

Ecological Sustainability Analysis of the Kaibab National Forest:

Species Diversity Report

Version 1.2.5

Including edits responding to comments on version 1.2

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For:

Kaibab National Forest Plan Revision Analysis

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NOTICE

On June 30, 2009, the United States District Court for the Northern District of California issued a decision in Citizens for a Better Forestry v. United States Department of Agriculture ordering the Forest Service to cease the implementation and use of the 2008 planning rule. The Forest Service is complying with the court's decision.

This Species Diversity Report was prepared under the 2008 National Forest Management Act planning rule, which was in effect at the time of initial publication of report version 1.2. Version 1.2.5 includes minor changes that were made prior to June 30, 2009, primarily in response to comments received from the Arizona Game and Fish Department and the U.S. Fish and Wildlife Service.

As the Kaibab National Forest proceeds with Forest Plan revision, the analysis results presented in this report will be referenced because the analyses conducted to date will continue to be valid and useful. However, future work will follow the latest planning rule direction.

Introduction

This report provides background information for the Species Diversity and Species Risk Assessment portions of the Ecological Sustainability Report developed for revision of the current Kaibab National Forest Land and Resource Management Plan (forest plan). This document was developed under the authority and direction of the 2008 National Forest Management Act planning rule. It identifies federally threatened and endangered species, species of concern, and species of interest whose ranges include the forest plan area (FSH 1909.12, Chap. 40, Sec. 43.2). The primary intent of this report is to document the methods used in evaluating species for the forest plan revision process. It describes the chronology and process of developing a proposed list of species, identifying the species that may require additional consideration in the plan revision process, and the subsequent identification of potential threats to those species. The species list and majority of species data are located in a separate Microsoft-ACCESS database, along with information about references. This database includes species-specific data used in the evaluation process, and is meant to function as a “living document” that is subject to change as new information becomes available.

Ecological sustainability is recognized as one of the primary issues in the 2008 planning rule, and providing for ecosystem diversity is integral to the new forest planning process. Ecological conditions that provide for ecosystem diversity are the context for the evaluation of species diversity (FSH 1909.12, Chap. 40, Sec. 43.21). Plan components for ecosystem diversity may contribute to ecological conditions that may or may not support species diversity. Therefore, the species diversity analysis process, in conjunction with the ecosystem diversity analysis process, strives to promote ecological sustainability across the planning area by developing forest plan components that protect or enhance species diversity where existing plan direction does not sufficiently protect or enhance individual species, groups of species, or habitats (FSH 1909.12, Ch. 40; FSM 1921.74b and 1921.77c).

PART I: Species Diversity

Species Diversity Database and Forest Planning Species

The species diversity analysis process considers the relationships between ecosystem diversity components and select plant and animal species (and subspecies) in the plan area by using explicit criteria to identify species considered to be of concern or interest in the plan area. Development of the proposed species list followed national direction (FSH 1909.12, Ch 40, Sec 43. 22). The list consisted of Threatened and Endangered (T & E) species for Region 3; Species-of-Concern (SOC) and potential Species-of-Interest (SOI) that occur within the forest plan area. This list of select species serves as a model of species diversity in the planning area. This report will refer to these as “forest planning species.” These forest planning species were identified only for forest plan revision purposes, and they hold no special regulatory status beyond existing state and federal status. The identified forest planning species are to be closely considered in the plan revision process, to determine if particular direction needs to be written into the revised forest plan to provide for special habitat needs or other management requirements.

An iterative approach was used to develop the species diversity database. Biologists and botanists from the Kaibab, Coconino, Prescott, and Apache-Sitgreaves National Forests gathered initial species information, and incorporated input from a local Species Diversity focus group. The focus group consisted of representatives from the Forest Service, U.S. Fish and Wildlife Service (FWS), Arizona Game and Fish Department (AGFD), Grand Canyon Wildlands Council, National Park Service, Nature Conservancy, and others. The State Heritage Data Management System and Arizona Rare Plant Task Force were contracted for plant information. The Forest Service Southwestern Regional Office and five Arizona Forests contracted with the Museum of Northern Arizona for information regarding invertebrate species. The database of species and subspecies (including plants, macro-lichens, invertebrates, reptiles, amphibians, birds, and mammals) with population or habitat concerns in Arizona was developed using the following criteria.

Criteria

The following guidelines were used to build the species diversity database, and stratify species within the database. These guidelines were set forth by the Ecological Sustainability workgroup (USDA Forest Service 2008). NatureServe (www.natureserve.org) maintains ranking information that informed identification of SOC and SOI (NatureServe 2008).

Threatened and Endangered Species

The FWS maintains lists for Threatened and Endangered species federally listed under the Endangered Species Act (1973). This list is periodically reviewed, and can be found at www.fws.gov/endangered/. Lists by Arizona county can be found at www.fws.gov/arizonaes/.

- Include T & E species known or likely to occur on the forest
- Accidental occurrences of species on the planning unit may not warrant inclusion under plan revision.
- If a species historically occurred on the forest, but has no known recent occurrences and no expectation for reestablishment it may not warrant inclusion under plan revision.

Species of Concern (FSH 1909.12.40.43.22b)

Species of Concern are those species for which the Forest Supervisor may determine that management actions may be necessary to prevent future listing under the Endangered Species Act.

- Proposed and candidate species under the Endangered Species Act.
- Species ranked G-1, G-2, and G-3 by NatureServe.
- Subspecific taxa ranked T-1, T-2, and T-3 by NatureServe.
- Species petitioned for federal listing and for which a positive “90 day finding” has been made.
- Species delisted within the last 5 years and/or delisted species which require continued monitoring.

Potential Species of Interest (FSH 1909.12.40.43.22c)

Species of Interest are those species for which the Forest Supervisor may determine that management actions may be necessary or desirable to achieve ecological or other multiple use objectives. Designation of SOI may be influenced by local conditions, and site specific

management actions and/or habitat conditions which might impart further risk to the species. In addition socio-economic value, public interest, and threats to ecosystem diversity may be considered. There is more discretion in the designation of SOI in contrast to SOC. Potential SOI were initially identified using the following criteria:

- Species with ranks of S-1, S-2, N-1, or N-2 on the NatureServe
- State listed T & E
- Species of conservation concern as identified by the State Comprehensive Wildlife Strategy.
- Species on the U.S. Fish & Wildlife Service Birds of Conservation Concern National Priority List.
- Additional species of regional or local conservation concern
- Species hunted or fished
- Other species of public interest

Since many of the potential SOI species were not at significant local risk, or of high public interest, it was necessary to use additional criteria to determine those that merit approval as SOI. After this second step, approved SOI follow the screening process described in the following 'Screening Results' section that identifies those SOC and SOI for which additional detailed analysis is not necessary.

- Species habitat or population has declined significantly in the plan area.
- Species and its habitats are not well-distributed in the plan area.
- Species population numbers are low in the plan area.
- Species is dependent on a specialized habitat or one that is limited in the plan area.
- There is some imminent threat to the species.
- Species habitat or population is not generally secure in the planning area, and NFS lands act as an important refuge.
- Species is of public interest, including those species identified cooperatively with State Fish and Wildlife Agencies consistent with the Sikes Act.

Other potential species of interest include those that are invasive and/or pose a threat to ecosystem or species diversity. However, the KNF chose to address these issues in plan revision as part of the threats that affect ecosystem and species diversity.

Assessment Sources

Sources of information included, but were not limited to:

- The Southwestern Regional Forester Sensitive Species List
- Feedback from a local Species Diversity Workgroup
- Biota Information System of New Mexico (Bison-M)
- Arizona State Heritage Data Management System
- Arizona Rare Plant Task Force
- Museum of Northern Arizona
- Taxonomy books, field guides, journals, various publications
- On-line herbaria

- Species listed or ranked within various strategies, agreements and lists such as, Arizona Partners in Flight, Partners in Flight, the State Wildlife Action Plan, U.S. Fish and Wildlife Service Birds of Conservation Concern, Statewide Conservation Agreement for Native Fish, Western Bat Working Group priorities, Arizona's administrative rules and laws
- Local, regional or national experts for various species and taxa

The FWS and the AGFD were additionally contacted regarding information about future plans to supplement, introduce or re-introduce species on or adjacent to the Kaibab National Forest within the next 5-10 years. Appendix A provides additional information on some of the primary resources consulted during development of the species diversity database and the screening process.

Screening Results

If the resulting SOC and SOI in the database met any of the following criteria they were not subjected to further detailed analysis in the planning process (FSH 1909.12, CH 40, Sec. 43.22d):

- Species does not occur on the forest and there is no known habitat in the plan area.
- Species is secure in the plan area based on occurrence, distribution, available habitat, and response to natural disturbance and/or management.
- There is too little information to complete a reliable assessment (taxonomic uncertainty, habitat needs, population trend estimates).
- Species are not affected by any form of current or potential management or lack of management in the plan area.

