzy seeds with twisted awn and partially enclosed in a leaf sheath. Grazed by all classes of livestock. Matures seed in fall.

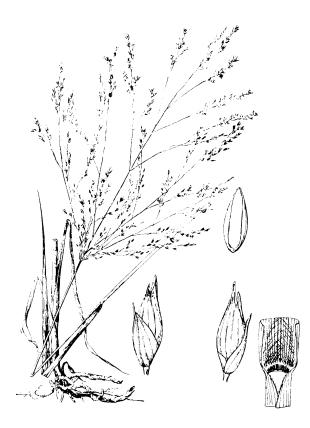
Growing Conditions:

Upland and bottomland









Common Name: **Broomsedge Bluestem** Specific Name: *Andropogon virginicus* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Poor

Wildlife Value Nesting: Good Protective Cover: Fair

Food: Poor

## Description:

2-4' tall bunchgrass growing in small tufts. The overlapping flattened sheaths are hairy along the margin of upper blade surface toward the base. The upper two-thirds of the plant is freely branching with the leaves turning straw yellow when mature. The seed heads are partly enclosed in a sheath (spathe). Seldom grazed by any kind of animal except when grazing is concentrated in the late summer and fall.

#### Growing Conditions:

Mostly along roadsides and railroad tracks. Tends to be weedy.

Common Name: **Switchgrass** Specific Name: *Panicum virgatum* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value

Nesting: Excellent, but can become too dense

if not managed properly.

Protective Cover: Excellent, stands well

throughout the winter.

Food: Excellent, over 60 species of birds and mammals use the seeds and foliage of this plant.

#### Description:

3-5' tall, hollow stem growing in small to large clumps from many scaly creeping rhizomes. Large robust plants with bluish blades up to 2' long. The ligule is a dense ring or cup of hairs on upper leaf surface at collar. The panicles are pyramid shaped with many purplish spikelets. In winter, the seed head resembles branches of a seeding willow tree. Decreases with heavy use early in the growing season. Increases when grazing is deferred past mid summer.

## Growing Conditions:

Highly calcareous soils and wet, acid soils.

Common Name: Silver Bluestem

Specific Name: Andropogon saccharoides var. tor-

reyous

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value Nesting: Good

Protective Cover: Fair, tends to be stemmy.

Food: Fair Description:

1½-3' tall usually growing from an inclined base with no rhizomes. The leafy bent stems are smooth with white nodes and a fuzzy white terminal panicle with short awned spikelets. Increases in abundance when poor condition ranges are deferred, but is replaced with better grasses as conditions improve. Grazed heaviest during early fall.

Growing Conditions:

Prairie and rocky slopes

Common Name: **Tall Dropseed** Specific Name: *Sporobolus asper* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value Nesting: Fair

Protective Cover: Poor

Food: Fair, mostly used by seed eating song-

birds.

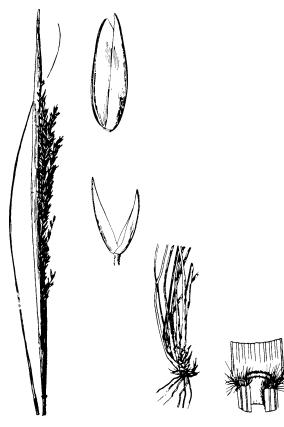
Description:

1½-4' tall with stout, erect stems with a spike-like panicle more or less included in the puffed up sheath. The spikelets are one-flowered and longer (¼") than most of the other dropseeds. Smooth lemma and palea tips are boat-shaped.

Growing Conditions:

Grows on plains or hills and sandy soils.







Common Name: **Sand Dropseed**Specific Name: *Sporobolus cryptandrus* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value Nesting: Fair

Protective Cover: Fair, is important in areas

where other grasses have been depleted.

Food: Good, although the seeds are small, they are used by a wide range of birds and mammals.

