

## INTRODUCTION

Poisonous plants represent one of the greatest hazards to livestock ranching on western rangelands. In addition to direct losses by death, there are those due to weight loss, poor reproductive performance, and poor health. Through scientific reports and practical experience, ranch managers have learned to recognize poisonous plants and keep livestock losses to a minimum. Some of the things that can be done to prevent problems with poisonous plants are

1. Know the poisonous plants. This is the first line of defense against toxic plants.
2. Practice good range management. To a limited degree, poisonous plants will always be present on rangelands, but the real danger is when the plants are eaten. Livestock poisoning is more often the result of poor range condition and poor management than the presence of poisonous plants. Most poisonous plants are unpalatable and will be eaten only if other good quality forage is not available.
3. Feed adequate mineral and vitamin A supplements. Livestock in poor health are more susceptible to many toxins than are healthy animals.
4. Provide adequate forage, especially during early spring or drought periods.
5. Avoid driving livestock through infested or poor condition range. Hungry animals lose their selectivity, and poor rangelands contain far more poisonous plants than those in good condition.

6. Use control measures—herbicides, grubbing, etc.—on heavy infestations of toxic plants.

The most common toxins in New Mexico poisonous plants are alkaloids, glycosides, minerals, nitrogenous compounds, oxalates and other organic acids, compounds causing photosensitivity, and resins or resinoids (see Tables 1 and 2).

**Alkaloids.** These are the most powerful poisons and produce strong physiological reactions, generally affecting the nervous system. The alkaloid is usually distributed throughout the plant and is active whether it is fresh or dry. There are no antidotes for alkaloid poisoning. Some of the common alkaloid-containing range plants are locoweeds (*Astragalus* spp.), larkspur (*Delphinium* spp.), groundsel (*Senecio* spp.), and lupine (*Lupinus* spp.).

**Glycosides.** Glycosides are compounds composed of a toxic agent combined with a sugar. The toxic agent is harmful when released from the glycosides. Cyanide (HCN, prussic acid) is the most common toxin in the glycosides. Glycoside levels in the plant are often related to environmental factors such as freezing, wilting, drought, and crushing. Cyanide is generally not retained in plant tissues after drying. Catclaw (*Acacia greggii*), chokecherry (*Prunus virginiana*), and johnsongrass (*Sorghum halepense*) are potential cyanide producers.

**Minerals.** Excessive absorption of certain minerals may be dangerous to livestock. Selenium is possibly the most important poisonous mineral in New Mexico. It may be found in some species of loco-

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weed (*Astragalus* spp.), fourwing saltbush (*Atriplex canescens*), snakeweed (*Gutierrezia sarothrae*), and asters (*Aster* spp.). Prince's plume (*Stanleya pinnata*) grows only on seleniferous soils.

**Nitrogenous compounds.** Both range and crop plants may contain potentially toxic levels of nitrogenous compounds. Care must be taken during drought or after fertilizer or herbicide application. Nitrates are also toxic in dry material and silage. Nitrogenous compounds are often found in many species of the amaranth (*Amaranthaceae*), sunflower (*Asteraceae*), mustard (*Brassicaceae*), and goose-foot (*Chenopodiaceae*) families.

**Oxalates and organic acids.** Many plants contain oxalates, but few species in New Mexico contain enough to be considered dangerous. Halogeton (*Halogeton glomeratus*) and dock (*Rumex* spp.) possess soluble oxalates that are corrosive to animal tissue. Non-ruminants are more susceptible to oxalate poisoning than ruminants because the large rumen capacity enables the animal to detoxify small amounts of soluble oxalates. Most cases of ruminant poisoning occur on poor condition rangelands.

**Compounds causing photosensitivity.** On certain occasions, animals become hypersensitive to light. Photodynamic pigments contained in horsebrush (*Tetradymia* spp.), lechuguilla (*Agave lechuguilla*), sacahuista (*Nolina* spp.), and puncture-vine (*Tribulus terrestris*) react with light to produce swelling about the head, blistering, and a sunburned appearance. Damage may be so severe that the lips, ears, and eyelids may be lost. Bacterial infection may also set in.

**Resins or resinoids.** These are highly complex organic compounds that are present in a number of plants. Resins are found in milkweeds (*Asclepias* spp.), marijuana (*Cannabis sativa*), water hemlock (*Cicuta maculata*), and chinaberry tree (*Melia azedarach*).

Several noxious plants contain no poisonous compounds, and instead cause injury through me-

**Table 1. Plant Toxins and Their Effects on Livestock**

Toxin	Effect and Symptoms
Alkaloids	Nervous system, liver damage, locoism, trembling, abortion, depression, paralysis, vomiting, loss of coordination, coma, and death
Glycosides	Excitement, gasping, staggering, paralysis, prostration, convulsions, emphysema, blindness, coma, and death
Mineral poisoning	Birth defects, loss of appetite, depression, labored breathing, excessive urination, coma, and death through respiratory and myocardial failure
Nitrogenous compounds	Abortion, depression of lactation, discolored urine, vitamin A deficiency, brown blood, trembling, weakness, labored breathing, hemorrhages, coma, and death
Oxalates	Nervous system, reduced coagulability of blood, acute kidney inflammation, dullness, colic, depression, labored breathing, prostration, weakness, coma, and death
Compounds causing photosensitivity	Liver damage, inflammation of skin, itching, necrosis of skin, restlessness, leakage of serum through skin; death does not occur directly from the photodynamic action, but through kidney failure
Resins or resinoids	Direct irritation of the nervous and muscular tissue, depression, weakness, staggering, labored breathing, elevated temperature, dilation of pupils, degeneration of kidneys, coma, and death

chanical means if grazed. This is often by long awns or bristles (*Aristida* spp., *Hordeum jubatum*, *Stipa* spp.) or by stinging hairs (*Urtica* spp.).

## POISONOUS PLANTS OF NEW MEXICO

There are at least 270 poisonous plants known to occur in New Mexico (Table 3). The following list includes all New Mexico range plants known to be poisonous or injurious to livestock or humans, even though many of these do not pose a threat except in exceptional circumstances. Also included are a few very common poisonous ornamentals or garden plants that may occasionally escape. The major poisonous plants that are likely to cause problems and should be watched for are marked with an asterisk (\*). The list is arranged in alphabetical order by plant family and scientific name. Indications of toxins and animals affected are only those reported and verified. The plants may be toxic to animals other than those listed.

**Table 2. Distribution of Toxins in the Major Plant Families in New Mexico**

Family Toxin	Number of species in which toxin occurs in New Mexico	Family Toxin	Number of species in which toxin occurs in New Mexico	Family Toxin	Number of species in which toxin occurs in New Mexico
<b>Fabaceae</b>		Photosensitization	2	<b>Brassicaceae</b>	
Alkaloids	21	Unknown	2	Allylisothiocyanate	2
Dicoumarin	2	<b>Solanaceae</b>		Glycosides	1
Glycosides	3	Alkaloids	11	Mustard oil	1
Photosensitization	3	Glycosides	1	Selenium	1
Saponin	1	Unknown	2	Unknown	2
Selenium	13	<b>Chenopodiaceae</b>		<b>Asclepiadaceae</b>	
Unknown	10	Antihelminthic oil	1	Alkaloids	7
<b>Asteraceae</b>		Glycosides	1	Glycosides	7
Acrid substance	2	Nitrogenous compounds	3	Resinoids	7
Alcohol	1	Oxalates	4	<b>Rosaceae</b>	
Alkaloids	5	Photosensitization	1	Glycosides	7
Glycosides	3	Selenium	3	<b>Euphorbiaceae</b>	
Nitrogenous compounds	2	<b>Ranunculaceae</b>		Acrid substance	3
Photosensitization	2	Alkaloids	6	Croton oil	1
Saponin	2	Glycosides	4	Photosensitization	1
Selenium	11	Hairballs	1	Unknown	1
Unknown	21	Irritant oils	1	<b>Liliaceae</b>	
Volatile oils	2	<b>Apiaceae</b>		Alkaloids	4
<b>Poaceae</b>		Alcohol	2	Unknown	2
Fungus	1	Alkaloids	2	<b>Polygonaceae</b>	
Glycosides	3	Nitrogenous compounds	2	Nitrogenous compounds	1
Mechanically injurious	10	Unknown	2	Oxalates	4
Nitrogenous compounds	3			Photosensitization	1

**Table 3. Number of Poisonous or Noxious Range Plants in New Mexico**

Family	Number of species	Family	Number of species	Family	Number of species
Fabaceae	52	Ranunculaceae	12	Rosaceae	6
Asteraceae	50	Apiaceae	10	Polygonaceae	5
Poaceae	32	Brassicaceae	8	38 other families	66
Solanaceae	14	Asclepiadaceae	7		
Chenopodiaceae	12	Euphorbiaceae	7	Total	281

## **Agavaceae**

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*Agave lechuguilla* Torr.