The species diversity database currently contains information on >1,880 species (Appendix B), and the screening results and rationale for each. The screening process resulted in 148 forest planning species to be carried forward in the species diversity analysis process (Table 1). This included 63 vertebrates and invertebrates (29 birds, 1 fish, 8 reptiles and amphibians, 19 mammals, 9 invertebrates) and 82 plants to be carried forward for further analysis. Of those species, 4 were federally threatened or endangered, 84 were SOC and the remaining 60 were SOI. Those species not carried forward were retained in the species diversity database and the project record should future information become available that might warrant reconsideration at a later date. The majority of species (>1,400) were screened out because they did not occur in the planning unit, or there was insufficient information to to complete a reliable assessment. Without adequate information on species habitat needs and/or population and status trends, it is difficult, if not impossible to devise adequate management policies. For many of these species additional research is necessary and encouraged. At least 50 species were screened out because of taxonomic uncertainty. The remaining species (>220) were screened out because they were secure in the planning unit or were unlikely to be affected by current management or lack of management.

Table 1. Forest planning species to be carried forward in the species diversity analysis process. T or E: Species identified as Threatened or Endangered under the Endangered Species Act; SOC: Species of Concern as identified under the 2008 Planning Rule, FSH 1909.12; SOI: Species of Interest as identified under the 2008 Planning Rule, FSH 1909.12

Scientific Name	Common Name	Taxon	Category
<i>Accipiter gentilis</i>	Northern goshawk	Bird	SOI
<i>Amphispiza belli</i>	Sage sparrow	Bird	SOI
<i>Aquila chrysaetos</i>	Golden eagle	Bird	SOI
<i>Athene cunicularia hypugaea</i>	Western burrowing owl	Bird	SOI
<i>Baeolophus ridgwayi</i>	Juniper titmouse	Bird	SOI
<i>Buteo regalis</i>	Ferruginous hawk	Bird	SOI
<i>Cardellina rubrifrons</i>	Red-faced warbler	Bird	SOI
<i>Coccythraustes vespertinus</i>	Evening grosbeak	Bird	SOI
<i>Contopus cooperi</i>	Olive-sided flycatcher	Bird	SOI
<i>Dendragapus obscurus</i>	Dusky (blue) grouse	Bird	SOI
<i>Dendroica graciae</i>	Grace's warbler	Bird	SOI
<i>Dendroica nigrescens</i>	Black-throated gray warbler	Bird	SOI
<i>Falco peregrinus anatum</i>	American peregrine falcon	Bird	SOC
<i>Gymnogyps californianus</i>	California condor	Bird	E
<i>Gymnorhinus cyanocephalus</i>	Pinyon jay	Bird	SOI
<i>Haliaeetus leucocephalus</i>	Bald eagle	Bird	SOC
<i>Haliaeetus leucocephalus</i> Sonoran Desert population	Bald eagle pop. 3	Bird	T
<i>Melanerpes lewis</i>	Lewis's woodpecker	Bird	SOI
<i>Oporornis tolmiei</i>	MacGillivray's warbler	Bird	SOI
<i>Oreoscoptes montanus</i>	Sage thrasher	Bird	SOI
<i>Passerculus sandwichensis</i>	Savannah sparrow	Bird	SOI
<i>Pipilo chlorurus</i>	Green-tailed towhee	Bird	SOI
<i>Progne subis arboricola</i>	Purple martin (western ssp.)	Bird	SOI
<i>Regulus satrapa</i>	Golden-crowned kinglet	Bird	SOI
<i>Sphyrapicus nuchalis</i>	Red-naped sapsucker	Bird	SOI
<i>Spizella breweri</i>	Brewer's sparrow	Bird	SOI
<i>Strix occidentalis lucida</i>	Mexican Spotted Owl	Bird	T
<i>Vermivora celata</i>	Orange-crowned warbler	Bird	SOI
<i>Vireo vicinior</i>	Gray vireo	Bird	SOI
<i>Oncorhynchus apache</i>	Apache (Arizona) Trout	Fish	T
<i>Bufo microscaphus</i>	Arizona toad	Herpetofauna	SOI
<i>Crotalus cerberus</i>	Arizona black rattlesnake	Herpetofauna	SOI
<i>Eumeces skiltonianus</i>	Western skink	Herpetofauna	SOI
<i>Hyla wrightorum</i>	Arizona (mountain) treefrog	Herpetofauna	SOI
<i>Lampropeltis pyromelana infralabialis</i>	Utah Mountain Kingsnake	Herpetofauna	SOC
<i>Lampropeltis triangulum</i>	Milksnake	Herpetofauna	SOI
<i>Rana pipiens</i>	Northern leopard frog	Herpetofauna	SOI
<i>Spea intermontana</i>	Great basin spadefoot	Herpetofauna	SOI

Scientific Name	Common Name	Taxon	Category
<i>Acrolophitus nevadensis</i>	Nevada point-headed grasshopper	Invertebrate	SOC
<i>Aeshna persephone</i>	Persephone's Darner	Invertebrate	SOC
<i>Callophrys sheridanii comstocki</i>	Desert green hairstreak	Invertebrate	SOC
<i>Cicindela terricola kaibabensis</i>	Kaibab variable tiger beetle	Invertebrate	SOI
<i>Libellula nodisticta</i>	Hoary skimmer	Invertebrate	SOI
<i>Papilio indra kaibabensis</i>	Kaibab Indra swallowtail	Invertebrate	SOC
<i>Piruna polingii</i>	Four-spotted skipperling	Invertebrate	SOC
<i>Speyeria nokomis</i>	Nokomis fritillary	Invertebrate	SOC
<i>Speyeria nokomis nokomis</i>	Nokomis fritillary ssp. nokomis	Invertebrate	SOC
<i>Antilocapra americana</i>	Pronghorn	Mammal	SOI
<i>Corynorhinus townsendii pallescens</i>	Pale Townsend's big-eared bat	Mammal	SOI
<i>Cynomys gunnisoni</i>	Gunnison's prairie dog	Mammal	SOI
<i>Dipodomys microps leucotis</i>	House Rock Valley chisel-toothed kangaroo rat	Mammal	SOI
<i>Euderma maculatum</i>	Spotted bat	Mammal	SOI
<i>Eumops perotis californicus</i>	Greater western mastiff bat	Mammal	SOI
<i>Idionycteris phyllotis</i>	Allen's lappet-browed bat	Mammal	SOI
<i>Microtus longicaudus</i>	Long-tailed vole	Mammal	SOI
<i>Microtus mogollonensis navaho</i>	Navajo Mogollon vole	Mammal	SOI
<i>Myotis auriculus</i>	Southwestern myotis	Mammal	SOI
<i>Neotamias minimus consobrinus</i>	Kaibab least chipmunk	Mammal	SOI
<i>Nyctinomops macrotis</i>	Big free-tailed bat	Mammal	SOI
<i>Ovis canadensis nelsoni</i>	Desert bighorn sheep	Mammal	SOI
<i>Sciurus aberti</i>	Abert's squirrel	Mammal	SOI
<i>Sciurus aberti kaibabensis</i>	Kaibab tree squirrel	Mammal	SOI
<i>Sorex merriami</i>	Merriam's shrew	Mammal	SOI
<i>Sorex nanus</i>	Dwarf shrew	Mammal	SOI
<i>Tamiasciurus hudsonicus</i>	Red squirrel	Mammal	SOI
<i>Thomomys talpoides kaibabensis</i>	Kaibab northern pocket gopher	Mammal	SOI
<i>Actaea arizonica</i>	Arizona bugbane	Plant	SOC
<i>Agave utahensis</i> var. <i>kaibabensis</i>	Utah century plant	Plant	SOC
<i>Agave utahensis</i> var. <i>utahensis</i>	Utah agave	Plant	SOC
<i>Allium bigelovii</i>	Bigelow's onion	Plant	SOC
<i>Aquilegia caerulea</i> var. <i>pinetorum</i>	Columbine	Plant	SOC
<i>Arenaria aberrans</i>	Mt. Dellenbaugh sandwort	Plant	SOC
<i>Asclepias hallii</i>	Hall's milkweed	Plant	SOC
<i>Asclepias quinqueidentata</i>	Slimpod milkweed	Plant	SOI
<i>Astragalus amphioxys</i> var. <i>modestus</i>	Alladin's slippers	Plant	SOC
<i>Astragalus ampullarius</i>	Gumbo milkvetch	Plant	SOC