Description:

1-3' tall, erect or spreading stems with the finally open panicle mostly included in the

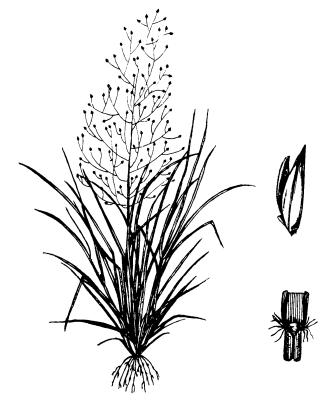
sheath. The sheath has a distinct tuft of hair at the throat. The panicle is lead colored to purplish with small one-flowered spikelets

borne on short pedicels.

Growing Conditions:

Invades sandy soil in overgrazed and blown-

out areas.



Common Name: **Sand Lovegrass** Specific Name: *Eragrostis trichodes* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value Nesting: Good

Protective Cover: Good

Food: Fair

Description:

1-4' tall stems, tufted, erect bunchgrass. The sheaths are hairy at the throat. The panicle is long, open, oblong, 1-2', with purplish to pale clusters at the tip end of the seed branches. Managed best in a pure stand as it is very palatable. Tends to be a short lived perennial that reseeds itself under good management.

Growing Conditions:

Grows on upland sandy soil.

Common Name: Purple Lovegrass Specific Name: *Eragrostis spectabilis* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value

Nesting: Good

Protective Cover: Fair

Food: Fair, foliage used by several small

mammal species.

#### Description:

8 to 36" tall bunchgrass sometimes with short rhizomes. Leaves flat and roll when dry. Silky hairs 1/8 to 1/3" long on inside and outside of collar. Inflorescence large, widely spreading, purplish panicle which separates from plant at maturity and is blown by wind. Hairs prominent at junction of panicle branches and the rachis. Spikelets contain 4 to 12 awnless florets.

ets.

## Growing Conditions:

Found in abundance on sands but also on other soils.

Common Name: **Sideoats Grama** Specific Name: *Bouteloua curtipendula* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value

Nesting: Excellent, readily used by a variety of birds and small mammals.

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Protective Cover: Fair

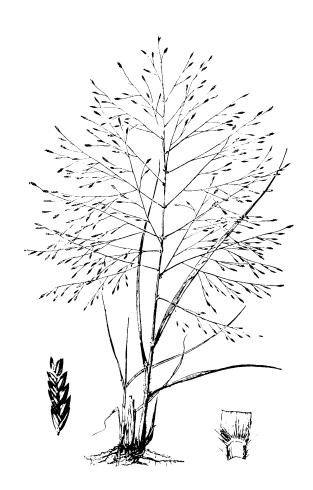
Food: Good, foliage eaten by various mammals and seeds used by numerous songbirds and small mammals.

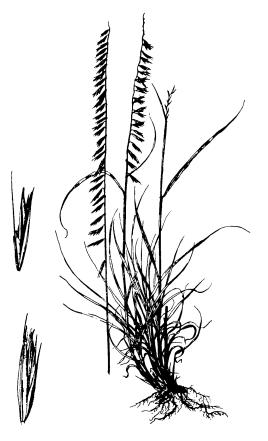
Description:

1-3½' tall with stems growing from strong, scaly rootstock. Hairs grow out of small bulblike spots on the leaf blade edges. The inflorescence has a zig-zag rachis with many spikelets (20-50) twisting around on one side when ripe. Seeds resemble oats. Grazed by all kinds of animals. Matures seed in spring and fall. Has good seedling vigor and can withstand long drought periods when not heavily grazed.

Growing Conditions:

Grows widespread on a variety of range sites.







Common Name: **Hairy Grama** Specific Name: *Bouteloua hirsuta* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value Nesting: Fair

Protective Cover: Poor

Food: Good

## Description:

1/2-2½' tall with erect stems growing from a tufted base. The hairy glumes have black awns. The leaf blades are hairy on the margins, especially at the base. The 2-4 rooster comb-like spikes have a stinger. Not a preferred species by livestock.

Growing Conditions:

Grows on rocky hills and plains.

