

## APPENDIX 11—WYOMING NATURAL DIVERSITY DATABASE SPECIES OF CONCERN

**Table A11-1. Plant Species of Concern  
Potential Occurrence by County**

Common Name	Scientific Name	Habitat	County
Meadow Pussytoes	<i>Antennaria arcuata</i>	Moist, hummocky meadows, seeps, or springs surrounded by sage/grasslands	Fremont, Sublette
Hayden's Milkvetch	<i>Astragalus bisulcatus</i> , <i>var. haydenianus</i>	Clay or sandy soils on rims, upper slopes, and draws associated with sandstone rock outcrops or springs	Fremont (?), Sweetwater
Moab Milkvetch	<i>Astragalus coltonii var. moabensis</i>	Not available	Sweetwater
Meadow Milkvetch	<i>Astragalus diversifolius</i>	Moist, often alkaline, meadows and swales in sagebrush valleys	Sweetwater (?)
Precocious Milkvetch	<i>Astragalus proimanthus</i>	Cushion plant communities on rocky, clay soils mixed with shale on summits and slopes of white shale hills	Sweetwater
Sickle Saltbush	<i>Atriplex falcata</i>	Sagebrush dominated mesas and gravel beaches with sandy to clayey soil	Sublette, Sweetwater
Wolf's Orache	<i>Atriplex wolfii</i>	Alkaline or clay soils, elevated mounds near aquatic sites, associated with greasewood	Sweetwater
White Fir	<i>Abies concolor</i>	South facing slopes on dry shallow soils; often found in the foothills and lower slopes of mountains	Sweetwater
Payson's Tansymustard	<i>Descurainia pinnata</i> , <i>var. paysonii</i>	Sandy flats and stabilized dunes with shrub cover	Sweetwater
Wyoming Tansymustard	<i>Descurainia torulosa</i>	Sparsely vegetated sandy slopes at base of cliffs of volcanic breccia or sandstone	Fremont, Sweetwater
Uinta Draba	<i>Draba juniperina</i>	Primarily found in woodlands on sandy-clay gravelly soils with abundant cryptogamic crusts and needle duff; populations may also occur in grasslands on sandstones and at the edge of juniperus woodlands and semibarren cushion plant communities on white clay-sandy rims	Sweetwater
Nevada Needlegrass	<i>Achnatherum nevadense</i>	Pine and aspen woods near creek	Fremont
Swallen Mountain-Ricegrass	<i>Achnatherum swallenii</i>	Rocky slopes, rims, and mesa summits with sandy to gravelly limey-clay soils covered with a lag surface of gravel	Sublette
Mystery Wormwood	<i>Artemisia biennis var. diffusa</i>	Clay flats and playas	Sweetwater
Crandall's Rockcress	<i>Boechera crandallii</i>	Rocky-sandy ridges in juniper woodlands	Sweetwater
Small Rockcress	<i>Boechera pusilla</i>	Crevices and sparsely vegetated, coarse granite soil in granite-pegmatite outcrops surrounded by sagebrush grassland	Fremont
Selby's Rockcress	<i>Boechera selbyi</i>	Sandy knolls, steep hillsides, among sagebrush or under junipers and pines, rocky slopes, base of sandstone cliffs, and chip-rock	Sweetwater