Scientific Name	Common Name	Taxon	Category
<i>Astragalus cremnophylax</i> var. <i>hevronii</i>	Hevron's milkvetch	Plant	SOC
<i>Astragalus cremnophylax</i> var. <i>myriorrhaphis</i>	Cliff milkvetch	Plant	SOC
<i>Astragalus episcopus</i> var. <i>lancearius</i>	Lancer milkvetch	Plant	SOC
<i>Astragalus humistratus</i> var. <i>tenerrimus</i>	Groundcover milkvetch	Plant	SOC
<i>Astragalus lentiginosus</i> var. <i>oropedii</i>	Freckled milkvetch	Plant	SOC
<i>Astragalus lentiginosus</i> var. <i>vitreus</i>	Freckled milkvetch	Plant	SOC
<i>Astragalus pinonis</i> var. <i>atwoodii</i>	A milkvetch	Plant	SOC
<i>Astragalus rusbyi</i>	Rusby's milkvetch	Plant	SOC
<i>Astragalus subcinereus</i>	Silver milkvetch	Plant	SOC
<i>Astragalus titanophilus</i>	Limestone milkvetch	Plant	SOC
<i>Astragalus troglodytus</i>	Creeping milkvetch	Plant	SOC
<i>Botrychium echo</i>	Reflected moonwort	Plant	SOC
<i>Camissonia gouldii</i>	Diamond Valley suncup	Plant	SOC
<i>Carex oreocharis</i>	A sedge	Plant	SOC
<i>Castilleja kaibabensis</i>	Kaibab Indian-paintbrush	Plant	SOC
<i>Chrysothamnus molestus</i>	Disturbed (Tusayan) rabbitbrush	Plant	SOC
<i>Cirsium rothrockii</i>	Rose-color thistle	Plant	SOC
<i>Clematis hirsutissima</i> var. <i>hirsutissima</i>	Hairy clematis	Plant	SOI
<i>Cleome lutea</i> var. <i>jonesii</i>	Jones' spider-flower	Plant	SOC
<i>Cordylanthus wrightii</i> ssp. <i>kaibabensis</i>	Wright's bird's-beak	Plant	SOC
<i>Cryptantha abata</i>	Dent-nut cat's-eye	Plant	SOC
<i>Cystopteris utahensis</i>	Utah bladder fern	Plant	SOC
<i>Draba asprella</i> var. <i>asprella</i>	Rough whitlow-grass	Plant	SOC
<i>Draba asprella</i> var. <i>kaibabensis</i>	Rough whitlow-grass	Plant	SOC
<i>Draba asprella</i> var. <i>stelligera</i>	Rough whitlow-grass	Plant	SOC
<i>Draba rectifruca</i>	Mountain whitlow-grass	Plant	SOC
<i>Erigeron saxatilis</i>	Cliff fleabane	Plant	SOC
<i>Eriogonum corymbosum</i> var. <i>glutinosum</i>	Wild buckwheat	Plant	SOC
<i>Eriogonum darrovii</i>	Darrow's buckwheat	Plant	SOC
<i>Eriogonum ericifolium</i> var. <i>pulchrum</i>	Yavapai wild buckwheat	Plant	SOC
<i>Eriogonum jonesii</i>	Jones' wild buckwheat	Plant	SOC
<i>Eriogonum mortonianum</i>	Morton wild buckwheat	Plant	SOC
<i>Eriogonum thompsoniae</i> var. <i>atwoodii</i>	Atwood's wild buckwheat	Plant	SOC
<i>Escobaria vivipara</i> var. <i>kaibabensis</i>	Spinystar	Plant	SOC
<i>Gaillardia parryi</i>	Parry's blanket-flower	Plant	SOC
<i>Hedeoma diffusa</i>	Flagstaff pennyroyal	Plant	SOC
<i>Helianthus arizonensis</i>	Arizona sunflower	Plant	SOI

Scientific Name	Common Name	Taxon	Category
<i>Heuchera novomexicana</i>	New Mexico alum-root	Plant	SOC
<i>Ivesia arizonica</i>	Arizona whitefeather	Plant	SOC
<i>Ivesia arizonica</i> var. <i>arizonica</i>	Arizona whitefeather	Plant	SOC
<i>Lepidium montanum</i> var. <i>glabrum</i>	Mountain pepperweed	Plant	SOC
<i>Lesquerella arizonica</i>	Arizona bladderpod	Plant	SOC
<i>Lesquerella kaibabensis</i>	Kaibab bladder-pod	Plant	SOC
<i>Lotus mearnsii</i> var. <i>mearnsii</i>	Mearns lotus	Plant	SOC
<i>Macromeria viridiflora</i> var. <i>viridiflora</i>	Giant-trumpets	Plant	SOC
<i>Mertensia macdougali</i>	Macdougals bluebells	Plant	SOC
<i>Moneses uniflora</i>	Wood nymph	Plant	SOI
<i>Myosurus nitidus</i>	Western mouse-tail	Plant	SOC
<i>Nuphar lutea</i>	Pond lily	Plant	SOI
<i>Pediocactus paradinei</i>	Park pincushion-cactus	Plant	SOC
<i>Pediocactus peeblesianus</i> var. <i>fickeiseniae</i>	Fickeisen hedgehog-cactus	Plant	SOC
<i>Pediomelum mephiticum</i>	Skunk-top scurfpea	Plant	SOC
<i>Penstemon caespitosus</i> var. <i>desertipicti</i>	Mat penstemon	Plant	SOC
<i>Penstemon laevis</i>	Southwestern beardtongue	Plant	SOC
<i>Penstemon nudiflorus</i>	Flagstaff beardtongue	Plant	SOC
<i>Penstemon pseudoputus</i>	Kaibab beardtongue	Plant	SOC
<i>Penstemon rydbergii</i>	Rydberg's penstemon	Plant	SOI
<i>Perityle congesta</i>	Compacted rock daisy	Plant	SOC
<i>Perityle gracilis</i>	Grass-like rock daisy	Plant	SOC
<i>Phacelia serrata</i>	Serrate phacelia	Plant	SOC
<i>Phemeranthus validulus</i>	Western flame-flower	Plant	SOC
<i>Phlox amabilis</i>	Arizona phlox	Plant	SOC
<i>Potentilla crinita</i> var. <i>lemmonii</i>	Bearded cinquefoil	Plant	SOC
<i>Ranunculus oreogenes</i>	Oregon buttercup	Plant	SOC
<i>Rosa stellata</i> ssp. <i>abyssa</i>	Grand Canyon rose	Plant	SOC
<i>Salix bebbiana</i>	Bebb's willow	Plant	SOI
<i>Shepherdia rotundifolia</i>	Roundleaf buffaloberry	Plant	SOC
<i>Sporobolus interruptus</i>	Black dropseed	Plant	SOC
<i>Stachys rothrockii</i>	Rothrock's hedge-nettle	Plant	SOC
<i>Thelypodopsis ambigua</i> var. <i>ambigua</i>	Long Valley tumbled mustard	Plant	SOC
<i>Thelypteris puberula</i>	Showy maidenfern	Plant	SOI
<i>Triteleia lemmoniae</i>	Oak Creek triteleia	Plant	SOC

Habitat Associations and Initial Species Groups

Two types of basic information were initially used to group forest planning species carried forward in the species diversity analysis process; terrestrial or aquatic habitat associations, and biotic or abiotic habitat components. Species were grouped first by habitat association, represented by water or the broadly defined vegetation types historically present in the planning

area (i.e., 'PNVT'; see discussion in following paragraph). Species were secondarily grouped by habitat components not specifically addressed by broad habitat associations.

Vegetation is one of the primary factors which influences species diversity and abundance and is one of the more obvious habitat components subject to management, land use, and natural disturbance. Because vegetation is such a significant habitat component, and because integration of species with habitat components is a primary emphasis of the current ESR, species were associated with one or more of several vegetation states that might be influenced by management activities on National Forest Service land. These Potential Natural Vegetation Types (PNVTs) represent the land's potential vegetation under natural disturbance or biological regimes, minus human induced change. Availability and status of PNVTs on the forest is in many cases directly tied to species presence and absence, and associating particular PNVTs with specific species is critical for assessing future management needs. For the Southwest Region, PNVTs were developed collaboratively by The Nature Conservancy and the U.S. Forest Service's Mid-Scale Vegetation Mapping Project. It is not within the scope of this document to elaborate further on PNVTs, but they are discussed thoroughly in the KNF Vegetation Fire and Fuels Report (Kaibab National Forest 2008a).

Species associated with ecosystem diversity characteristics of terrestrial vegetation or aquatic systems

Table 2 summarizes the number of species by taxa, category and habitat associations, and Table 3 lists the habitats and the species associated with each. A detailed listing of species and their habitat associations can be found in Appendix C, which also identifies species that are considered Management Indicator Species in the current Forest Plan (1987, as amended), and the 2007 Forest Service Region 3 Sensitive Species. Figure 1 represents the proportion of species in each category by habitat association. Numerous species were associated with more than one PNVT. However, only 3 species (Pale Townsend's big-eared bat, American peregrine falcon, and California condor), were so wide ranging among habitat types that they could not be assigned a particular habitat association.

Table 2. Total number of species by taxa and category (ESA: federally threatened or endangered species; SOC: species-of-concern; SOI: species-of-interest) for each habitat association (i.e., PNVT, Water, or Multiple).