Common Name: **Blue Grama** Specific Name: *Bouteloua gracilis* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value

Nesting: Fair, important to some prairie song-

birds.

Protective Cover: Poor

Food: Good, foliage used by jackrabbits, prairie dogs, and antelope; seeds used by finches and longspurs.

Description:

1-2' tall, growing in tufts with erect stems but sometimes forming a sod. The inflorescence has 2 rooster comb-like spikes that curve downward when mature with no stinger.

Growing Conditions:

Plains and hills, decreases with heavy grazing on the drier sites. Is an increaser on tall grass sites. Common Name: Alkali Sacaton Specific Name: Sporobulus airoides

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value Nesting: Fair

Protective Cover: Fair

Food: Fair, seeds are important to some

ground feeding birds and prairie dogs.

Description:

1-4' tall, coarse-stemmed, growing in tough clumps (no rhizomes). The long slender blades are hairy at the throat. The panicle is pyramid-shaped and loosely flowered. Oneflowered spikelets are on short pedicels.

Growing Conditions:

Grows in meadows and valleys, especially in alkaline soil. Desirable grass to seed in salted out sites.



Common Name: Tumblegrass

Specific Name: Schedonnardus paniculatus

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Poor

Wildlife Value Nesting: Poor

Protective Cover: Poor

Food: Poor

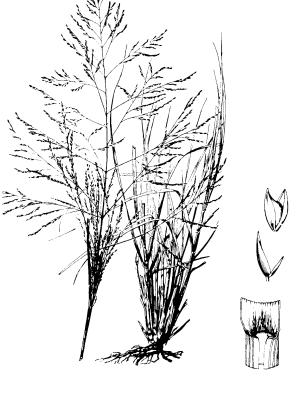
Description:

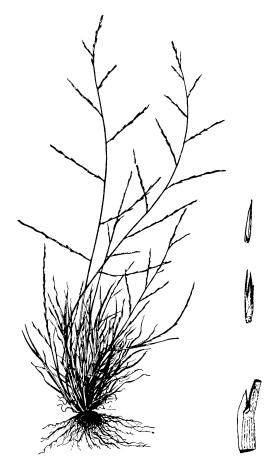
8-25" tall, low tufted bunchgrass having scythe-shaped culms that turn downward with overlapping flattened sheaths and spirally twisted blades with white margins. The panicle is pale green to purple with alternating 1-5" spikes and when mature breaks off and tumbles in the wind. The spikelets are 1-flowered, in 2 rows on one side of slender seed stem.

Growing Conditions:

Grows on sandy soil and invades overgrazed

areas.







Common Name: **Purple Threeawn** Specific Name: *Aristida purpurea* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Poor

Wildlife Value Nesting: Fair

Protective Cover: Poor

Food: Poor Description:

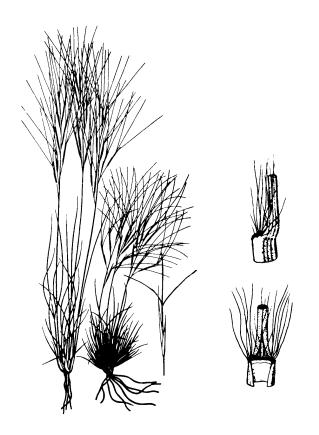
1-2½' tall, densely tufted bunchgrass with inrolled leaves up to 5" long. The seed head is narrow, nodding, loose and purplish in color with many 3-awned spikelets. The second glume is twice as long as the first. The awns

glume is twice as long as the first. The awns are widely spreading, nearly equal in length and 1-2" long. Grazed only in the spring when plants are green.

Growing Conditions:

Rocky hills and sandy plains; invades over-

grazed ranges.