Common name: lechuguilla

Toxin: unknown substances producing hepatogenic photosensitization; saponins

Habitat: dry hills and plains

Animals affected: sheep, goats

*Nolina microcarpa* Wats.

Common name: beargrass, sacahuista

Toxin: unknown

Habitat: dry, rocky hills and plains

Animals affected: cattle, sheep, goats

*Nolina texana* Wats.

Common name: beargrass, sacahuista

Toxin: unknown

Habitat: dry, rocky hills and plains

Animals affected: cattle, sheep, goats

## **Amaranthaceae**

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\**Amaranthus palmeri* S. Wats.

Common name: pigweed, carelessweed, redroot amaranth

Toxin: nitrates

Habitat: gardens and old fields, waste areas

Animals affected: cattle, sheep, horses

\**Amaranthus retroflexus* L.

Common name: pigweed, carelessweed, redroot amaranth

Toxin: nitrates

Habitat: gardens and old fields, waste places

Animals affected: cattle, sheep, horses

## **Anacardiaceae**

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\**Toxicodendron radicans* (L.) Kuntze

Common name: poison ivy

Toxin: urushiol, a skin irritant

Habitat: moist areas at lower elevations, ravines

Animals affected: humans (dermatitis)

## **Apiaceae**

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*Apium graveolens* L.

Common name: celery

Toxin: nitrates (in the tops)

Habitat: waste ground

Animals affected: cattle

*Berula erecta* (Huds.) Cov.

Common name: water parsnip

Toxin: alkaloids

Habitat: waterways, wet habitats

Animals affected: cattle

\**Cicuta maculata* L.

Common name: water hemlock

Toxin: cicutoxin (alcohol)

Habitat: streams and marshes

Animals affected: all animals and humans

*Conium maculatum* L.

Common name: poison hemlock

Toxin: alkaloids

Habitat: moist roadsides, ditches, edges of cultivated fields

Animals affected: all animals and humans

*Daucus carota* L.

Common name: wild carrot, Queen Ann's lace

Toxin: nitrates

Habitat: waste areas

Animals affected: horses, cattle

*Pastinaca sativa* L.

Common name: parsnip

Toxin: unknown

Habitat: disturbed ground, cultivated areas

Animals affected: humans

*Sium suave* Walt.

Common name: water parsnip

Toxin: unknown

Habitat: marshes and wet soils

Animals affected: cattle, swine

## **Apocynaceae**

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*Apocynum androsaemifolium* L.

Common name: spreading dogbane

Toxin: resins, glycosides

Habitat: open places, coarse soils along streams, meadows, and wooded hillsides

Animals affected: cats, dogs

*Apocynum cannabinum* L.

Common name: dogbane, hemp dogbane

Toxin: resins, glycosides

\* Major poisonous plant

## **Apocynaceae (contd.)** \_\_\_\_\_

Habitat: open places, coarse soils along streams

Animals affected: cats, dogs

*Nerium oleander* L.

Common name: oleander

Toxin: glycosides

Habitat: common ornamental

Animals affected: cattle, sheep, horses, humans

## **Asclepiadaceae** \_\_\_\_\_

\**Asclepias asperula* (Decne) Woodson

Common name: rough milkweed, spider antelopehorn

Toxin: resinoids, glycosides, alkaloids

Habitat: open dry plains, flats, desert swales, sandy or rocky hillsides with pinyon, juniper, or oak

Animals affected: sheep, cattle goats, horses, poultry

\**Asclepias incarnata* L.

Common name: swamp milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: marshes

Animals affected: sheep, cattle, horses, poultry

\**Asclepias latifolia* (Torr.) Raf.

Common name: broadleaf milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: dry plains in sandy soils

Animals affected: sheep, goats

\**Asclepias pumila* Voil.

Common name: low whorled milkweed, plains whorled milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: plains, low hills

Animals affected: sheep, goats

\**Asclepias speciosa* Torr.

Common name: showy milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: prairies, open areas

Animals affected: sheep, goats

\**Asclepias subverticillata* Vail.

Common name: whorled milkweed, western whorled milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: dry plains and foothills, waterways, irrigation canals

Animals affected: sheep, goats

\**Asclepias verticillata* L.

Common name: whorled milkweed

Toxin: resinoids, glycosides, alkaloids

Habitat: plains of northeastern New Mexico

Animals affected: sheep, cattle, horses

## **Asteraceae** \_\_\_\_\_

*Achillea millefolium* L.

Common name: yarrow

Toxin: alkaloids and glycosides

Habitat: various

Animals affected: cattle, sheep, horses

*Anthemis cotula* L.

Common name: dog fennel, mayweed

Toxin: acrid substance irritating to mucous membranes

Habitat: disturbed soils, fields, waste places

Animals affected: poultry

*Artemisia filifolia* Torr.

Common name: sand sagebrush

Toxin: volatile oils

Habitat: sandy soils

Animals affected: horses

*Artemisia spinescens* (DC.) Eaton

Common name: bud sagebrush

Toxin: volatile oils

Habitat: dry plains, hills

Animals affected: cattle, sheep

*Aster adscendens* Lindl.

Common name: aster

Toxin: selenium

Habitat: mountain meadows

Animals affected: cattle, sheep

*Aster coeruleus* DC.

Common name: aster

Toxin: selenium

Habitat: wet ground, along streams

Animals affected: cattle, sheep

\* Major poisonous plant

## **Asteraceae (contd.)**

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*Aster commutatus* Gray

Common name: aster

Toxin: selenium

Habitat: open fields, waste grounds

Animals affected: cattle, sheep

*Aster ericoides* L.

Common name: aster

Toxin: selenium

Habitat: meadows, open woods

Animals affected: cattle, sheep

*Aster glaucoides* Blake

Common name: gray aster

Toxin: selenium

Habitat: mountains

Animals affected: sheep

*Aster laevis* L.

Common name: smooth aster

Toxin: selenium

Habitat: scattered in dry to moist places

Animals affected: cattle, sheep

*Aster occidentalis* (Nutt.) Torr. & Gray

Common name: western aster

Toxin: selenium

Habitat: mountain meadows at moderate elevations

Animals affected: cattle, sheep

*Aster pauciflorus* Nutt.

Common name: fewheaded aster

Toxin: selenium

Habitat: widespread in saline soils

Animals affected: cattle, sheep

*Baccharis pteronioides* DC.

Common name: yerba-de-pasmo

Toxin: unknown

Habitat: dry, open hills

Animals affected: cattle, sheep

*Bahia oppositifolia* (Nutt.) DC.

Common name: bahia, plains bahia

Toxin: cyanogenetic glycoside

Habitat: dry soils of plains and hills

Animals affected: cattle, sheep

\**Baileya multiradiata* Harv. & Gray

Common name: desert baileya, desert marigold

Toxin: unknown

Habitat: sandy and gravelly soils in dry areas

Animals affected: sheep, goats

*Centaurea repens* L.

Common name: Russian knapweed

Toxin: unknown

Habitat: fields, roadsides, waste places

Animals affected: horses

*Centaurea solstitialis* L.

Common name: yellow starthistle

Toxin: unknown

Habitat: waste grounds

Animals affected: horses

*Chrysothamnus nauseosus* (Pall.) Britton

Common name: rubber rabbitbrush

Toxin: unknown

Habitat: dry, open places at moderate and low elevations

Animals affected: cattle, sheep, horses

*Conyza coulteri* Gray

Common name: conyza

Toxin: unknown

Habitat: plains, valleys, alkaline soils

Animals affected: sheep

*Flourensia cernua* DC.