Habitat Association	Birds	Fish	Herpetofauna	Invertebrates	Mammals	Plants	ESA	SOC	SOI	Total Species
Pinyon-Juniper Woodland	5		4	2	1	37		39	10	49
Ponderosa Pine Forest	10		4	4	5	36	2	39	18	59
Dry Mixed Conifer Forest	8			3	3	2	1	5	10	16
Mixed Conifer with Aspen	9			2	4	5	1	6	13	20
Sage-brush Shrubland	6		1	1	3	12		13	10	23
Montane / Subalpine Grassland	3			2	8	8		8	13	21
Great Basin Grassland	4		3	1	4	6		7	11	18
Spruce Fir Forest	3				3	4		3	7	10
Semi-desert Grassland	3		3		4	3		4	9	13
Desert Communities					2	8		8	2	10
Gambel Oak Shrubland	1		2					1	2	3
Wetland / Cienega	2		4	5		2	1	6	6	13
Cottonwood-Willow Riparian Forest			1			2		1	2	3
Water	2	1	4	2		1	2	3	5	10
Multiple	2				1		1	1	1	3

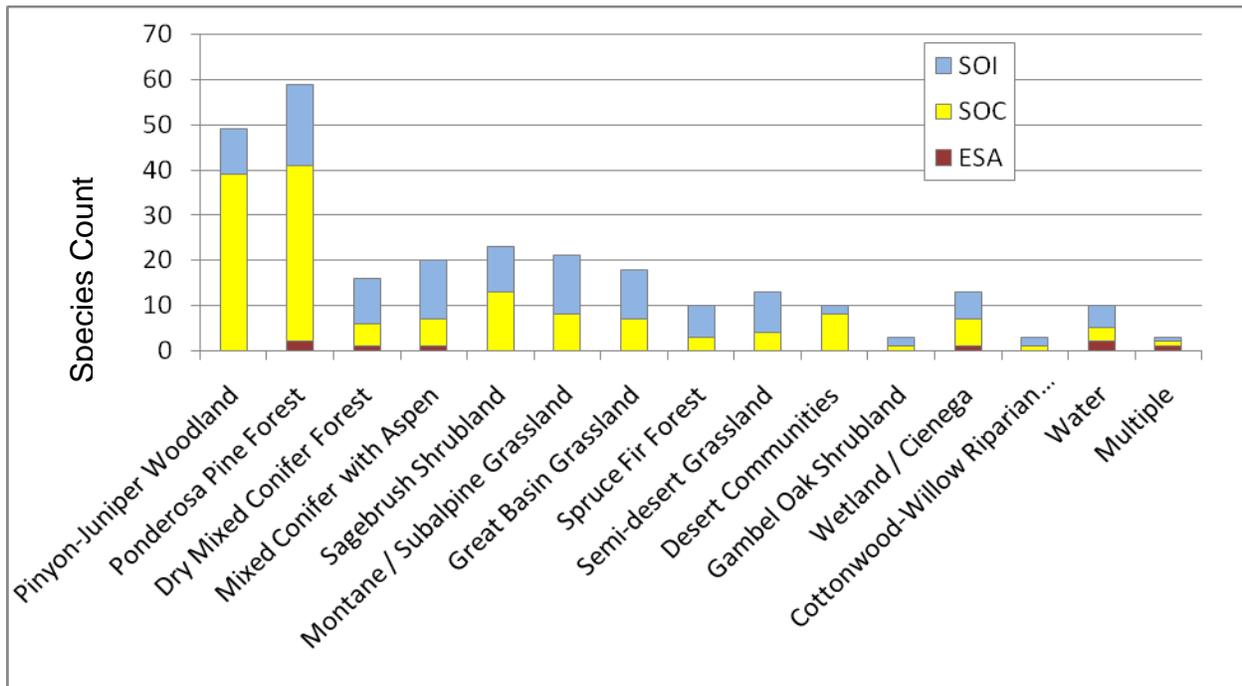


Figure 1. Count of species by category (SOI: Species of Interest, SOC: Species of Concern, ESA: species federally listed under the Endangered Species Act of 1973) and habitat type.

Table 3. Forest planning species and their habitat associations, according to PNVT and water.

Habitat Association	Taxa	Species Common Name
Pinyon-Juniper Woodland	Bird	Black-throated gray warbler
		Brewer's sparrow
		Gray vireo
		Juniper titmouse
		Pinyon jay
	Herpetofauna	Arizona black rattlesnake
		Great basin spadefoot
		Utah Mountain kingsnake
		Western skink
	Invertebrates	Desert green hairstreak
		Kaibab Indra swallowtail
	Mammal	Big free-tailed bat
	Plant	A Milkvetch (<i>Astragalus pinonis</i> var. <i>atwoodi</i>)
		Alladin's slippers
		Arizona bladderpod
		Arizona phlox
		Arizona sunflower
		Cliff milkvetch
		Creeping milkvetch
		Dent-nut cat's-eye
		Diamond Valley suncup
		Disturbed (Tusayan) rabbitbrush
		Flagstaff beardtongue
		Freckled milkvetch var. <i>oropedii</i>
		Freckled milkvetch var. <i>vitreus</i>
		Grand Canyon rose
		Grass-like rockdaisy
		Gumbo milkvetch
		Hall's milkweed
		Jones' spider-flower
		Jones' wild buckwheat
		Lancer milkvetch
		Long Valley tumbledustard
		Mat penstemon
		Mountain pepperweed
		Park pincushion-cactus
		Parry's blanket-flower
		Rothrock's hedge-nettle
		Rough whitlow-grass var. <i>kaibabensis</i>
		Roundleaf buffaloberry
		Silver milkvetch
Southwestern beardtongue		
Spinystar		

Habitat Association	Taxa	Species Common Name
Pinyon-Juniper Woodland continued	Plant continued	Utah bladder fern
		Utah century plant
		Western flame-flower
		Wild buckwheat
		Wright's bird's-beak
		Yavapai wild buckwheat
Ponderosa Pine Forest	Bird	Bald eagle
		Bald eagle, Sonoran Desert population
		Grace's warbler
		Green-tailed towhee
		Lewis's woodpecker
		MacGillivray's warbler
		Mexican spotted owl
		Northern goshawk
		Olive-sided flycatcher
		Purple martin (western ssp.)
	Herpetofauna	Arizona (mountain) treefrog
		Arizona black rattlesnake
		Utah Mountain kingsnake
		Western skink
	Invertebrates	Nevada point-headed grasshopper
		Nokomis fritillary
		Nokomis fritillary ssp. <i>nokomis</i>
		Persephone's darner
	Mammal	Abert's squirrel
		Allen's lappet-browed bat
		Kaibab tree squirrel
		Merriam's shrew
		Southwestern myotis
	Plant	Arizona bladderpod
		Arizona phlox
		Arizona whitefeather
		Arizona whitefeather var. <i>arizonica</i>
		Bearded cinquefoil
		Black dropseed
		Cliff fleabane
		Compacted rock daisy
		Creeping milkvetch
		Dent-nut cat's-eye
		Flagstaff pennyroyal
		Flagstaff beardtongue
		Freckled milkvetch var. <i>oropedii</i>
		Giant-trumpets
		Groundcover milkvetch

Habitat Association	Taxa	Species Common Name
Ponderosa Pine Forest continued	Plant continued	Hairy clematis
		Kaibab beardtongue
		Macdougal's bluebells
		Oak Creek triteleia
		Oregon buttercup
		Rose-color thistle
		Rothrock's hedge-nettle
		Rough whitlow-grass var. <i>asprella</i>
		Rough whitlow-grass var. <i>kaibabensis</i>
		Rough whitlow-grass var. <i>stelligera</i>
		Rusby's milkvetch
		Serrate phacelia
		Silver milkvetch
		Slimpod milkweed
		Southwestern beardtongue
		Utah bladder fern
		Western flame-flower
		Western mouse-tail
		Wood nymph
Wright's bird's-beak		
Yavapai wild buckwheat		
Dry Mixed Conifer Forest	Bird	Evening grosbeak
		Green-tailed towhee
		MacGillivray's warbler
		Mexican spotted owl
		Northern goshawk
		Olive-sided flycatcher
		Orange-crowned warbler
		Red-faced warbler
	Invertebrates	Kaibab Indra swallowtail
		Nokomis fritillary
		Nokomis fritillary ssp. <i>nokomis</i>
	Mammal	Allen's lappet-browed bat
		Merriam's shrew
		Southwestern myotis
	Plant	Cliff milkvetch
Silver milkvetch		
Mixed Conifer w/ Aspen	Bird	Dusky (blue) grouse
		Evening grosbeak
		Golden-crowned kinglet
		MacGillivray's warbler
		Mexican spotted owl
		Olive-sided flycatcher
		Orange-crowned warbler