**Table A11-1. Plant Species of Concern  
Potential Occurrence by County (Continued)**

Common Name	Scientific Name	Habitat	County
Little-leaved Brickell-bush	<i>Brickellia microphylla</i> <i>var. scabra</i>	Primarily crevices in sandstone outcrops at 5,600 to 6,750 feet; occasionally populations found on black clay and shale hills	Fremont, Sweetwater
Utah Mountain Lilac	<i>Ceanothus martinii</i>	Steep sagebrush slopes or mountain shrub and on shallow-stony or hard clay soils (often in areas that accumulate winter snow)	Sweetwater
Dwarf Mountain Mahogany	<i>Cercocarpus ledifolius</i> <i>var. intricatus</i>	Rocky slopes, sandstone outcrops, and sandy desert hills	Sweetwater
Fullstem	<i>Chamaechaenactis scaposa</i>	Sparsely vegetated calcareous clay barrens, rims and benches with a lag surface of shale flakes, or in dry washes on extremely fine clay shale	Sweetwater
Cedar Rim Thistle	<i>Cirsium aridum</i>	Barren slopes, fans, and draws on whitish-gray sandstone, chalk, or clay; mostly found in sparsely vegetated openings within Wyoming big sagebrush grasslands	Fremont, Sublette, Sweetwater
Ownbey's Thistle	<i>Cirsium ownbeyi</i>	Semibarren rims or steep slopes of broken gray slate below shale cliffs at 6,440 to 8,200 feet	Sweetwater
Slender cryptantha	<i>Cryptantha gracilis</i>	Course slate areas on slopes and in washes	Sweetwater
Rollins' Cat's-Eye	<i>Cryptantha rollinsii</i>	Cushion plant communities on ridgetops and slopes with sandy soils or sandstone slate flakes at 6,040 to 7,820 feet	Sweetwater
Western Dodder	<i>Cuscuta occidentalis</i>	Mountain big sagebrush communities	Sweetwater
Long-Awned Alkali Wildrye	<i>Elymus simplex</i> <i>var. luxurians</i>	Sparse stands along rivers, stream banks, lakeshores, ditches and roadsides, open prairie, and disturbed ground	Sweetwater
Wilcox Eriastrum	<i>Eriastrum wilcoxii</i>	Dry, open, often sandy places in the plains and foothills	Fremont, Sweetwater
San Rafael Daisy	<i>Erigeron compactus</i> <i>var. consimilis</i>	Windy, gravelly, sandstone ridgetops with thin, rocky soils	Sweetwater
Divergent Wild Buckwheat	<i>Eriogonum divaricatum</i>	Barren or semibarren clay, shale, or sandstone slopes in cushion plant-bunchgrass communities or on the fringes of sagebrush grasslands	Sublette, Sweetwater
Crisp-Leaf Wild Buckwheat	<i>Eriogonum corymbosum</i> <i>var. corymbosum</i>	Open rocky slopes and barren, dry, clay gypsum or sandy clay hills	Sweetwater
Hooker Wild Buckwheat	<i>Eriogonum hookeri</i>	Dry hills and shale and sandstone canyons	Sweetwater
Green Mormon Tea	<i>Ephedra viridis</i> <i>var. viridis</i>	Upland desert and foothill habitats, usually in sandy or rocky soil	Sweetwater
Dwarf Milkwood	<i>Asclepias uncialis</i>	Sandy or rocky prairies	Sweetwater (?)
Colorado Bedstraw	<i>Galium coloradoense</i>	Rocky sagebrush slopes and on sandstone ridges	Sweetwater
Utah Greasebush	<i>Glossopetalon spinescens</i> <i>var. meionandrum</i>	Montane lowlands	Sweetwater