Common name: tarbush

Toxin: unknown

Habitat: dry plains, hills, mesas

Animals affected: sheep, goats

*Grindelia squarrosa* (Pursh) Dunal

Common name: curlycup gumweed

Toxin: selenium

Habitat: dry open places, prairies, plains, roadsides, fields

Animals affected: cattle, sheep, horses

\**Gutierrezia microcephala* (DC.) Gray

Common name: broomweed, perennial snakeweed, turpentine weed, snakeweed, matchweed

Toxin: saponin

\* Major poisonous plant

## **Asteraceae (contd.)**

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Habitat: dry plains, slopes, mesas

Animals affected: cattle, sheep, goats, swine, chicks, rabbits

\**Gutierrezia sarothrae* (Pursh) Britt. & Rusby

Common name: broom snakeweed, snakeweed, matchbrush, turpentine weed

Toxin: saponin

Habitat: dry stony plains, slopes, mesas

Animals affected: cattle, sheep, goats, swine, chicks, rabbits

\**Haplopappus tenuisectus* (Greene) Blake

Common name: burrowweed

Toxin: tremetol (alcohol)

Habitat: dry slopes and mesas

Animals affected: cattle, sheep

\**Helenium autumnale* L.

Common name: sneezeweed, bitterweed

Toxin: unknown acrid substance

Habitat: moist low ground in lowlands and foothills

Animals affected: cattle, sheep

\**Helenium hoopesii* Gray

Common name: sneezeweed, orange sneezeweed

Toxin: glycoside (dugaldin)

Habitat: high mountain slopes and valleys, often forming dense stands in moist, sunny, undisturbed localities

Animals affected: cattle, sheep

\**Helenium microcephalum* DC.

Common name: sneezeweed

Toxin: unknown

Habitat: moist ground

Animals affected: cattle, sheep, horses, mules

\**Hymenoxys odorata* DC.

Common name: bitterweed, bitter rubberweed

Toxin: unknown

Habitat: semiarid range

Animals affected: sheep

\**Hymenoxys richardsonii* (Hook.) Cockerell

Common name: pingue, Colorado rubberweed, rubberweed

Toxin: unknown, may be associated with mineral imbalance

Habitat: dry, rocky, or clay soils of plains and mountain slopes

Animals affected: cattle, sheep, goats

\**Isocoma wrightii* (Gray) Rydb.

Common name: rayless goldenrod, jimmyweed, burrowweed

Toxin: tremetol (alcohol)

Habitat: river valleys, drainage areas, irrigation canals

Animals affected: cattle, sheep, horses

*Lactuca serriola* L.

Common name: wild lettuce

Toxin: unknown

Habitat: waste grounds, valleys, stream banks

Animals affected: cattle

\**Oxytenia acerosa* Nutt.

Common name: copperweed

Toxin: unknown

Habitat: alkaline soils in draws and streambeds, desert ranges

Animals affected: cattle, sheep

*Psathyrotes annua* (Nutt.) Gray

Common name: annual psathyrotes

Toxin: unknown

Habitat: dry, sandy, often alkaline soils, especially creekbeds, dry washes

Animals affected: sheep

\**Psilostrophe sparsiflora* (Gray) A. Nels.

Common name: paperflower

Toxin: unknown, induces kidney damage

Habitat: dry, open range

Animals affected: sheep

\**Psilostrophe tagetinae* (Nutt.) Greene

Common name: paperflower

Toxin: unknown, induces kidney damage

Habitat: dry, open range

Animals affected: sheep

*Rudbeckia laciniata* L.

Common name: golden glow, coneflower, thimble weed

\* Major poisonous plant

## **Asteraceae (contd.)** \_\_\_\_\_

Toxin: unknown

Habitat: moist, rich soils

Animals affected: swine, sheep

*Rudbeckia hirta* L.

Common name: black-eyed Susan

Toxin: unknown

Habitat: open slopes, meadows

Animals affected: cattle, swine

*Sartwellia flaveriae* Gray

Common name: sartwellia

Toxin: unknown

Habitat: alkaline soils, gypsum

Animals affected: cattle, sheep, goats

\**Senecio flaccidus* Lessing

Common name: threadleaf groundsel

Toxin: pyrrolizidine alkaloids

Habitat: dry slopes, mesas, dry washes

Animals affected: cattle, sheep, horses, goats

\**Senecio riddellii* Torr. & Gray

Common name: Riddell's groundsel

Toxin: pyrrolizidine alkaloids

Habitat: dry, sandy soils

Animals affected: cattle, sheep, horses, goats

*Senecio spartioides* Torr. & Gray

Common name: broom groundsel

Toxin: pyrrolizidine alkaloids

Habitat: valleys, plains, open areas, pine forests

Animals affected: cattle, sheep, horses, goats

*Senecio vulgaris* L.

Common name: common groundsel

Toxin: pyrrolizidine alkaloids

Habitat: gardens, disturbed ground

Animals affected: cattle, sheep, horses, goats

*Sideranthus grindelioides* (Nutt.) Rydb.

Common name: ironweed

Toxin: selenium

Habitat: dry plains, rocky hills

Animals affected: sheep

*Tanacetum vulgare* L.

Common name: common tansy

Toxin: ethereal oil; causes abortions

Habitat: roadsides, waste areas, ditchbanks, moist areas

Animals affected: cattle

\**Tetradymia canescens* DC.

Common name: horsebrush

Toxin: photosensitizing compounds

Habitat: dry desert and sagebrush range

Animals affected: sheep

\**Tetradymia spinosa* Torr. & Gray

Common name: spiny horsebrush

Toxin: photosensitizing compounds

Habitat: dry desert and sagebrush range

Animals affected: sheep

*Viguiera annua* (Jones) Blake

Common name: annual goldeneye

Toxin: unknown

Habitat: dry hills and mesas

Animals affected: cattle

\**Xanthium spinosum* L.

Common name: spiny cocklebur

Toxin: hydroquinone

Habitat: waste places, fields

Animals affected: cattle, sheep, fowl, swine

\**Xanthium strumarium* L.

Common name: cocklebur

Toxin: hydroquinone

Habitat: fields and waste places

Animals affected: cattle, sheep, horses, fowl, swine

## **Boraginaceae** \_\_\_\_\_

*Amsinckia intermedia* Fisch & May

Common name: fiddleneck

Toxin: unknown

Habitat: dry, open, cultivated ground and waste areas

Animals affected: cattle, horses, swine

*Cynoglossum officinale* L.

Common name: hounds tongue

Toxin: unknown

Habitat: waste places in plains and hills

Animals affected: cattle

\* Major poisonous plant



## **Brassicaceae**

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*Barbarea vulgaris* R. Br.

Common name: yellow rocket

Toxin: mustard oil

Habitat: wet meadows, waste places

Animals affected: horses

*Brassica hirta* Moench

Common name: white mustard

Toxin: cyanogenetic glycoside

Habitat: cultivated fields, waste areas

Animals affected: cattle, sheep

*Brassica kaber* Wheeler

Common name: charlock

Toxin: cyanogenetic glycoside

Habitat: grain fields, waste areas

Animals affected: cattle, sheep, swine

*Brassica nigra* Koch

Common name: black mustard

Toxin: goiterogenic glycoside

Habitat: cultivated fields

Animals affected: cattle

\**Descurainia pinnata* (Walt.) Britt.

Common name: tansy mustard

Toxin: unknown

Habitat: sandy soils

Animals affected: cattle

*Raphanus raphanistrum* L.

Common name: wild radish

Toxin: unknown

Habitat: cultivated areas, waste places

Animals affected: cattle

*Stanleya pinnata* (Pursh) Britt.

Common name: prince's plume

Toxin: selenium

Habitat: desert areas, dry plains and mesas

Animals affected: cattle, sheep

*Thlaspi arvense* L.

Common name: field pennycress

Toxin: cyanogenetic glycoside

Habitat: cultivated fields, waste areas

Animals affected: cattle

## **Campanulaceae**

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*Lobelia cardinalis* L.

Common name: western cardinal flower

Toxin: alkaloids

Habitat: wet ground

Animals affected: cattle, sheep, goats

## **Cannabinaceae**

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*Cannabis sativa* L.

Common name: marijuana

Toxin: tetrahydrocannabinol

Habitat: waste places

Animals affected: cattle, sheep, horses, humans

## **Capparidaceae**

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*Wislizenia refracta* Engelm.