Habitat Association	Taxa	Species Common Name	
Mixed Conifer w/ Aspen continued	Bird continued	Red-faced warbler	
		Red-naped sapsucker	
	Invertebrates	Nokomis fritillary	
		Nokomis fritillary ssp. <i>nokomis</i>	
	Mammal	Kaibab least chipmunk	
		Kaibab northern pocket gopher	
		Red squirrel	
		Southwestern myotis	
	Plant	Arizona bugbane	
		Columbine	
		Mountain whitlow-grass	
		Rusby's milkvetch	
		Wood nymph	
	Sagebrush Shrubland	Bird	Brewer's sparrow
			Ferruginous hawk
Golden eagle			
Green-tailed towhee			
Sage sparrow			
Sage thrasher			
Herpetofauna		Great basin spadefoot	
Invertebrates		Desert green hairstreak	
Mammal		Big free-tailed bat	
		Pronghorn	
		Spotted bat	
Plant		Alladin's slippers	
		Atwood's wild buckwheat	
		Dent-nut cat's-eye	
		Disturbed (Tusayan) rabbitbrush	
		Fickeisen hedgehog-cactus	
		Freckled milkvetch var. <i>vitreus</i>	
		Grand Canyon rose	
		Jones' wild buckwheat	
		Lancer milkvetch	
		Morton wild buckwheat	
		Park pincushion-cactus	
Wright's bird's-beak			
Montane / Subalpine Grassland		Bird	Golden eagle
			Savannah sparrow
			Western burrowing owl
		Invertebrates	Four-spotted skipperling
	Kaibab variable tiger beetle		
	Mammal	Big free-tailed bat	
		Dwarf shrew	
		Greater western mastiff bat	

Habitat Association	Taxa	Species Common Name	
Montane / Subalpine Grassland continued	Mammal continued	Kaibab northern pocket gopher	
		Long-tailed vole	
		Navajo Mogollon vole	
		Pronghorn	
		Spotted bat	
	Plant	A Sedge (<i>Carex oreocharis</i>)	
		Black dropseed	
		Kaibab beardtongue	
		Kaibab bladder-pod	
		Kaibab Indian-paintbrush	
		Mt. Dellenbaugh sandwort	
		Reflected moonwort	
		Rydberg's penstemon	
Great Basin Grassland	Bird	Ferruginous hawk	
		Golden eagle	
		Savannah sparrow	
		Western burrowing owl	
	Herpetofauna	Arizona black rattlesnake	
		Great basin spadefoot	
		Milksnake	
	Invertebrates	Kaibab Indra swallowtail	
	Mammal	Gunnison's prairie dog	
		Navajo Mogollon vole	
		Pronghorn	
		Spotted bat	
	Plant	Darrow's buckwheat	
		Fickeisen hedgehog-cactus	
		Freckled milkvetch var. <i>vitreus</i>	
		Limestone milkvetch	
		Park pincushion-cactus	
		Utah agave	
	Spruce Fir Forest	Bird	Dusky (blue) grouse
			Golden-crowned kinglet
Olive-sided flycatcher			
Mammal		Kaibab least chipmunk	
		Kaibab northern pocket gopher	
		Red Squirrel	
Plant		Columbine	
		Groundcover milkvetch	
		Reflected moonwort	
		Wood nymph	
Semi-desert Grassland	Bird	Ferruginous hawk	
		Golden eagle	
		Western burrowing owl	

Habitat Association	Taxa	Species Common Name
Semi-desert Grassland continued	Herpetofauna	Great basin spadefoot
		Milksnake
		Utah Mountain kingsnake
	Mammal	Gunnison's prairie dog
		House Rock Valley chisel-toothed kangaroo rat
		Pronghorn
		Spotted bat
	Plant	Bigelow's onion
		Mearns lotus
Skunk-top scurfpea		
Desert Communities	Mammal	Big free-tailed bat
		Desert bighorn sheep
	Plant	Bigelow's onion
		Gumbo milkvetch
		Hevron's milkvetch
		Long Valley tumbled mustard
		Mearns lotus
		Mountain pepperweed
		Skunk-top scurfpea
Utah century plant		
Gambel Oak Shrubland	Bird	Green-tailed towhee
	Herpetofauna	Arizona black rattlesnake
		Utah Mountain kingsnake
Wetland / Cienega	Bird	Bald eagle
		Bald eagle, Sonoran Desert population
	Herpetofauna	Arizona (mountain) treefrog
		Arizona toad
		Great basin spadefoot
		Northern leopard frog
	Invertebrates	Four-spotted skipperling
		Hoary skimmer
		Nokomis fritillary
		Nokomis fritillary ssp. <i>nokomis</i>
		Persephone's darner
Plant	Bebb's willow	
	Pond lily	
Cottonwood-Willow Riparian Forest	Herpetofauna	Arizona toad
	Plant	Jones' spider-flower
		Showy maidenfern
Water	Bird	Bald eagle
		Bald eagle, Sonoran Desert population
	Fish	Apache (Arizona) Trout
	Herpetofauna	Arizona (mountain) treefrog
		Arizona toad

Habitat Association	Taxa	Species Common Name
Water continued	Herpetofauna continued	Great basin spadefoot
		Northern leopard frog
	Invertebrates	Hoary skimmer
		Persephone's darner
Plant	Pond lily	
Multiple PNVTs	Bird	American peregrine falcon
		California condor
	Mammal	Pale Townsend's big-eared bat

Species grouped by specific habitat components

Plants were grouped solely on habitat associations (i.e., PNVT and Water). Non-plant species (specified in Table 4) were secondarily grouped by the following habitat components:

- **Trees:** cavities, snags, downed logs, litter/debris, tree species (i.e., oak, aspen), tree size class, tree height, sap producing hard woods
- **Forest:** open/closed canopy, forest clearings, degree of canopy layering, tree dispersion (i.e., clumps and groups)
- **Understory:** available forage, low shrubs, forbs, grasses for nesting
- **Shrubland:** shrub height and density, herbaceous component
- **Wetland/Water:** cattle tanks, ephemeral pools, seeps, springs, emergent vegetation, marsh/wetland edges
- **Grassland:** subalpine meadows, moist meadows, extensive open grasslands
- **Rock and Other Abiotic:** canyons, cliffs, crevices, talus, mines, empty buildings

PART II: Species Risk Assessment

Once the forest planning species to be carried forward for further analysis were identified, they were assigned to two groups: 1) species threatened by risks to ecosystem diversity characteristics, and 2) species facing threats in addition to risks to ecosystem diversity characteristics. Ecosystem diversity characteristics include the environmental measures that were used to describe terrestrial vegetation (PNVT), soil, and aquatic conditions on the Forest. Threats to composition, structure, and processes that affect vegetation, soil, and aquatic conditions were considered and described in relation to historic conditions. For details, refer to the Kaibab National Forest vegetation, fire and fuels report (Kaibab National Forest 2008a), soils report (Kaibab National Forest 2008b), and aquatic systems report (Kaibab National Forest 2008c).

Species Associated With Risks to Ecosystem Diversity Characteristics

Information gathered on each species was reviewed and a determination made as to whether the threats to the terrestrial and aquatic ecosystem diversity characteristics were also affecting the species. In general, it was assumed that those species associated with PNVTs or water sources

departed from and trending away from historic conditions were at risk. Many species were associated with more than one PNVT. All PNVTS analyzed in the terrestrial vegetation report (Kaibab National Forest 2008a) were departed from reference conditions, suggesting that the associated species' habitat needs were not being met and therefore not sustainable given current management practices. Water sources (seeps, springs, streams, ponds, reservoirs, tanks) exhibit various conditions by watershed. Most watersheds in the planning area show low departure from reference conditions, but some individual water sources are departed from reference conditions (Kaibab National Forest 2008c). Habitat-specific threats related to ecosystem diversity characteristics included effects such as fire, vegetation type conversion, overgrazing, insect outbreaks and exotic species invasion. These threats and their impacts on PNVTS are treated more intensively in the Kaibab National Forest vegetation, fire and fuels report (Kaibab National Forest 2008a). Threats associated with water can be found in the aquatic systems report (Kaibab National Forest 2008c), and fish species diversity report (Kaibab National Forest 2008d).

Only two species were not considered to be affected by threats to terrestrial PNVTS or aquatic ecosystem diversity characteristics; the American peregrine falcon and the California condor. These birds are not closely associated with any particular vegetation or aquatic community on the forest. As such, it is unlikely that past and predicted departures from reference conditions will result in considerable impacts to the species. All other forest planning species are likely affected by one or more threats to the terrestrial and aquatic ecosystem diversity characteristics of the habitats they are associated with (see Appendix C).

Species Facing Threats Not Associated With Risks to Ecosystem Diversity Characteristics

Additional management considerations may be necessary to adequately address threats that are not covered by landscape level management policies. If species had other threats to their habitat which could not be accounted for by ecosystem diversity risks alone, those threats were categorized separately by related habitat features (Table 4). This included species which might depend on non-vegetative features or fine-scale microhabitat components found within the broader context of their habitat. Finally, some species face threats that are not related to ecosystem diversity characteristics or habitat features, and they are identified in Table 5. Appendix D describes specific potential threats.

Table 4. Species affected by threats to habitat features in addition to risks to ecosystem diversity characteristics. Threats marked with an asterisk (*) may be localized, but the extent of impact can include the entire range of some narrow endemics, or significantly impact species of restricted distribution.