**Table A11-1. Plant Species of Concern  
Potential Occurrence by County (Continued)**

Common Name	Scientific Name	Habitat	County
Large-Fruited Bladderpod	<i>Lesquerella macrocarpa</i>	Gypsum-clay hills and benches, clay flats, and barren hills	Fremont, Sublette, Sweetwater
Sage-Like Loefflingia	<i>Loefflingia squarrosa</i> <i>var. artemisiarum</i>	Sandy desert soils under sagebrush cover	Sweetwater
Rufous-Spine Prickly-Pear	<i>Opuntia polyacantha</i> <i>var. rufispina</i>	Sagebrush grasslands, salt desert shrublands, and vegetated sand dunes on slopes and buttes	Sweetwater
Utah Old Man Prickly-Pear	<i>Opuntia erinacea</i> <i>var. utahensis</i>	Exposed, dry areas such as pinyon-juniper communities, sagebrush communities, rocky hills, mesa slopes, and desert scrub communities	Sweetwater
Saffron Groundsel	<i>Packera crocata</i>	Mid-elevation wet meadows, stream sides, and slopes	Sweetwater
Stemless Beardtongue	<i>Penstemon acaulis</i> <i>var. acaulis</i>	Primarily in sparsely vegetated openings within grasslands on low slopes, outwash fans, ridgetops, and flats	Sweetwater
Garrett's Beardtongue	<i>Penstemon scariosus</i> <i>var. garrettii</i>	Sparsely vegetated shale slopes at 5,000 to 6,800 feet.	Sweetwater
Red Poverty-Weed	<i>Monolepis pusilla</i>	Not available	Sweetwater
Tree-Like Oxytheca	<i>Oxytheca dendroidea</i>	Desert hills and sandy roadsides	Fremont, Sweetwater, Sublette (?)
Intermountain Phacelia	<i>Phacelia demissa</i>	Not available	Fremont, Sweetwater
Desert Glandular Phacelia	<i>Phacelia glandulosa</i> <i>var. deserta</i>	Semibarren south or west facing upper slopes of gray clay shale	Sublette, Sweetwater
Western Phacelia	<i>Phacelia incana</i>	Rocky or sandy-clay slopes	Sweetwater
Tiny Phacelia	<i>Phacelia tetramera</i>	Stabilized sand dunes and sandy terraces above rivers	Fremont, Sweetwater
Nelson's Phacelia	<i>Phacelia salina</i>	Alkaline flats and clay slopes	Sublette, Sweetwater
Little-Leaf Mock-Orange	<i>Philadelphus microphyllus</i> <i>var. occidentalis</i>	Arid rocky slopes, cliffs, and pinyon-juniper to coniferous woods	Sweetwater
Beaver Rim Phlox	<i>Phlox Pungens</i>	Slopes of limestone, volcanic-rich sandstone, siltstone, or red-bed clays	Fremont, Sublette
Tufted Twinpod	<i>Physaria condensata</i>	Dry rocky knolls and ridges, clay banks, and shaley hills	Sublette
Dwarf Ninebark	<i>Physocarpus alternans</i>		Sweetwater
Strict-Leaved Pondweed	<i>Potamogeton strictifolius</i>	Rooted in shallow water at edge of gently flowing rivers, lakes, or reservoirs	Sublette, Sweetwater (?)
Deep Creek Cinquefoil	<i>Potentilla multisecta</i>		Sweetwater
Dwarf Woolly-Heads	<i>Psilocarphus brevissimus</i>	Dried beds of vernal pools and flats below 3,000 feet; many plant communities especially in grasslands	Fremont, Sublette
Blue Elderberry	<i>Sambucus cerulean</i>	Typically, sunny areas along steam banks in open forests	Sweetwater
Many-Headed Broom Groundsel	<i>Senecio spartioides</i> <i>var. multicapitatus</i>	Stabilized sand dunes and hills	Sweetwater

**Table A11-1. Plant Species of Concern  
Potential Occurrence by County (Continued)**

Common Name	Scientific Name	Habitat	County
Uinta Greenthread	<i>Thelesperma pubescens</i>	Cobbled soils, typically along the summit edges of relict surfaces that now stand as isolated "mountains"	Sweetwater
Cedar Mountain Easter-daisy	<i>Townsendia microcephala</i>	Exposed, west-facing upper slopes and ridges on shallow, sandy soils	Sweetwater
Keinath, B., B. Heidel and G. P. Beauvais. 2003. Wyoming Plant and Animal Species of Concern. Prepared by the Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.			