Common name: jackass clover

Toxin: unknown

Habitat: roadsides, fields

Animals affected: cattle

## **Caprifoliaceae**

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*Sambucus mexicana* Presl.

Common name: Mexican elder

Toxin: unknown

Habitat: valleys, stream banks, ornamental

Animals affected: cattle, swine

*Sambucus microbotrys* Rydb.

Common name: Rocky Mountain red elder

Toxin: unknown, concentrated in root

Habitat: moist woods, 8,000–12,000 feet

Animals affected: cattle, swine

## **Caryophyllaceae**

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*Agrostemma githago* L.

Common name: corn cockle

Toxin: cardiac glycoside

Habitat: cultivated fields, waste places

Animals affected: cattle, swine, poultry

\**Drymaria pachyphylla* Woot. & Standl.

Common name: inkweed, drymary

Toxin: unknown

Habitat: alkaline clay soils

Animals affected: cattle, sheep

\* Major poisonous plant

## **Caryophyllaceae (contd.)** \_\_\_\_\_

*Saponaria officinalis* L.

Common name: bouncing bet, soapwort

Toxin: saponin

Habitat: waste areas, roadsides

Animals affected: sheep, rabbits

*Saponaria vaccaria* L.

Common name: cow cockle

Toxin: saponin

Habitat: waste areas, roadsides

Animals affected: sheep, rabbits

## **Chenopodiaceae** \_\_\_\_\_

*Atriplex canescens* (Pursh) James

Common name: four-wing saltbush

Toxin: selenium

Habitat: dry plains, canyons

Animals affected: cattle, sheep

*Atriplex nuttallii* Wats. subsp. *cuneata* (A. Nels.)

Common name: Nuttall saltbush

Toxin: selenium

Habitat: dry hills and slopes

Animals affected: cattle, sheep

*Atriplex rosea* L.

Common name: red orache, red shadscale

Toxin: selenium

Habitat: waste areas

Animals affected: cattle, sheep

*Bassia hyssopifolia* (Pall.) Kuntze

Common name: bassia

Toxin: oxalates

Habitat: dry, saline areas

Animals affected: sheep

\**Chenopodium album* L.

Common name: lambsquarter, goosefoot

Toxin: nitrates

Habitat: waste places

Animals affected: cattle, sheep, horses

*Chenopodium ambrosioides* L.

Common name: goosefoot

Toxin: antihelminthic oil

Habitat: waste places

Animals affected: geese

*Chenopodium glaucum* L.

Common name: oakleaf goosefoot

Toxin: nitrates

Habitat: waste places

Animals affected: cattle, sheep

\**Halogeton glomeratus* (Bieg.) C.A. Mey.

Common name: halogeton, barilla

Toxin: oxalates

Habitat: dry saline plains and alkaline areas, roadsides

Animals affected: cattle, sheep

*Kochia scoparia* (L.) Schrad.

Common name: summer cypress, kochia

Toxin: photosensitizing compounds

Habitat: dry soils, roadsides, waste places

Animals affected: cattle, sheep, horses

*Salsola tragus* L.

Common name: Russian thistle, tumbleweed

Toxin: nitrates

Habitat: dry soils of plains and foothills

Animals affected: cattle, sheep, horses

\**Sarcobatus vermiculatus* (Hook.) Torr.

Common name: greasewood

Toxin: oxalates

Habitat: alkaline flats or saline areas at low elevations

Animals affected: sheep, sometimes cattle

*Suckleya suckleyana* (Torr.) Rydb.

Common name: poison suckleya

Toxin: hydrocyanic acid

Habitat: moist ground, near ponds and reservoirs

Animals affected: cattle, sheep

## **Cyperaceae** \_\_\_\_\_

*Scirpus americanus* Pers.

Common name: bulrush

Toxin: unknown, suspected of producing pulmonary emphysema

Habitat: wet or moist ground

Animals affected: sheep, sometimes cattle

\* Major poisonous plant

## **Equisetaceae**

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\**Equisetum arvense* L.

Common name: horsetail, scouring rush

Toxin: alkaloids

Habitat: sandy or gravelly soils along streams, moist fields, meadows

Animals affected: cattle, sheep, horses, goats

\**Equisetum hiemale* L.

Common name: scouring rush, horsetail

Toxin: alkaloids

Habitat: low moist areas, mostly along streams

Animals affected: cattle, sheep, horses, goats

\**Equisetum laevigatum* R. Br.

Common name: smooth horsetail

Toxin: thiaminase

Habitat: marshes, alluvial thickets, cultivated areas

Animals affected: cattle, sheep, horses, goats

## **Euphorbiaceae**

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*Croton texensis* (Klotz.) DC.

Common name: Texas croton

Toxin: croton oil (caustic)

Habitat: roadsides, fields, dry streambeds

Animals affected: cattle, sheep, horses

*Euphorbia albomarginata* Torr. & Gray

Common name: spurge

Toxin: unknown photosensitizing substance

Habitat: dry flats and slopes

Animals affected: cattle, sheep

*Euphorbia esula* L.

Common name: leafy spurge

Toxin: unknown acrid principle

Habitat: waste areas

Animals affected: sheep, horses

*Euphorbia maculata* L.

Common name: eyebane, spotted spurge

Toxin: unknown photosensitizing substance

Habitat: fields, slopes, canyons

Animals affected: sheep

*Euphorbia marginata* Pursh

Common name: snow-on-the-mountain

Toxin: unknown acrid principle

Habitat: plains, ornamental

Animals affected: cattle, humans

*Euphorbia prostrata* Alt.

Common name: euphorbia

Toxin: unknown acrid principle

Habitat: open plains and waste areas

Animals affected: cattle

*Reverchonnia arenaria* Gray

Common name: reverchonnia

Toxin: unknown

Habitat: dry, sandy ground

Animals affected: sheep

## **Fabaceae**

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\**Acacia constricta* Benth.

Common name: whitethorn acacia

Toxin: cyanogenetic glycoside

Habitat: dry slopes and mesas

Animals affected: cattle

*Acacia greggii* Gray

Common name: catclaw acacia

Toxin: cyanogenetic glycoside

Habitat: along streams and washes; southern New Mexico

Animals affected: sheep

*Astragalus albulus* Woot. & Standl.

Common name: Cibola milkvetch

Toxin: selenium

Habitat: clay flats, low hills, sandstone soils

Animals affected: cattle, sheep, horses

*Astragalus allochrous* Gray var. *allochrous*

Common name: halfmoon locoweed

Toxin: swainsonine

Habitat: dry slopes, plains, and valleys

Animals affected: cattle, sheep, horses

\**Astragalus allochrous* Gray var. *playanus* (M.E. Jones) Isely

Common name: Wooton locoweed

Toxin: alkaloid (locoine)

Habitat: plains, slopes, valleys

Animals affected: cattle, sheep, horses

\* Major poisonous plant

## Fabaceae (contd.)

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\**Astragalus bisulcatus* (Hook.) Gray var. *bisulcatus*

Common name: two-grooved milkvetch

Toxin: selenium

Habitat: plains and bottomlands, sagebrush zones

Animals affected: cattle, sheep, horses

\**Astragalus bisulcatus* var. *haydenianus* (Gray) Barneby

Common name: two-grooved milkvetch

Toxin: selenium

Habitat: plains, dry slopes, sagebrush zone

Animals affected: cattle, sheep, horses

*Astragalus canadensis* L.

Common name: Canada milkvetch

Toxin: swainsonine

Habitat: moist ground or sometimes rocky slopes

Animals affected: cattle, sheep, horses

*Astragalus confertiflorus* Gray

Common name: yellow milkvetch

Toxin: selenium

Habitat: rocky slopes

Animals affected: cattle, sheep, horses

*Astragalus drummondii* Hook.