Threats	Outcome	Species Common Name
Threats to tree features include loss of snags, debris removal, uncharacteristic fire, wood collection.	Loss of roost and nest sites for bats and cavity nesting birds. Decreased foraging opportunities and reduced habitat for small mammals, snakes and birds. Can lead to widespread population declines within the plan area	Red-naped sapsucker, Western skink, Dusky (blue) grouse, Grace's warbler, Mexican spotted owl, Utah Mountain kingsnake, Navajo Mogollon vole, Purple martin (western), Olive-sided flycatcher, Pale Townsend's big-eared bat, Allen's lappet-browed bat, Juniper titmouse, Lewis's woodpecker, Red-faced warbler, Southwestern myotis, Northern goshawk, Bald eagle, Bald eagle pop. 3, Evening grosbeak, Golden eagle
Threats to forest features include uncharacteristic fire, loss of deciduous trees/shrubs, herbivory that removes canopy layering, fire suppression, and excessive overstory tree removal.	Direct loss of habitat, loss of nesting/roosting and foraging sites can lead to population declines within the plan area	Dusky (blue) grouse, Olive-sided flycatcher, Juniper titmouse, Lewis's woodpecker, Northern goshawk, Abert's squirrel, Pinyon jay, Golden-crowned kinglet, Black-throated gray warbler, Red-faced warbler, Green-tailed towhee, Dwarf shrew, Evening grosbeak, Mexican spotted owl, Arizona (mountain) treefrog.
Threats to understory features include non-native grass invasion, overgrazing, fire regime,	Decrease in available forage and foraging sites	Desert green hairstreak, Dusky (blue) grouse, red-faced warbler
Threats to shrubland features include overgrazing, drought, woodland invasion.	Loss of habitat and decrease in available forage and nesting sites	Pronghorn, House Rock Valley chisel-toothed kangaroo rat, Sage sparrow, Sage thrasher, Golden eagle, Green-tailed towhee
Threats to wetland/water features include wetland drainage and spring capping, flood scouring, overgrazing near water.	Direct loss of habitat, loss of foraging opportunities, decrease in reproductive sites	Arizona toad, Arizona (mountain) treefrog, Northern leopard frog, Great Basin spadefoot, Bald eagle, Bald eagle pop. 3, Persephone's darner, Hoary skimmer, Four-spotted skipperling, Nokomis fritillary, Nokomis fritillary ssp. <i>nokomis</i> , Navajo Mogollon vole

Threats	Outcome	Species Common Name
Threats to grassland features include drying of moist meadows, too much bare ground, loss of forbs, tree invasion.	Loss of foraging opportunities/prey base	Ferruginous hawk, Golden eagle, Western burrowing owl, Gray vireo, Greater western mastiff bat, Spotted bat, Pronghorn, Gunnison's prairie dog, Long-tailed vole, Big free-tailed bat, Four-spotted skipperling, Nokomis fritillary, Kaibab variable tiger beetle
Threats to rock and other abiotic features include rock collection, cliff blasting, recreational rock climbing/caving, demolition of buildings used as roost sites	Loss of shelter, resting or breeding sites can lead to decreased reproductive status for snakes, bats, birds, and small mammal species	Purple martin (western), Mexican spotted owl, California condor, Golden eagle, American peregrine falcon, Southwestern myotis, Pale Townsend's big-eared bat, Allen's lappet-browed bat, Spotted bat, Greater western mastiff bat, Big free-tailed bat, Dwarf shrew, House Rock Valley chisel-toothed kangaroo rat, Western skink, Milksnake, Utah Mountain kingsnake, Arizona black rattlesnake, Great Basin spadefoot
* Soil disturbance such as activities of livestock, people, or machinery that result in compaction, churning, and/or erosion.	Can inhibit plant reproduction and/or growth and vigor.	Arizona bugbane, Bigelow's onion, Mt. Dellenbaugh sandwort, Slimpod milkweed, Gumbo milkvetch, Lancer milkvetch, Groundcover milkvetch, Freckled milkvetch var. <i>oropedii</i> , Rusby's milkvetch, Silver milkvetch, Creeping milkvetch, Reflected moonwort, Diamond Valley suncup, A sedge (<i>Carex oreocharis</i>), Rose-color thistle, Jones' spider-flower, Wright's bird's-beak, Dent-nut cat's-eye, Mountain whitlow-grass, Darrow's buckwheat, Yavapai wild buckwheat, Jones' wild buckwheat, Parry's blanket-flower, Arizona whitefeather, Arizona whitefeather var. <i>arizonica</i> , Kaibab bladder-pod, Macdougals bluebells, Western mouse-tail, Pond lily, Park pincushion-cactus, Skunk-top scurfpea, Flagstaff beardtongue, Kaibab beardtongue, Rydberg's penstemon, Serrate phacelia, Western flame-flower, Arizona phlox, Bearded cinquefoil, Oregon buttercup, Black dropseed, Rothrock's hedge-nettle, Oak Creek triteleia, Park pincushion-cactus, Fickeisen hedgehog-cactus

Threats	Outcome	Species Common Name
* Inappropriate Livestock grazing	Can exceed a species ability to regenerate and reproduce, encourage invasive species, and alter growing conditions.	Arizona bugbane, Bigelow's onion, Slimpod milkweed, Rusby's milkvetch, Reflected moonwort, A sedge (<i>Carex oreocharis</i>), Kaibab Indian-paintbrush, Disturbed (Tusayan) rabbitbrush, Hairy clematis, Wild buckwheat, Darrow's buckwheat, Southwestern beardtongue, Black dropseed, Park pincushion-cactus, Fickeisen hedgehog-cactus
* Excessive wildlife herbivory	Can exceed a species ability to regenerate and reproduce, and alter growing conditions.	A sedge (<i>Carex oreocharis</i>), Disturbed (Tusayan) rabbitbrush, Wild buckwheat, Southwestern beardtongue, Kaibab beardtongue, Bebb's willow
Removal of overstory (e.g., inappropriate timber removal, insect/disease mortality) is relevant to plants that need cool, shady site conditions.	Can inhibit plant reproduction and/or growth and vigor.	Arizona bugbane, Hairy clematis, Wood nymph
* Dewatering or channelization lowers the water table.	Can inhibit plant reproduction and/or growth and vigor.	Bebb's willow

Table 5. Species facing threats not tied to habitat features. Threats marked with an asterisk (*) may be localized, but the extent of impact can include the entire range of some narrow endemics, or significantly impact species of restricted distribution. Only those threats under Forest Service control, or that can be managed are included.

Threats Not Tied To Habitat Features	Outcome	Species Common Name
Invasive Species Interactions -noxious weeds -crayfish -bullfrogs	Competition for resources (food, space, water), and/or hybridizations which can lead to direct mortality and decreases in populations within the planning area, loss of native species and changes in vegetation structure	Apache (Arizona) trout, Arizona (mountain) treefrog, Arizona toad, Northern leopard frog, Arizona bugbane, Mt. Dellenbaugh sandwort, Gumbo milkvetch, Hevron's milkvetch, A milkvetch (<i>Astragalus pinonis</i> var. <i>atwoodii</i>), Silver milkvetch, Creeping milkvetch, Diamond Valley suncup, Dent-nut cat's-eye, Darrow's buckwheat, Kaibab bladder-pod, Macdougals bluebells, Western mouse-tail, Fickeisen hedgehog-cactus, Skunk-top scurfpea, Southwestern beardtongue, Flagstaff beardtongue, Kaibab beardtongue, Serrate phacelia, Western flame-flower, Arizona phlox, Bearded cinquefoil, Oregon buttercup, Grand Canyon rose, Oak Creek triteleia
Poisoning/Pesticide Use	Direct mortality and local to widespread population declines	Pale Townsend's big-eared bat, Allen's lappet-browed bat, Big free-tailed bat, Gunnison's prairie dog, California condor, Bald eagle, Bald eagle pop. 3, Golden eagle
Disease	Direct mortality and local to widespread population declines	Northern leopard frog, Gunnison's prairie dog, Arizona (mountain) treefrog, Desert bighorn, Arizona toad
Brown-headed cowbird parasitism	Decrease in nesting success, local population declines	Gray vireo
Development (housing, agriculture, roads, fences)	Local population declines, possible isolation of species and restrictions on species interactions	Gunnison's prairie dog, Pronghorn, Milksnake, Ferruginous hawk, Golden eagle, Western burrowing owl

Threats Not Tied To Habitat Features	Outcome	Species Common Name
* Crushing by livestock, people, or machinery; often associated with soil disturbance events.	Direct mortality, can lead to widespread population declines of narrow endemics	Arizona bugbane, Bigelow's onion, Mt. Dellenbaugh sandwort, Slimpod milkweed, Gumbo milkvetch, Lancer milkvetch, Diamond Valley suncup, Jones' spider-flower, Wright's bird's-beak, Dent-nut cat's-eye, Mountain whitlow-grass, Yavapai wild buckwheat, Jones' wild buckwheat, Parry's blanket-flower, Arizona whitefeather, Arizona whitefeather var. <i>arizonica</i> , Wood nymph, Pond lily, Park pincushion-cactus, Rydberg's penstemon, Serrate phacelia, Black dropseed, Rothrock's hedge-nettle, Park pincushion-cactus, Fickeisen hedgehog-cactus
* Activities associated with infrastructure construction and maintenance (e.g., cliff blasting, road work).	Direct mortality, can lead to widespread population declines of narrow endemics	Gumbo milkvetch, Groundcover milkvetch, Cliff fleabane
Misidentification as a weed during weed eradication	Direct mortality.	Arizona sunflower
Slash piles/burning in forest openings	Direct mortality	Western flame-flower
Uranium exploration/mining	Direct mortality and population decline	Grand Canyon rose
Restricted Distribution or Narrow Endemics	Relatively high risk of extinction from localized threats.	See Table 6

Some species that occur on the Forest face an additional threat simply by virtue of their relatively limited range-wide distribution. These species might be easily affected by localized and/or stochastic events, and were noted separately regardless of whether or not they were associated with habitat level threats. A species (or subspecies) was considered to have a Restricted Distribution if it occurs to a limited extent in the Southwest; a species was also considered to be a Narrow Endemic if it has extremely limited distribution and/or habitat in northern Arizona. Due to their limited distribution and potential susceptibility to perturbation, these species may require additional management considerations. There were 73 species for which their restricted distribution was considered an additional threat. Of these, 47 were narrow endemics (Table 6).