**Table A11-2. Mammal Species of Concern  
Potential Occurrence by County**

Common Name	Scientific Name	Habitat	County
Fringed myotis	<i>Myotis thysanodes</i>	Elevations less than 7,500 feet in forests and shrublands	Fremont (?), Sublette, Sweetwater (?)
Yuma myotis	<i>Myotis yumanensis</i>	Caves, mines, buildings, and underside of bridges	Sweetwater, Fremont (?)
Spotted bat	<i>Euderma maculatum</i>	Desert and coniferous habitats	Fremont (?), Sublette (?), Sweetwater
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	Coniferous forest and desert shrubland	Fremont (?), Sublette (?), Sweetwater
Pallid bat	<i>Antrozous pallidus</i>	Desert shrubs; grassland basins and plains	Sweetwater
Pygmy rabbit	<i>Brachylagus idahoensis</i>	Big, dense sagebrush	Fremont, Sublette, Sweetwater
Cliff chipmunk	<i>Tamias dorsalis utahensis</i>	Rocky, steep hillsides	Sweetwater
Allen's thirteen-lined ground squirrel	<i>Spermophilus tridecemlineatus alleni</i>	Grasslands and desert grasslands	Fremont, Sublette
White-tailed prairie dog	<i>Cynomys leucurus</i>	Plains	Fremont, Sublette, Sweetwater
Wyoming pocket gopher	<i>Thomomys clusius</i>	Dry ridgetops; gravelly, loose soil; greasewood	Sweetwater
Idaho pocket gopher	<i>Thomomys idahoensis</i>	Stony, shallow soil	Sublette
Canyon mouse	<i>Peromyscus crinitus</i>	Pine or lodgepole	Sweetwater
Pinon mouse	<i>Peromyscus truei</i>	Less dense shrub steppe areas	Sweetwater
Water vole	<i>Microtus richardsoni</i>	High-elevation, slow-moving streams with overhanging banks	Fremont, Sublette
Gray wolf	<i>Canis lupus</i>	Extremely variable, densities being highest where prey biomass is highest	Fremont, Sublette (?)
Swift fox	<i>Vulpes velox</i>	Shortgrass prairie	Fremont, Sweetwater

**Table A11-2. Mammal Species of Concern  
Potential Occurrence by County (Continued)**

Common Name	Scientific Name	Habitat	County
Grizzly bear	<i>Ursus arctos horribilis</i>	Variety, including dense riparian, mountain evergreen forests, and oak lowlands	Fremont, Sublette
Fisher	<i>Martes pennanti</i>	Coniferous forests	Fremont (?), Sublette
North American wolverine	<i>Gulo gulo luscus</i>	Near the tree line on the mountains	Fremont (?), Sublette
Canada lynx	<i>Lynx Canadensis</i>	Edge of boreal forests	Fremont, Sublette
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**Table A11-3. Avian Species of Concern  
Potential Occurrence by County**

Common Name	Scientific Name	Habitat	County
Common loon	<i>Gavia immer</i>	Wetlands and aquatic	Fremont, Sublette, Sweetwater
Clark's grebe	<i>Aechmophorus clarkia</i>	Wetlands and aquatic	Fremont
American bittern	<i>Botaurus lentiginosus</i>	Dense marsh	Fremont, Sweetwater
White-faced ibis	<i>Plegadis chihi</i>	Marshes and wet meadows	Fremont, Sublette, Sweetwater
Trumpeter swan	<i>Cygnus buccinator</i>	Wetlands and aquatic	Fremont, Sublette, Sweetwater
Harlequin duck	<i>Histrionicus histrionicus</i>	Wetlands and aquatic	Fremont, Sublette
Bald eagle	<i>Haliaeetus leucocephalus</i>	Rivers, lakes, marshes, and wetlands	Fremont, Sublette, Sweetwater
Northern goshawk	<i>Accipiter gentilis</i>	Coniferous and deciduous forests	Fremont, Sublette, Sweetwater
Ferruginous hawk	<i>Buteo regalis</i>	Riparian, shrubland, prairie and special features—areas having unique characteristics such as rock outcrops, caves, cliffs, shorelines, buildings, mines, roadsides, burns, and logging	Fremont, Sublette, Sweetwater
American peregrine falcon	<i>Falco peregrinus anatum</i>	Mountains, grassland, and desert	Sublette, Sweetwater
White-tailed ptarmigan	<i>Lagopus leucurus</i>	Riparian areas, meadows, and coniferous and deciduous forests	Fremont (?), Sweetwater (?)
Greater sage-grouse	<i>Centrocercus urophasianus</i>	Shrubland, meadows, and agricultural areas	Fremont, Sublette, Sweetwater
Whooping crane	<i>Grus Americana</i>	Salt flats and marshes, flooded crop fields, artificial ponds, reservoirs, and rivers	Fremont, Sublette, Sweetwater