Common name: Drummond milkvetch

Toxin: swainsonine

Habitat: plains and hillsides, brush places

Animals affected: cattle, sheep, horses

*Astragalus emoryanus* (Rydb.) Cory

Common name: Emory milkvetch

Toxin: alkaloid, produces locoism when found on limestone soils or red sandy soils

Habitat: rocky hillsides, canyons, disturbed areas

Animals affected: cattle, sheep, goats

*Astragalus flavus* Torr. & Gray

Common name: yellow milkvetch

Toxin: selenium

Habitat: rocky slopes, low hills

Animals affected: cattle, sheep, horses

\**Astragalus lentiginosus* Hook var. *lentiginosus*

Common name: blue loco

Toxin: swainsonine

Habitat: rocky slopes, canyons, mesas

Animals affected: cattle, sheep, horses

\**Astragalus lentiginosus* Hook. var. *diphysus* (Gray)

M.E. Jones

Common name: blue loco, rattleweed

Toxin: swainsonine

Habitat: rocky slopes, canyons, mesas

Animals affected: cattle, sheep, horses

\**Astragalus mollissimus* Torr. var. *mollissimus*

Common name: woolly locoweed

Toxin: swainsonine

Habitat: open plains and valleys

Animals affected: cattle, sheep, horses

\**Astragalus mollissimus* var. *earlei* (Rydb.) Tidestrom

Common name: woolly locoweed

Toxin: swainsonine

Habitat: dry slopes and plains

Animals affected: cattle, sheep, horses

\**Astragalus nothoxys* Gray

Common name: beaked milkvetch

Toxin: swainsonine

Habitat: open slopes, sandy areas, among oak and juniper

Animals affected: cattle, sheep, horses

*Astragalus oocalycis* M.E. Jones

Common name: locoweed

Toxin: selenium

Habitat: dry hills, plains, valleys

Animals affected: cattle, sheep, horses

*Astragalus pattersonii* Gray

Common name: Patterson locoweed

Toxin: selenium

Habitat: dry plains and hillsides, in alkaline or seleniferous soils

Animals affected: cattle, sheep, horses

*Astragalus pectinatus* G. Don

Common name: tine-leaved milkvetch

Toxin: selenium

Habitat: variety of habitats

Animals affected: cattle, sheep, horses

\**Astragalus praelongus* Sheld. var. *praelongus*

Common name: stinking milkvetch

Toxin: selenium

Habitat: variety of habitats

Animal affected: cattle, sheep, horses

\* Major poisonous plant

## Fabaceae (contd.)

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\**Astragalus praelongus* var. *ellisiae* (Rydb.) Barneby

Common name: Ellis milkvetch

Toxin: selenium

Habitat: variety of habitats, widespread

Animals affected: cattle, sheep, horses

*Astragalus racemosus* Pursh var. *racemosus*

Common name: alkali milkvetch

Toxin: selenium

Habitat: barren slopes, alluvial areas, alkaline soils

Animals affected: cattle

*Astragalus racemosus* var. *longisetus* M.E. Jones

Common name: alkali milkvetch

Toxin: selenium

Habitat: eroded slopes, along streams

Animals affected: cattle

*Astragalus tephrodes* Gray

Common name: silverline locoweed

Toxin: swainsonine

Habitat: rocky slopes to sandy plains

Animals affected: cattle, sheep, horses

\**Astragalus thurberi* Gray

Common name: Thurber milkvetch

Toxin: alkaloid (locoine)

Habitat: plains, valleys, open slopes

Animals affected: cattle, sheep, horses

*Cassia fasciculata* Michx.

Common name: partridge-pea

Toxin: unknown

Habitat: dry fields and hillsides

Animals affected: cattle, sheep, horses

*Crotalaria sagittalis* L.

Common name: rattlebox, crotalaria

Toxin: unknown

Habitat: sandy soil near streams

Animals affected: horses

*Lathyrus polymorphus* Nuttall subsp. *incanus* (J.G.

Sm. & Rydb.) C.L. Hitchc.

Common name: wild pea

Toxin: alpha-, gamma-diaminobutyric acid

Habitat: dry plains, sandy banks, washes

Animals affected: horses

*Lotus corniculatus* L.

Common name: birdsfoot trefoil

Toxin: cyanogenetic glycoside

Habitat: sandy roadsides

Animals affected: cattle, sheep, horses

\**Lupinus alpestris* A. Nels.

Common name: lupine, bluebonnet

Toxin: alkaloids

Habitat: mountains

Animals affected: cattle, sheep

\**Lupinus argenteus*

Common name: silvery lupine

Toxin: alkaloids

Habitat: meadows, open woods

Animals affected: cattle, sheep, deer

\**Lupinus caudatus* Kell.

Common name: Kellogg's spurred lupine, tailcut lupine

Toxin: alkaloids

Habitat: exposed hillsides

Animals affected: cattle

*Medicago hispida* Gaertn.

Common name: burclover

Toxin: photosensitization compounds

Habitat: waste areas

Animals affected: cattle, sheep, swine

*Medicago sativa* L.

Common name: alfalfa, lucerne

Toxin: saponin, photosensitization compounds

Habitat: cultivated and escaping

Animals affected: cattle, sheep, chicks, swine

*Melilotus albus* Desv.

Common name: white sweetclover

Toxin: dicoumarin

Habitat: waste areas, fields

Animals affected: cattle

\* Major poisonous plant

## **Fabaceae (contd.)**

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\**Melilotus officinalis* Lam.

Common name: yellow sweetclover

Toxin: dicoumarin

Habitat: waste areas, fields

Animals affected: cattle, sheep, horses

\**Oxytropis lambertii* Pursh

Common name: Lambert's crazyweed

Toxin: unknown alkaloid, produces locoism

Habitat: plains, mountain slopes

Animals affected: cattle, sheep, horses

\**Oxytropis sericea* Torr. & Gray

Common name: white loco, silky crazyweed

Toxin: alkaloids, produces locoism

Habitat: open slopes, widespread

Animals affected: cattle, sheep, horses

*Pisum sativum* L.

Common name: garden pea

Toxin: unknown

Habitat: gardens

Animals affected: cattle, sheep

*Caesalpinia gilliesii* (Wallich ex Hooker) Wallich ex D. Dietrich

Common name: bird of paradise

Toxin: unknown, green seed pods are gastrointestinal irritants

Habitat: around dwelling sites, waste areas

Animals affected: cattle

*Prosopis glandulosa* Torr.

Common name: mesquite

Toxin: unknown, may cause a nutritional deficiency

Habitat: plains, prairies, river valleys

Animals affected: cattle

*Psoralea argophylla* Pursh

Common name: scurf pea

Toxin: unknown

Habitat: plains and hills

Animals affected: cattle, sheep

*Psoralea tenuiflora* Pursh

Common name: scurf pea, Indian turnip

Toxin: unknown

Habitat: dry plains, low hills

Animals affected: cattle, horses

*Robinia pseudoacacia* L.

Common name: black locust

Toxin: unknown

Habitat: along roadsides, escaped from cultivation

Animals affected: cattle, sheep, horses, poultry

*Sophora secundiflora* (Ort.) Lag.

Common name: mescal bean, frijolito

Toxin: alkaloids

Habitat: along limestone bluffs, gravelly outwashes

Animals affected: cattle, sheep, goats

*Sophora sericea* Nutt.

Common name: silky sophora

Toxin: alkaloids

Habitat: dry fields and plains

Animals affected: horses

*Thermopsis montana* Nutt.

Common name: mountain golden pea

Toxin: alkaloids

Habitat: mountain valleys and clearings

Animals affected: cattle

*Thermopsis rhombifolia* Rich.

Common name: prairie thermopsis

Toxin: alkaloids

Habitat: dry, sandy soils of hills and plains

Animals affected: cattle, horses

*Trifolium hybridum* L.

Common name: alsike clover

Toxin: photosensitizing compound

Habitat: meadows, waste areas

Animals affected: cattle, sheep, horses, swine

*Trifolium pratense* L.

Common name: red clover

Toxin: unknown

Habitat: fields and waste areas

Animals affected: cattle, sheep, horses

*Trifolium repens* L.