Table 6. Species with restricted distributions, and whether they are considered narrow endemics.

Scientific Name	Common Name	Narrow Endemic
<i>Actaea arizonica</i>	Arizona bugbane	Yes
<i>Aeshna persephone</i>	Persephone's darner	no
<i>Agave utahensis</i> var. <i>kaibabensis</i>	Utah century plant	Yes
<i>Agave utahensis</i> var. <i>utahensis</i>	Utah agave	no
<i>Aquilegia caerulea</i> var. <i>pinetorum</i>	Columbine	no
<i>Arenaria aberrans</i>	Mt. Dellenbaugh sandwort	Yes
<i>Astragalus amphioxys</i> var. <i>modestus</i>	Alladin's slippers	no
<i>Astragalus ampullarius</i>	Gumbo milkvetch	no
<i>Astragalus cremnophylax</i> var. <i>hevronii</i>	Hevron's milkvetch	Yes
<i>Astragalus cremnophylax</i> var. <i>myriorrhaphis</i>	Cliff milkvetch	Yes
<i>Astragalus episcopus</i> var. <i>lancearius</i>	Lancer Mmilkvetch	no
<i>Astragalus humistratus</i> var. <i>tenerrimus</i>	Groundcover milkvetch	Yes
<i>Astragalus lentiginosus</i> var. <i>oropedii</i>	Freckled milkvetch	Yes
<i>Astragalus lentiginosus</i> var. <i>vitreus</i>	Freckled milkvetch	no
<i>Astragalus pinonis</i> var. <i>atwoodii</i>	A milk-vetch	Yes
<i>Astragalus rusbyi</i>	Rusby's milkvetch	Yes
<i>Astragalus subcinereus</i>	Silver milkvetch	no
<i>Astragalus titanophilus</i>	Limestone milkvetch	no
<i>Astragalus troglodytes</i>	Creeping milkvetch	no
<i>Camissonia gouldii</i>	Diamond Valley suncup	no
<i>Castilleja kaibabensis</i>	Kaibab Indian-paintbrush	Yes
<i>Chrysothamnus molestus</i>	Disturbed (Tusayan) rabbitbrush	Yes
<i>Cicindela terricola kaibabensis</i>	Kaibab variable tiger beetle	Yes
<i>Cleome lutea</i> var. <i>jonesii</i>	Jones' spider-flower	Yes
<i>Cordylanthus wrightii</i> ssp. <i>kaibabensis</i>	Wright's bird's-beak	Yes
<i>Crotalus cerberus</i>	Arizona black rattlesnake	no
<i>Cryptantha abata</i>	Dent-nut cat's-eye	no
<i>Dipodomys microps leucotis</i>	House Rock Valley chisel-toothed kangaroo rat	Yes
<i>Draba asprella</i> var. <i>asprella</i>	Rough whitlow-grass	Yes
<i>Draba asprella</i> var. <i>kaibabensis</i>	Rough whitlow-grass	Yes
<i>Draba asprella</i> var. <i>stelligera</i>	Rough whitlow-grass	Yes

Scientific Name	Common Name	Narrow Endemic
<i>Erigeron saxatilis</i>	Cliff fleabane	Yes
<i>Eriogonum corymbosum</i> var. <i>glutinosum</i>	Wild buckwheat	no
<i>Eriogonum darrovii</i>	Darrow's buckwheat	no
<i>Eriogonum ericifolium</i> var. <i>pulchrum</i>	Yavapai wild buckwheat	Yes
<i>Eriogonum jonesii</i>	Jones' wild buckwheat	Yes
<i>Eriogonum mortonianum</i>	Morton wild buckwheat	Yes
<i>Eriogonum thompsoniae</i> var. <i>atwoodii</i>	Atwood's wild buckwheat	Yes
<i>Escobaria vivipara</i> var. <i>kaibabensis</i>	Spinystar	Yes
<i>Gaillardia parryi</i>	Parry's blanket-flower	Yes
<i>Gymnogyps californianus</i>	California condor	no
<i>Hedeoma diffusa</i>	Flagstaff pennyroyal	Yes
<i>Helianthus arizonensis</i>	Arizona sunflower	no
<i>Heuchera novomexicana</i>	New Mexico alum-root	no
<i>Lampropeltis pyromelana infralabialis</i>	Utah Mountain kingsnake	no
<i>Lepidium montanum</i> var. <i>glabrum</i>	Mountain pepperweed	Yes
<i>Lesquerella arizonica</i>	Arizona bladder-pod	no
<i>Lesquerella kaibabensis</i>	Kaibab bladder-pod	Yes
<i>Lotus mearnsii</i> var. <i>mearnsii</i>	Mearns lotus	Yes
<i>Mertensia macdougalii</i>	Macdougall's bluebells	no
<i>Myosurus nitidus</i>	Western mouse-tail	no
<i>Neotamias minimus consobrinus</i>	Kaibab least chipmunk	Yes
<i>Oncorhynchus apache</i>	Apache (Arizona) trout	no
<i>Papilio indra kaibabensis</i>	Kaibab Indra swallowtail	Yes
<i>Pediocactus paradinei</i>	Park pincushion-cactus	Yes
<i>Pediocactus peeblesianus</i> var. <i>fickeiseniae</i>	Fickeisen hedgehog-cactus	Yes
<i>Pediomelum mephiticum</i>	Skunk-top scurfpea	no
<i>Penstemon caespitosus</i> var. <i>desertipicti</i>	Mat penstemon	no
<i>Penstemon nudiflorus</i>	Flagstaff beardtongue	Yes
<i>Penstemon pseudoputus</i>	Kaibab beardtongue	Yes
<i>Perityle congesta</i>	Compacted rock daisy	Yes
<i>Phacelia serrata</i>	Serrate phacelia	Yes
<i>Phemeranthus validulus</i>	Western flame-flower	Yes
<i>Phlox amabilis</i>	Arizona phlox	Yes
<i>Potentilla crinita</i> var. <i>lemmonii</i>	Bearded cinquefoil	Yes
<i>Ranunculus oreogenes</i>	Oregon buttercup	no
<i>Rosa stellata</i> ssp. <i>abyssa</i>	Grand Canyon rose	Yes
<i>Sciurus aberti kaibabensis</i>	Kaibab tree squirrel	Yes
<i>Shepherdia rotundifolia</i>	Roundleaf buffaloberry	Yes
<i>Sporobolus interruptus</i>	Black dropseed	Yes
<i>Thelypodopsis ambigua</i> var. <i>ambigua</i>	Long Valley tumbled mustard	Yes
<i>Thomomys talpoides kaibabensis</i>	Kaibab northern pocket gopher	Yes
<i>Triteleia lemmoniae</i>	Oak Creek triteleia	Yes

Although we did not formally identify climate change as a specific risk to our list of potential species, we recognize that climate change exists and that future management actions may need to be re-evaluated as new data becomes available. In a recent review, Periman (2008), found that most current models of climate change are broad and still evolving, making it difficult to assess associated impacts at the forest level scale. This distinction is important if locally implemented management strategies are to be effective.

In general, most climate modelers agree that the Southwest is trending toward prolonged drought. Future potential ecological effects in the Southwest may include an increase in more intense disturbance events such as wildfires, monsoons, and wind. Changing ecological conditions could provide opportunities for invasion by non-native species with potential subsequent negative impacts on various taxa. General trends toward decreased precipitation could limit overall forest productivity. General changes in vegetation patterns could affect overall distribution and range of flora as well as fauna. Cumulatively these factors would likely impact biodiversity, however to what extent is currently uncertain. (See Periman 2008 and references therein).

Summary of Major Findings and Conclusions

- 148 species were selected for further analysis from an initial list of >1,880 species.
- 146 species are subject to threats to Ecological Diversity Characteristics of terrestrial and aquatic systems.
- 104 species are subject to additional threats beyond identified threats to Ecological Diversity Characteristics of terrestrial and aquatic systems.
- 73 species with restricted distributions (including 47 narrow endemics) occur (or are likely to occur) wholly or in part within the planning area.