**Table A11-3. Avian Species of Concern  
Potential Occurrence by County (Continued)**

Common Name	Scientific Name	Habitat	County
Snowy plover	<i>Charadrius alexandrinus</i>	Wetlands and special feature areas having unique characteristics such as rock outcrops, caves, cliffs, shorelines, building, mines, roadsides, burns, and logging	Fremont, Sweetwater
Mountain plover	<i>Charadrius montanus</i>	High, dry, short-grass plains/prairies; sagebrush grasslands	Fremont, Sublette, Sweetwater
Long-billed curlew	<i>Numenius americanus</i>	Short-grass prairies; mixed-grass and scrub prairies	Fremont, Sublette, Sweetwater
Caspian tern	<i>Sterna caspia</i>	Wetlands and aquatic areas	Fremont
Forster's tern	<i>Sterna forsteri</i>	Large marshes, estuaries, and lake islands	Fremont
Black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	Deciduous woodlands	Fremont
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Streamside deciduous woodland with low scrubby vegetation; cottonwood stands and willow thickets	Fremont, Sweetwater
Northern pygmy owl	<i>Glaucidium gnoma</i>	Open coniferous and mixed forests from valley bottoms up to treeline	Fremont
Short-eared owl	<i>Asio flammeus</i>	Grasslands, prairie, agricultural fields, salt marshes, and mountain meadows	Fremont, Sublette, Sweetwater
Burrowing owl	<i>Athene cunicularia</i>	Open, dry grasslands, agricultural fields and rangelands, and desert	Fremont, Sublette, Sweetwater
Great gray owl	<i>Strix nebulosa</i>	Coniferous and deciduous forests and prairies	Fremont, Sublette
Boreal owl	<i>Aegolius funereus</i>	Coniferous and deciduous forests	Fremont
Calliope hummingbird	<i>Stellula calliope</i>	High mountains near streams or lakes	Sublette
Lewis' woodpecker	<i>Melanerpes lewis</i>	Coniferous and deciduous forests and riparian areas	Fremont
Williamson's sapsucker	<i>Sphyrapicus thyroideus</i>	Coniferous or mixed deciduous/coniferous forests	Fremont, Sublette, Sweetwater (?)
Three-toed woodpecker	<i>Picoides tridactylus</i>	Coniferous and deciduous forests and special feature areas having unique characteristics such as rock outcrops, caves, cliffs, shorelines, buildings, mines, roadsides, burns, and logging	Fremont, Sublette, Sweetwater (?)
Loggerhead shrike	<i>Lanius ludovicianus</i>	Coniferous and deciduous forests and shrubland	Fremont, Sublette, Sweetwater
Western scrub-jay	<i>Aphelocoma californica</i>	Mesquite, scrub oak, pinyon pine, juniper, and thick low brush	Sweetwater

**Table A11-3. Avian Species of Concern  
Potential Occurrence by County (Continued)**

Common Name	Scientific Name	Habitat	County
Juniper titmouse	<i>Baeolophus ridgwayi</i>	Coniferous and deciduous forests, shrubland, and special features, that is areas having unique characteristics such as rock outcrops, caves, cliffs, shorelines, buildings, mines, roadsides, burns, and logging	Fremont, Sweetwater
Bushtit	<i>Psaltriparus minimus</i>	Open deciduous and mixed woodlands	Sweetwater
Pygmy nuthatch	<i>Sitta pygmaea</i>	Ponderosa pine forest and other woodlands	Sublette
Virginia's warbler	<i>Vermivora virginiae</i>	Mountain slopes of dense-growth aspen, pine, and oak	Sweetwater, Sublette (?)
Black-throated gray warbler	<i>Dendroica nigrescens</i>	Semiarid woodlands; dry, open forest	Fremont, Sweetwater
Sage sparrow	<i>Amphispiza belli</i>	Basin-prairie shrub and mountain-foothill shrub	Fremont, Sublette, Sweetwater
McCown's longspur	<i>Calcarius mccownii</i>	Short-grass prairie and arid plains	Fremont, Sweetwater
Chestnut-collared longspur	<i>Calcarius ornatus</i>	Prairie, shrublands, and agricultural areas	Fremont
Bobolink	<i>Dolichonyx oryzivorus</i>	Prairies and meadows	Fremont
Scott's oriole	<i>Icterus parisorum</i>	Desert grassland prairies	Sweetwater
Black-rosy finch	<i>Leucosticte atrata</i>	Mountain meadows and shrublands	Fremont, Sublette, Sweetwater
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**Table A11-4. Fish and Amphibian Species of Concern  
Potential Occurrence by County**