Common Name: Red Threeawn

Specific Name: Aristida purpurea var. robusta

(Merrill)

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Poor

Wildlife Value Nesting: Poor

Protective Cover: Poor

Food: Poor

Description:

8 to 24" tall bunchgrass, leafy at base with fine stems. Leaves smooth with hairy collar, narrow, rolled, stiff, up to 6" long. Ligule a fringe of short hairs. Inflorescence narrow erect panicle. Spikelets few, contain only one floret, purplish-red at maturity, awns up to 4" long.

Growing Conditions:

Found on all sites under overgrazing or in dis-

turbed areas.

Common Name: Prairie Threeawn Specific Name: Aristida oligantha

Life Cycle: Annual Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Poor

Wildlife Value Nesting: Poor

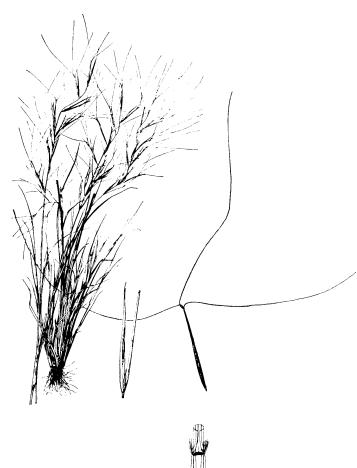
Protective Cover: Poor

Food: Poor Description:

> 1-2' tall growing in tufts and branched at the base and nodes. Woolly at the base with a smooth sheath. The open panicle has long spreading about equal awns (2 to 3½").

Growing Conditions:

Uplands, invades disturbed and overgrazed areas.





Common Name: Inland Saltgrass

Specific Name: Distichlis spicata var. stricta

Life Cycle: Perennial Season of growth: Warm

Origin: Native

Livestock Grazing Value: Fair

Wildlife Value

Nesting: Fair, becomes too dense if not man-

aged.

Protective Cover: Fair

Food: Fair, seeds used by various waterfowl

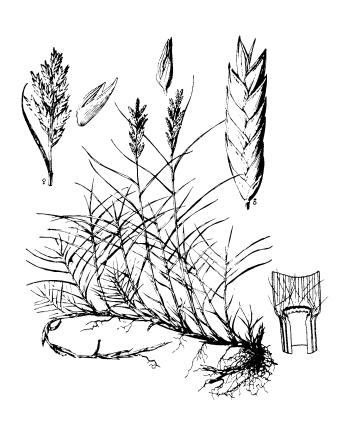
and small mammals.

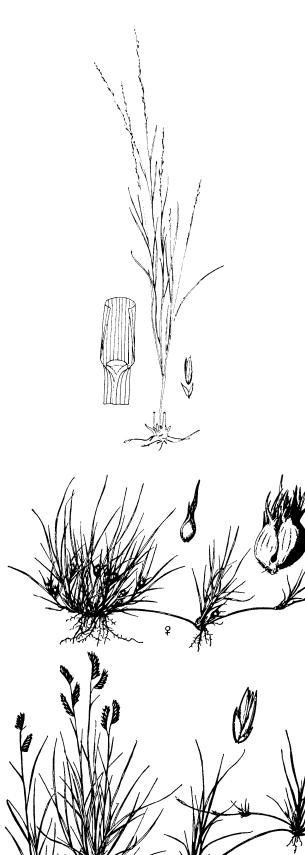
Description:

5-14" tall with erect, coarse stems growing from creeping scaly rootstock. Short, rigid, pointed blades. Male spikelet (left) and female (right).

Growing Conditions:

Alkaline sites





Common Name: Plains Muhly

Specific Name: Muhlenbergia cuspidata

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value Nesting: Fair

Protective Cover: Poor

Food: Fair, an important turkey food in the

southwest.

Description:

8-16" tall, erect, leafy, much branched from a hard bulblike and scaly base. Leaves are smooth, erect, narrow to rolled. Ligule short, membranous, but short-fringed on the margin. Inflorescence a very narrow panicle, 2 to 4" long with panicle branches upright against rachis. Spikelets small and have one floret.

Growing Conditions:

Found on upland and hillsides except on sand.