Common name: white clover

Toxin: cyanogenetic glycoside

\* Major poisonous plant

## **Fabaceae** \_\_\_\_\_

Habitat: fields and waste areas  
Animals affected: newborn pigs

*Vicia villosa* Roth  
Common name: hairy vetch, wintervetch  
Toxin: photosensitizing compound  
Habitat: cultivated areas  
Animals affected: cattle, horses

## **Fagaceae** \_\_\_\_\_

\**Quercus gambelii* Nutt.  
Common name: Gambel oak  
Toxin: tannins  
Habitat: canyons and mountain slopes  
Animals affected: cattle, sheep, goats

\**Quercus havardii* Rydb.  
Common name: Havard shinoak, shinnery  
Toxin: tannins  
Habitat: sandy plains  
Animals affected: cattle, sheep

## **Fumariaceae** \_\_\_\_\_

\**Corydalis aurea* Willd.  
Common name: golden corydalis  
Toxin: alkaloids  
Habitat: damp slopes and plains  
Animals affected: cattle, sheep

## **Gentianaceae** \_\_\_\_\_

*Centaurium calycosum* Fern.  
Common name: mountain pink  
Toxin: unknown  
Habitat: boggy or marshy places  
Animals affected: sheep, goats

## **Hypericaceae** \_\_\_\_\_

*Hypericum formosum* H.B.K.  
Common name: southwestern St. John's wort  
Toxin: photosensitizing compounds  
Habitat: moist soil in damp meadows  
Animals affected: cattle, sheep, horses, goats

## **Iridaceae** \_\_\_\_\_

*Iris missouriensis* Nutt.  
Common name: Rocky Mountain iris  
Toxin: unknown  
Habitat: open meadows in the higher mountains  
Animals affected: calves

\* Major poisonous plant

## **Juncaginaceae** \_\_\_\_\_

\**Triglochin maritima* L.  
Common name: arrowgrass  
Toxin: hydrocyanic acid  
Habitat: marshy ground  
Animals affected: cattle, sheep

\**Triglochin palustris* L.  
Common name: arrowgrass  
Toxin: hydrocyanic acid  
Habitat: marshy ground  
Animals affected: cattle, sheep

## **Lamiaceae** \_\_\_\_\_

*Lamium amplexicaule* L.  
Common name: henbit, dead nettle  
Toxin: unknown  
Habitat: waste areas  
Animals affected: cattle, sheep, horses

*Salvia reflexa* Hornem.  
Common name: annual sage, mintweed  
Toxin: nitrates  
Habitat: rocky slopes, open woods  
Animals affected: cattle

## **Liliaceae** \_\_\_\_\_

*Asparagus officinalis* L.  
Common name: asparagus  
Toxin: unknown compound in fruits  
Habitat: valleys, roadsides, loose or sandy soils  
Animals affected: cattle and dairy cattle

\**Veratrum californicum* Durand  
Common name: false hellebore, cornlily  
Toxin: alkaloids  
Habitat: moist meadows in the mountains  
Animals affected: cattle, sheep, fowl

\**Zigadenus venenosus* Pursh  
Common name: death camas  
Toxin: alkaloids  
Habitat: wooded slopes in the mountains  
Animals affected: cattle, horses, swine, fowl

\**Zigadenus gramineus* Rydb.  
Common name: death camas  
Toxin: alkaloids  
Habitat: wooded slopes and open ground  
Animals affected: cattle, sheep, horses

## **Liliaceae** (contd.)

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\**Zigadenus paniculatus* (Nutt.) Wats

Common name: death camas

Toxin: alkaloids

Habitat: open grassy or rocky plains and hills

Animals affected: cattle, horses, swine

## **Linaceae**

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*Linum neomexicanum* Greene

Common name: New Mexico yellow flax

Toxin: saponin, glycoside

Habitat: wooded mountain slopes

Animals affected: cattle

*Linum usitatissimum* L.

Common name: flax

Toxin: cyanogenetic glycoside

Habitat: waste areas around cultivated areas

Animals affected: cattle

## **Loranthaceae**

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*Phoradendron flavescens* (Pursh) Nutt.

Common name: mistletoe

Toxin: pressor amines, phenylethylamine, tyramine

Habitat: parasitic on cottonwood and other deciduous trees

Animals affected: cattle

## **Malvaceae**

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*Gossypium barbadense* L.

Common name: sea-island cotton

Toxin: gossypol in seeds

Habitat: cultivated

Animals affected: cattle, sheep, horses

*Malva parviflora* L.

Common name: mallow, cheeseweed

Toxin: fatty acids (malvalic and sterculic)

Habitat: waste areas

Animals affected: cattle, sheep, horses

## **Meliaceae**

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*Melia azedarach* L.

Common name: chinaberry tree

Toxin: resins, especially in fruits

Habitat: waste areas, ornamental

Animals affected: cattle, sheep, horses

## **Moraceae**

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*Maclura pomifera* Schneid

Common name: Osage orange

Toxins: unknown compounds in fruit

Habitat: waste areas and arroyos

Animals affected: cattle, sheep, horses

## **Oxalidaceae**

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*Oxalis corniculata* L.

Common name: creeping woodsorrel

Toxin: oxalates

Habitat: moist waste areas, often in lawns

Animals affected: sheep

## **Papaveraceae**

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*Argemone mexicana* L.

Common name: Mexican poppy

Toxin: alkaloids

Habitat: waste areas

Animals affected: cattle, sheep, horses, fowl

*Argemone polyanthemus* (Fedde) G. Ownbey

Common name: prickly poppy

Toxin: alkaloids

Habitat: dry plains, waste areas

Animals affected: cattle, sheep, horses, fowl

*Papaver nudicaule* L. var. *radicatum* (Rottb.) DC.

Common name: Iceland poppy

Toxin: alkaloids

Habitat: open slopes and summits

Animals affected: cattle, sheep, horses

*Papaver somniferum* L.

Common name: common poppy

Toxin: alkaloids

Habitat: ornamental

Animals affected: cattle, sheep, horses

## **Pinaceae**

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*Pinus ponderosa* Laws.

Common name: Western yellow pine, ponderosa pine

Toxin: unknown compounds in leaves

Habitat: mountain areas

Animals affected: cattle

\* Major poisonous plant



## Poaceae

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*Agropyron cristatum* (L.) Gaertn.

Common name: wheatgrass

Toxin: ergot infestation of seedheads

Habitat: rangeland and pastures

Animals affected: cattle, sheep, horses, humans

*Aristida* spp.

Common name: red three-awn

Toxin: awns are mechanically injurious

Habitat: plains and rocky slopes

Animals affected: cattle, sheep, horses

*Avena fatua* L.

Common name: wild oats

Toxin: nitrates

Habitat: cultivated land and waste areas

Animals affected: cattle, sheep, horses

*Avena sativa* L.

Common name: cultivated oats

Toxin: nitrates, photosensitizing compounds, grass tetany

Habitat: open ground, grasslands, waste areas

Animals affected: cattle, sheep, horses

*Bouteloua* spp.

Common name: grama grasses

Toxin: low levels of cyanide

Habitat: plains

Animals affected: cattle

*Bromus diandrus* Roth

Common name: ripgut brome

Toxin: mechanical injury from mature awns

Habitat: weedy ground

Animals affected: cattle, sheep

*Bromus inermis* Leyss.

Common name: smooth brome

Toxin: ergot infestation of seed heads

Habitat: mountain slopes and meadows

Animals affected: cattle, sheep, horses

*Bromus rubens* L.

Common name: foxtail chess, red brome

Toxin: mechanical injury from mature awns

Habitat: dry hills and waste areas

Animals affected: cattle, sheep

*Bromus tectorum* L.

Common name: cheatgrass, down cheat

Toxin: mechanical injury from mature awns; may also cause ergot poisoning

Habitat: roadsides and waste areas

Animals affected: cattle

*Cynodon dactylon* (L.) Pers.

Common name: Bermudagrass

Toxin: photosensitizing compound, hayfever

Habitat: waste areas; widespread

Animals affected: cattle

*Elymus* spp.

Common name: wild rye

Toxin: ergot infestation

Habitat: mountain slopes, plains

Animals affected: cattle

*Eragrostis cilianensis* (All.) Lutati ex Janchen

Common name: lovegrass, stinkgrass

Toxin: unknown

Habitat: cultivated or waste areas

Animals affected: horses

*Festuca arundinacea* Schreber

Common name: tall fescue

Toxin: alkaloids, fescue foot

Habitat: pastures

Animals affected: cattle

*Glyceria striata* (Lam.) Hitchc.

Common name: fowl mannagrass

Toxin: cyanogenetic compounds

Habitat: plains and foothills

Animals affected: cattle, sheep, horses

*Hilaria jamesii* (Torr.) Benth.

Common name: galleta

Toxin: ergot infestation of seedheads

Habitat: plains and foothills

Animals affected: cattle, sheep, horses

*Hilaria mutica* (Buckl.) Benth.