Common Name	Scientific Name	Habitat	County
<b>Fish</b>			
Humpback chub	<i>Gila cypha</i>	Deep, fast-moving, turbid waters often associated with large boulders and steep cliffs	Sweetwater
Roundtail chub	<i>Gila robusta</i>	Warm streams and larger rivers, usually in habitats with slow-flowing water adjacent to areas of faster water	Sublette, Sweetwater
Bonytail chub	<i>Gila elegans</i>	Swift channels of large, turbid rivers	Sweetwater
Colorado River squawfish	<i>Ptychocheilus lucius</i>	CO River drainage; large rivers with strong-to-moderate current, deep pools, eddies, riffles, swift runs, and quiet backwaters	Sweetwater
Kendall Warm Springs dace	<i>Rhinichthys osculus thermalis</i>	Kendall Warm Springs	Sublette

**Table A11-4. Fish and Amphibian Species of Concern  
Potential Occurrence by County (Continued)**

Common Name	Scientific Name	Habitat	County
Bluehead sucker	<i>Catostomus discobolus</i>	CO River drainage, from headwaters streams to river; prefers moderate-to-high water velocity and rock substrate	Sublette, Sweetwater
Flannelmouth sucker	<i>Catostomus latipinnis</i>	CO River drainage; deep pools of slow-flowing, low-gradient reaches	Sublette, Sweetwater
Razorback sucker	<i>Xyrauchen texanus</i>	Deep, clear-to-turbid waters of large rivers and some reservoirs over mud, sand, or gravel	Sweetwater
Yellowstone cutthroat trout	<i>Oncorhynchus clarki bouvieri</i>	Clear, cold streams, rivers, and lakes	Fremont, Sublette
Fine-spotted Snake River cutthroat trout	<i>Oncorhynchus clarki</i>	Cool water at temperatures less than 59 degrees F and a high dissolved oxygen level; preference for streams but also found in lakes	Fremont, Sublette
Colorado River cutthroat trout	<i>Oncorhynchus clarki pleuriticus</i>	Clean, cool mountain streams of moderate gradient	Sublette, Sweetwater
<b>Amphibians</b>			
Boreal western toad	<i>Bufo boreas boreas</i>	Water sources in subalpine and alpine areas	Fremont, Sublette
Great Basin spadefoot toad	<i>Spea intermontana</i>	Soft sandy/gravelly soils near permanent or temporary bodies of water	Fremont, Sweetwater
Northern leopard frog	<i>Rana pipiens</i>	Shallow ponds and vegetated coves of lakes	Fremont, Sublette, Sweetwater
Columbia spotted frog	<i>Rana luteiventris</i>	Lakes, ponds, slow streams, and marshes	Fremont, Sublette
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**Table A11-5. Reptile Species of Concern  
Potential Occurrence by County**

Common Name	Scientific Name	Habitat	County
Northern plateau lizard	<i>Sceloporus undulatus elongatus</i>	Sunny locations: favors rotting logs, open woodlands, open grassy dunes, prairies	Sweetwater
Tree lizard	<i>Urosaurus ornatus</i>	Trees, rocks, fence posts, and buildings in arid regions; often near streams and dry washes.	Sweetwater
Rubber boa	<i>Charina bottae</i>	Moist and dry pine forest, and shrubby habitats; most common where moisture, such as streams or moist soil, are underground	Fremont, Sublette
Midget faded rattlesnake	<i>Crotalus viridis concolor</i>	Rocky, arid areas to 8,000 feet	Sweetwater
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