Common Name: **Buffalograss**Specific Name: *Buchloe dactyloides* 

Life Cycle: Perennial Season of Growth: Warm

Origin: Native

Livestock Grazing Value: Good

Wildlife Value Nesting: Poor

Protective Cover: Poor, too short for signifi-

cant protection.

Food: Poor for most species, however, it is important to antelope and McCown longspur.

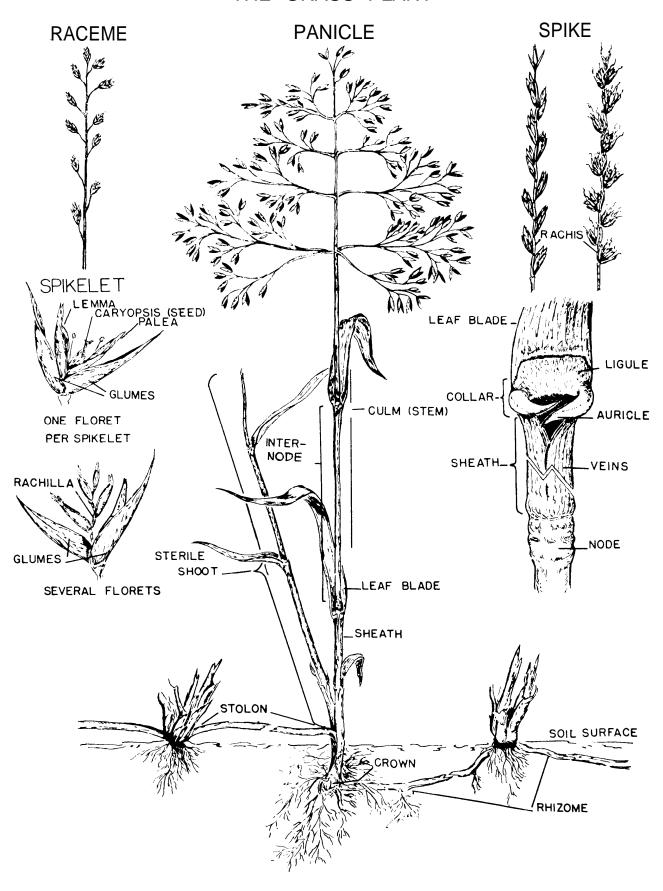
Description:

4-12" tall stems but sod-forming with creeping stolons which take root at the leafy nodes. The nodes are smooth and internodes 2-2½' long and flattened. Leaves with short bristly hairs on both sides. Foliage turns reddish brown after frost. The male and female plants grow in separate colonies. Female plants bear seed in bur-like clusters among the leaves (top). Male plants have a 2 or 3 spiked flag-like seed head (bottom). Produces seed throughout the year.

Growing Conditions:

Plains and prairies

## THE GRASS PLANT



Forbs are herbaceous plants other than grasses and grasslike plants. They have solid stems, and generally have broad leaves that are net veined. Flowers are often large, colored, and showy.

Woody plants have secondary growth originating from aerial stems which live throughout the year, although they may be dormant part of the time. Leaves are often broad and net veined. Flowers are often showy. Both trees and shrubs fit into this category.

	Grasses:	Grasslike	Forbs:	Shrubs:
Stems	Jointed Hollow or Pithy	Solid, not Jointed	Solid	Growth Control of Solid
Leaves	PARALLEL VEINS		/ELF	Resident
		STEM	"VEINS" are NETLIKE	
	LEAVES on 2 Sides	LEAVES on 3 Sides		
Flowers		Overy MALE FEMALE		
	1 1	(may be combined)	Usually Showy	
Example				
	Western Wheatgrass	Threadleaf Sedge	Yarrow	Big Sagebrush (Iwig)

#### **Definition of Terms**

**Annual** —plant lives only 1 year or season. There is no living over of the crown; it must come from seed each year.

**Auricle** —ear-like lobes at the junction of the blade and the sheath.

**Awn** —bristle-like growth, especially on parts of the plant such as the beard on wheat.

**Blade** —the expanded part of a leaf; that part above the sheath and away from the stem.

**Collar** —the portion of the leaf where the sheath and leaf join.

 ${\bf Culm}$  —the jointed stalk or stem. Usually has a seed head at the top.