Common name: tobosa

Toxin: ergot infestation of seedheads

Habitat: plains and foothills

Animals affected: cattle, sheep, horses

\* Major poisonous plant

## Poaceae (contd.)

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*Hordeum jubatum* L.

Common name: foxtail barley  
Toxin: mechanical injury from mature awns  
Habitat: plains and open slopes  
Animals affected: cattle, sheep, horses

*Hordeum vulgare* L.

Common name: barley  
Toxin: mechanical injury from mature awns  
Habitat: waste areas  
Animals affected: cattle, swine, dogs, poultry

*Lolium perenne* L.

Common name: perennial ryegrass  
Toxin: ergot infestation of seed heads  
Habitat: meadows, waste areas  
Animals affected: cattle

*Panicum antidotale* Retz.

Common name: blue panicum  
Toxin: nitrates  
Habitat: rangelands  
Animals affected: cattle

*Panicum capillare* L.

Common name: witchgrass  
Toxin: nitrates  
Habitat: roadsides, waste places  
Animals affected: cattle

*Panicum coloratum* L.

Common name: Kleinegrass  
Toxin: photosensitivity  
Habitat: pastures  
Animals affected: sheep

*Paspalum dilatatum* Poir.

Common name: dallisgrass  
Toxin: ergot infestation of seed heads  
Habitat: irrigated pastures, moist disturbed areas  
Animals affected: cattle, sheep, horses

*Poa pratensis* L.

Common name: Kentucky bluegrass  
Toxin: ergot infestation of seed heads  
Habitat: lawns, pastures, meadows  
Animals affected: cattle, sheep, horses

*Secale cereale* L.

Common name: rye  
Toxin: ergot infestation of seed heads  
Habitat: cultivated  
Animals affected: cattle, sheep, horses, humans

*Setaria lutescens* (Wiegel) Hubb.

Common name: yellow bristlegrass  
Toxin: mechanically injurious (rare)  
Habitat: waste areas  
Animals affected: cattle

*Sorghum bicolor* (L.) Moench

Common name: common sorghum, milo  
Toxin: cyanide  
Habitat: waste areas, cultivated  
Animals affected: cattle, sheep, horses

\**Sorghum halepense* (L.) Pers.

Common name: Johnsongrass  
Toxin: cyanide  
Habitat: waste areas, cultivated fields  
Animals affected: cattle, sheep, horses

*Stipa comata* Trin. Rupr.

Common name: needle-and-thread  
Toxin: mechanical injury from mature awns  
Habitat: open slopes  
Animals affected: cattle, sheep, horses

*Stipa neomexicana* (Thurb.) Scribn.

Common name: New Mexico feathergrass  
Toxin: mechanical injury from mature awns  
Habitat: dry hills  
Animals affected: cattle, sheep, horses

*Stipa robusta* (Vasey) Scribn.

Common name: sleepygrass  
Toxin: unknown narcotic  
Habitat: open slopes, northern to south-central New Mexico  
Animals affected: horses

*Zea mays* L.

Common name: common maize  
Toxin: nitrates  
Habitat: cultivated  
Animals affected: cattle

\* Major poisonous plant

## **Polygalaceae**

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*Polygala sanguinea* (L.) Farwell  
Common name: milkwort, snakeroot  
Toxin: irritant drug  
Habitat: plains  
Animals affected: horses

## **Polygonaceae**

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*Beta vulgaris* L.  
Common name: beet, sugar beet  
Toxin: oxalates, nitrates  
Habitat: cultivated  
Animals affected: cattle

*Fagopyrum sagittatum* Gilib.  
Common name: buckwheat  
Toxin: primary photosensitizer  
Habitat: waste areas, roadsides  
Animals affected: cattle, sheep, horses, goats, swine, fowl

*Rheum rhaponticum* L.  
Common name: rhubarb  
Toxin: oxalic acid in the leaf blades  
Habitat: cultivated  
Animals affected: cattle, sheep

*Rumex acetosella* L.  
Common name: sheep sorrel, dock  
Toxin: oxalates in the leaf blades  
Habitat: disturbed places  
Animals affected: sheep

*Rumex crispus* L.  
Common name: curlyleaf dock  
Toxin: oxalates  
Habitat: cultivated fields, waste areas  
Animals affected: sheep

## **Polypodiaceae**

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\**Pteridium aquilinum* (L.) Kuhn.  
Common name: bracken fern  
Toxin: thiaminase  
Habitat: open woods and clearings in the mountains  
Animals affected: cattle, sheep, horses

## **Portulacaceae**

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*Portulaca oleracea* L.  
Common name: common purslane

\* Major poisonous plant

Toxin: oxalates  
Habitat: waste areas, cultivated areas  
Animals affected: sheep

## **Primulaceae**

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*Anagallis arvensis* L.  
Common name: pimpernel  
Toxin: unknown  
Habitat: waste areas  
Animals affected: sheep

## **Ranunculaceae**

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\**Aconitum columbianum* Nutt.  
Common name: monkshood  
Toxin: alkaloids  
Habitat: moist ground, often along streams  
Animals affected: cattle, sheep, horses

*Actea arguta* Nutt.  
Common name: baneberry  
Toxin: irritant oil  
Habitat: woods  
Animals affected: cattle, sheep, horses, humans

*Anemone patens* L.  
Common name: pasque flower  
Toxin: glycoside  
Habitat: open meadows  
Animals affected: sheep

*Caltha leptosepala* DC.  
Common name: elk slip, March marigold  
Toxin: glycoside  
Habitat: wet meadows, boggy ground  
Animals affected: cattle, sheep

\**Delphinium barbeyi* Huth.  
Common name: Barbey larkspur, tall larkspur  
Toxin: alkaloids  
Habitat: open meadows  
Animals affected: cattle, occasionally sheep

\**Delphinium nelsonii* Greene  
Common name: Nelson larkspur  
Toxin: alkaloids  
Habitat: dry plains  
Animals affected: cattle, sheep, horses

\**Delphinium occidentale* Wats.  
Common name: larkspur

## **Ranunculaceae (contd.)** \_\_\_\_\_

Toxin: alkaloids

Habitat: dry slopes in oak scrub

Animals affected: cattle, sheep, horses

\**Delphinium robustum* Rydb.

Common name: larkspur

Toxin: alkaloids

Habitat: mountain meadows

Animals affected: cattle, sheep, horses

\**Delphinium virescens* Nutt.

Common name: larkspur

Toxin: alkaloids

Habitat: dry plains and hills

Animals affected: cattle, sheep, horses

*Ranunculus cymbalaria* Purch

Common name: alkali buttercup, trailing buttercup

Toxin: glycoside

Habitat: wet ground

Animals affected: cattle, sheep, horses

*Ranunculus sceleratus* L.

Common name: crowfoot, buttercup

Toxin: glycoside

Habitat: marshy ground

Animals affected: cattle, sheep, horses

## **Rosaceae** \_\_\_\_\_

\**Cercocarpus montanus* Raf.

Common name: mountain mahogany

Toxin: cyanogenetic glycosides

Habitat: dry hillsides

Animals affected: cattle

*Malus sylvestris* Mill.

Common name: apple

Toxin: cyanide in leaves

Habitat: cultivated

Animals affected: cattle, horses, mules

*Prunus armeniaca* L.

Common name: apricot

Toxin: cyanogenetic glycoside, especially in seeds (pits)

Habitat: cultivated

Animals affected: cattle, sheep, horses

*Prunus persica* Batsch

Common name: peach

Toxin: cyanogenetic glycoside, especially in seeds (pits)

Habitat: cultivated

Animals affected: cattle, sheep, horses

\**Prunus serotina* Ehrh.

Common name: southwestern chokecherry

Toxin: cyanogenetic glycoside

Habitat: along streams

Animals affected: cattle, sheep, horses

\**Prunus virginiana* L.

Common name: chokecherry

Toxin: cyanogenetic glycoside

Habitat: moist canyons and slopes

Animals affected: cattle, sheep

## **Santalaceae** \_\_\_\_\_

*Comandra umbellata* (L.) Nutt.

Common name: bastard toadflax

Toxin: alkaloids, glycosides, selenium

Habitat: plains and forested slopes; parasitic on other plants

Animals affected: cattle, sheep, horses

## **Scrophulariaceae** \_\_\_\_\_

*Castilleja* spp.

Common name: paintbrushes

Toxin: selenium

Habitat: foothills and plains

Animals affected: cattle

## **Sinopteridaceae** \_\_\_\_\_

*Dryopteris filix-mas* (L.) Schott

Common name: malefern

Toxin: thiaminase

Habitat: damp, rocky places, often along streams

Animals affected: horses

\**Notholaena sinuata* (Lag.) Kaulf. var. *cochisenis* (Goodding) Weath.

Common name: Jimmy fern, cloak fern

Toxin: unknown, passed through the milk

Habitat: dry, rocky areas, along canyon walls

Animals affected: sheep

\* Major poisonous plant

## **Solanaceae**

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*Datura stramonium* L.

Common name: Jimsonweed

Toxin: alkaloids

Habitat: waste or cultivated ground

Animals affected: cattle, sheep, horses, swine, mules, chickens, humans

*Datura wrightii* Regel.

Common name: datura, thornapple

Toxin: alkaloids

Habitat: mesas and waste grounds

Animals affected: cattle, sheep, horses, swine, mules, chickens, humans

*Hyoscyamus niger* L.

Common name: henbane

Toxin: alkaloids

Habitat: moist roadsides

Animals affected: cattle, sheep, fowl

*Lycium halimifolium* Mill.

Common name: matrimony vine

Toxin: unknown

Habitat: dry hills and plains

Animals affected: calves, sheep

*Lycopersicon esculentum* Mill.

Common name: tomato

Toxin: alkaloids in leaves and vines

Habitat: cultivated

Animals affected: cattle, swine

*Nicotiana attenuata* S. Wats.

Common name: coyote tobacco

Toxin: nicotine

Habitat: sandy ground near streams and washes

Animals affected: cattle, sheep, horses, swine

*Nicotiana glauca* Graham

Common name: tree tobacco

Toxin: nicotine

Habitat: along desert streams and washes

Animals affected: cattle, sheep, horses

*Nicotiana trigonophylla* Dunal

Common name: desert tobacco

Toxin: nicotine

Habitat: desert canyons, washes

Animals affected: cattle, sheep, horses

\* Major poisonous plant

*Physalis virginiana* Mill. var. *sonora* (Torr.) Waterfall

Common name: groundcherry

Toxin: unknown

Habitat: moist ground, widespread

Animals affected: sheep

*Solanum elaeagnifolium* Cav.

Common name: silverleaf nightshade, horsenettle

Toxin: glycoalkaloids

Habitat: shaded slopes or waste areas

Animals affected: cattle, sheep

*Solanum nigrum* L.

Common name: black nightshade

Toxin: glycoalkaloids

Habitat: shaded slopes or waste areas

Animals affected: cattle, sheep, horses

*Solanum rostratum* Dunal.

Common name: buffalobur

Toxin: glycoalkaloids

Habitat: plains and waste areas

Animals affected: cattle, swine

*Solanum sarachoides* Sendt.

Common name: hairy nightshade

Toxin: glycoalkaloids

Habitat: waste areas

Animals affected: cattle, sheep, horses

*Solanum triflorum* Nutt.

Common name: cutleaf nightshade

Toxin: glycoalkaloids

Habitat: plains, roadsides, streambeds

Animals affected: cattle, horses

## **Typhaceae**

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*Typha latifolia* L.

Common name: cattail

Toxin: hayfever

Habitat: marshes, ponds

Animals affected: horses

*Urtica gracilis* Ait.

Common name: stinging nettle

Toxin: stinging hairs cause dermatitis, nitrates

Habitat: rich damp soil in thickets in mountains

Animals affected: horses

## Verbenaceae

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*Aloysia wrightii* (Gray) Heller

Common name: whitebrush

Toxin: unknown

Habitat: dry, rocky slopes, often on limestone soils

Animals affected: horses

## Zygophyllaceae

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*Kallstroemia hirsutissima* Vail

Common name: hairy caltrop

Toxin: unknown

Habitat: dry plains, widespread

Animals affected: cattle, sheep, goats

*Peganum harmala* L.

Common name: African rue

Toxin: alkaloids

Habitat: southern dry plains

Animals affected: cattle

\**Tribulus terrestris* L.

Common name: puncturevine, goathead

Toxin: nitrates, photosensitizing compound, saponins

Habitat: disturbed areas

Animals affected: sheep

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\* Major poisonous plant

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<i>Rumex acetosella</i>	19	<i>Solanum nigrum</i>	21
<i>Rumex crispus</i>	19	<i>Solanum rostratum</i>	21
Russian knapweed	6	<i>Solanum sarachoides</i>	21
Russian thistle	10	<i>Solanum triflorum</i>	21
Rye	18	<i>Sophora secundiflora</i>	14
<b>S</b>			
Sacahuista	4	<i>Sophora sericea</i>	14
<i>Salsola tragus</i>	10	<i>Sorghum bicolor</i>	18
<i>Salvia reflexa</i>	15	<i>Sorghum halepense</i>	18
<i>Sambucus mexicana</i>	9	Southwestern chokecherry	20
<i>Sambucus microbotrys</i>	9	Southwestern St. John's wort	15
Sand sagebrush	5	Spider antelopehorn	5
<i>Saponaria officinalis</i>	10	Spiny cocklebur	8
<i>Saponaria vaccaria</i>	10	Spiny horsebrush	8
<i>Sarcobatus vermiculatus</i>	10	Spotted spurge	11
Sartwellia	8	Spreading dogbane	4
<i>Sartwellia flaveriae</i>	8	Spurge	11
<i>Scirpus americanus</i>	10	<i>Stanleya pinnata</i>	9
		Stinging nettle	21
		Stinkgrass	17
		Stinking milkvetch	12
		<i>Stipa comata</i>	18
		<i>Stipa neomexicana</i>	18
		<i>Stipa robusta</i>	18

<i>Suckleya suckleyana</i>	10
Sugar beet	19
Summer cypress	10
Swamp milkweed	5

## T

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Tailcut lupine	13
Tall fescue	17
Tall larkspur	19
<i>Tanacetum vulgare</i>	8
Tansy mustard	9
Tarbush	6
<i>Tetradymia canescens</i>	8
<i>Tetradymia spinosa</i>	8
Texas croton	11
<i>Thermopsis montana</i>	14
<i>Thermopsis rhombifolia</i>	14
Thimble weed	7
<i>Thlaspi arvense</i>	9
Thornapple	21
Threadleaf groundsel	8
Thurber milkvetch	13
Tine-leaved milkvetch	12
Tobosa	17
Tomato	21
<i>Toxicodendron radicans</i>	4
Trailing buttercup	20
Tree tobacco	21
<i>Tribulus terrestris</i>	22
<i>Trifolium hybridum</i>	14
<i>Trifolium pratense</i>	14
<i>Trifolium repens</i>	14
<i>Triglochin maritima</i>	15
<i>Triglochin palustris</i>	15
Tumbleweed	10
Turpentine weed	6, 7
Two-grooved milkvetch	12
<i>Typha latifolia</i>	21

## U

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<i>Urtica gracilis</i>	21
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## V

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<i>Veratrum californicum</i>	15
<i>Vicia villosa</i>	15
<i>Viguiera annua</i>	8

## W

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Water hemlock	4
Water parsnip	4
Western aster	6
Western cardinal flower	9
Western whorled milkweed	5
Western yellow pine	16
Wheatgrass	17
Whitebrush	22
White clover	14
Whitethorn acacia	11
White loco	14
White mustard	9
White sweetclover	13
Whorled milkweed	5
Wild carrot	4
Wild lettuce	7
Wild oats	17
Wild pea	13
Wild radish	9
Wild rye	17
Wintervetch	15
<i>Wislizenia refracta</i>	9
Witchgrass	18
Woolly locoweed	12
Wooton locoweed	11

## X

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<i>Xanthium spinosum</i>	8
<i>Xanthium strumarium</i>	8

## Y

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Yarrow	5
Yellow bristlegrass	18
Yellow milkvetch	12
Yellow rocket	9
Yellow starthistle	6
Yellow sweetclover	14
Yerba-de-pasmo	6

## Z

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<i>Zea mays</i>	18
<i>Zigadenus gramineus</i>	15
<i>Zigadenus paniculatus</i>	16
<i>Zigadenus venenosus</i>	15

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