**Decumbent** —stems or branches are in an inclined or prostrate position, but the seed head is erect.

**Floret** —the small individual grass flower consisting of the lemma, palea, and seed.

**Fruit** —the ripe grain or seed. (This term is not used in the text.)

**Glumes** —the lowermost and empty bracts of a grass spikelet. Usually there are two.

**Grazing Value**—the worth of a plant for livestock determined by considering its palatability, nutritive quality, volume of forage produced, longevity, and area of primary distribution.

**Good** applies to a plant that is in top volume production, is highly palatable (not necessarily in all seasons), and nutritious where adapted.

**Fair** means that the plant is less desirable in palatability, quality, or volume of production.

**Poor** indicates that the plant rates the lowest in one or more basic requirements in most areas where found. An abundance of such plants indicates a range in poor condition.

Inflorescence —the whole flowering part of a grass plant.

**Internodes** —that portion of the stem between the joints.

**Introduced** —grasses which have been brought in from outside North America and are not in the original vegetation (climax).

**Invaders** —grasses which come into areas after the climax grasses have been diminished by overgrazing, drought, fire, or other disturbances. Ranges in which these species are abundant are in poor condition.

**Lemma** —chaffy bract or scale away from the stem and enclosing the seed.

**Ligule** —a small flap or a row of hairs often found lying cross-wise on the inner or upper side of a leaf at the collar.

**Native** —grasses which are native to the North American continent.

**Node** —joint or knot on the stalk which is often swollen and dark and where the leaf sheath is joined to the culm.

**Palea** —chaffy bract opposite the lemma and toward the stem. It encloses the seed.

**Panicle** —an open rebranching type of inflorescence. The lower branches are longer than the ones above and they all bear pediceled spikelets (e.g. Johnsongrass).

**Pedicel** —the stem or footstalk of an individual spikelet of an inflorescence which has many flowers.

**Perennial** —plant lasts for 3 years or more, producing leaves and stems each year from rootstock, crown buds, or branches.

**Prostrate** —lying on the surface of the ground, especially the stems.

**Pubescent** —with hairs.

**Raceme** —a simple, elongated stem with each spikelet pediceled (e.g. Rescuegrass).

**Rachis** —the central stalk of a spike or spike-like raceme.

**Rhizome** —same as rootstock. Any underground stem which will take root at the joints.

**Sheath** —a tubular envelope; the lower part of the leaf which fits around the stem.

**Spike** —an elongated inflorescence with the spikelets usually stemless (e.g. Wheat).

**Spikelet** —a unit of a grass inflorescence. It usually consists of two empty glumes and one or more florets, each with lemmas, paleas, stamens, and pistils.

**Stolon** —above ground runners which take root at the joints, forming new plants.

**Tufted** —growing in clusters which are attached at the base and free at the ends.

Whorl —several leaves or branches at a joint.

Wildlife value —the worth of a plant to wildlife based upon its structural qualities to provide nesting cover, protective cover, and upon the number of species that use the plant for food.

**Excellent** applies to a plant that has exceptional structural qualities for cover or is used for food by 30 or more species of vertebrate wildlife.

**Good** means that the plant has structural qualities which provide a high degree of cover or is used for food by 20 to 30 wildlife species.

**Fair** is applied to those grasses which have restricted cover qualities or are used for food by 10 to 20 wildlife species.

**Poor** refers to a plant which has little or no cover qualities or is used by less than 10 wildlife species as food.

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100 Native Forage Grasses in 11 Southern States, U.S. Department of Agriculture, Soil Conservation Service, Agricultural Handbook No. 389.

Nebraska Range and Pasture Grasses Nebraska Cooperative Extension

Nebraska Range and Pasture Grasses, Nebraska Cooperative Extension Service, University of Nebraska.

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