Of the 148 species identified as a model of species diversity on the KNF, 146 species are subject to factors that threaten terrestrial and aquatic ecosystem diversity characteristics. As the risks to ecosystem diversity characteristics mentioned above are managed, the species' habitat needs related to those ecosystem diversity characteristics will also be addressed. However, 104 species are subject to additional threats beyond identified risks to terrestrial and aquatic ecosystem diversity characteristics.

Some of these additional threats involve localized habitat features (Table 4). The risk of these threats must be considered at the project level to manage for and maintain full ecosystem function across the Forest. While plant and wildlife species use broad-scale vegetation types and associated developmental states in a general sense, most species use fine-scale habitat components in a specialized way. For example, many primary- and secondary cavity nesting species depend on an adequate distribution of standing dead wood suitable for excavation. The narrow endemic plant, Arizona bugbane, is highly dependent on cool, shady microsite conditions in ponderosa pine forest. These fine-scale habitat needs are not specifically considered or addressed in broad-scale terrestrial or aquatic management plans, so it is necessary to develop desired conditions and evaluate habitat needs from the species' perspective. Desired conditions can be described in the forest plan, but the best way to evaluate these fine-scale habitat issues is

at the project level. By using both broad-scale and fine-scale approaches to land management planning, the Forest can promote sustainable management of fully-functioning ecosystems.

Other additional threats some species face are not related to specific habitat features (Table 5). Some of these threats are directly within the agency's control and authority to manage, such as avoiding Arizona sunflowers during weed eradication activities, and avoiding Western flame-flowers during slash-pile burning activities. Some threats are not so much within agency control, but the KNF has the authority to mitigate the threats. For example, biological threats like disease or cowbird parasitism may be addressed by modifying livestock use, or restricting access in areas of high risk. The impacts of development, infrastructure, and non-renewable resource exploration/extraction activities may also be mitigated on a case-by-case basis. Desired conditions and acceptable mitigation strategies addressing threats not tied to habitat features can be described in the forest plan.

Species that may suffer especially severe consequences of unmanaged threats are the 73 "restricted distribution" plants and animals on the Forest (Table 6). In areas where these species occur, or are likely to occur, special consideration must be paid to analyzing and managing the risk of localized threats at the project level.

Finally, a key issue related to successfully effecting ecological change with land management planning is the concept of species and habitat monitoring. Species monitoring has been employed on the KNF to a limited extent (e.g., bird surveys), but could be used more extensively and with greater influence in designing future projects. Traditional forest and range monitoring are moderately applicable to habitat monitoring, but do not target wildlife and sensitive plant management objectives. The results of thoughtful monitoring efforts are important for adapting management activities to new conditions in the planning area. To determine if agency management activities meet species and habitat objectives, Plan components should be developed to better support species and habitat monitoring efforts on the Forest.

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APPENDIX A: Key Assessment Sources

NatureServe

<http://www.natureserve.org>

NatureServe is a joint establishment between The Nature Conservancy and The Natural Heritage Network. It is a non-profit organization whose primary goal is to disseminate biological information which may foster more effective conservation practices. NatureServe is a dynamic data source which changes as new data are available and includes biological information on more than 55,000 plants and animals in the United States and Canada. NatureServe uses a ranking system to establish conservation status of species at the Global (G), National (N), and Subnational (S) levels. Numerical numbers (1-5) are also assigned to the level appropriate for each species and are defined as follows:

1. Critically Imperiled
2. Imperiled
3. Vulnerable
4. Apparently Secure
5. Secure

Arizona Partners in Flight (APIF)

http://mirror-pole.com/apif_web/

A sub-group of the international organization Partners in Flight (PIF) which emphasizes the conservation of neotropical migratory birds in Arizona and Mexico. PIF maintains a Watch List of birds with special conservation status such as: species with multiple causes for concern across their entire range; species that are moderately abundant or widespread with declines or high threats; and species with restricted distribution or low population size. Additional information about the national Partners in Flight Program can be found on their website at <http://www.partnersinflight.org/>. Information on the APIF website is gathered from the USGS Biological Resources Division Colorado Field Station, the Arizona Game and Fish Department, and The U.S. Fish and Wildlife Service.

Kaibab National Forest Management Indicator Species (MIS)

http://www.fs.fed.us/r3/kai/management/efoia/wildlife_mgmt/index.shtml

All forests are directed by the National Forest Management Act (1976) and the 1982 forest planning rule to identify a list of specific flora and fauna that serve as a metric for forest management activities. By monitoring the population, status, and trends of MIS species, forests are better able to assess how current forest activities and projects are affecting not only MIS species, but additional species which may share similar habitat needs. A current list of MIS for the Kaibab National Forest can be downloaded from the Kaibab National Forest website at: www.fs.fed.us/r3/kai/.

Arizona Heritage Data Management System (HDMS)

http://www.azgfd.gov/w_c/edits/species_concern.shtml

The Arizona Game and Fish Department is responsible for the state HDMS program, which is part of a global network of more than 80 Natural Heritage Programs and Conservation Data

Centres. The HDMS identifies elements of concern in Arizona and consolidates information about their status and distribution throughout the state. Data concerning the location of species of concern and habitats are mapped; data concerning the ecological status of species are cataloged; and data concerning the biology of species are consolidated into an organized system available for public use. Among other services, HDMS offers unpublished plant and animal abstracts and distribution maps collated from a variety of sources. Information is constantly being added and updated, creating a dynamic system. The HDMS is available through the AGFD website at: <http://www.azgfd.gov/>.

Arizona State Wildlife Action Plan (SWAP)

http://www.azgfd.gov/w_c/cwcs.shtml

State wildlife action plans outline the steps that are needed to conserve wildlife and habitat before they become more rare and more costly to protect. The Arizona SWAP (formerly the Comprehensive Wildlife Conservation Strategy) encourages collaboration among a variety of stakeholders to improve existing conservation activities and plans. The focus is on improved management for “wildlife and biotic communities of greatest conservation need”. Additional information can be found by visiting the AGFD website at: <http://www.azgfd.gov/>.

Biota Information System of New Mexico (Bison-M)

<http://www.bison-m.org/>

This website contains information on terrestrial vertebrates and invertebrates found in New Mexico and Arizona. It is jointly run by the New Mexico Department of Fish and Game and the Fish and Wildlife Information Exchange. BISON-M includes information on threatened, endangered, and sensitive species, and is continuously updated.

U.S. Fish & Wildlife Service Birds of Conservation Concern National Priority List

<http://www.fws.gov/migratorybirds/reports/BCC2008/BCC2008.pdf>

The U.S. Fish and Wildlife Service Division of Migratory Bird Management has identified bird species and subspecies as Birds of Conservation Concern for those species that were likely to become federally threatened or endangered under the Endangered Species Act if conservation measures were not taken. The most recent version of the report and list was released in 2009, and is available through the FWS website: <http://www.fws.gov/migratorybirds/>.

Southwest Regional Forester Sensitive Species List

The Forest Service maintains a list of sensitive species in the Southwest Region, both native and non-native, which contribute to the forest’s overall biodiversity. This list is periodically updated to reflect new information concerning status and trends. The most recent update of this list was in September of 2007. This update replaced the existing list dated July 1999. Updates and revisions to this list are important for identifying current management needs which may help to prevent additional listings under the Endangered Species Act. The 2007 version of the list is on file at the Kaibab National Forest, Williams, AZ.

Other sources are listed in the project record (see Supporting Information).

APPENDIX B: Species included in the species diversity database developed for the plan revision process and each screening decision.

Scientific Name	Common Name	Screening
<i>Abies lasiocarpa</i> var. <i>arizonica</i>	Corkbark Fir	Screened Out
<i>Abronia nana</i> var. <i>nana</i>	Dwarf Sand-verbena	Screened Out
<i>Abutilon parishii</i>	Parish's Abutilon	Screened Out
<i>Abutilon thurberi</i>	Thurber Abutilon	Screened Out
<i>Acacia millefolia</i>	Milfoil Acacia	Screened Out
<i>Accipiter gentilis</i>	Northern goshawk	Retained
<i>Accipiter gentilis apache</i>	Apache northern goshawk	Screened Out
<i>Acer glabrum</i> var. <i>diffusum</i>	Mountain maple	Screened Out
<i>Acer glabrum</i> var. <i>neomexicanum</i>	Mountain maple	Screened Out
<i>Acer negundo</i> var. <i>arizonicum</i>	Box-elder	Screened Out
<i>Aconitum infectum</i>	Arizona Monkshood	Screened Out
<i>Acrolophitus nevadensis</i>	Nevada point-headed grasshopper	Retained
<i>Actaea arizonica</i>	Arizona Bugbane	Retained
<i>Adenophyllum wrightii</i>	Wright's Dogweed	Screened Out
<i>Adopaeoides prittwitzii</i>	Sunrise Skipper	Screened Out
<i>Aechmophorus clarkii</i>	Clark's grebe	Screened Out
<i>Aechmophorus occidentalis</i>	Western grebe	Screened Out
<i>Aeronautes saxatilis</i>	White-throated swift	Screened Out
<i>Aeshna persephone</i>	Persephone's Darner	Retained
<i>Agastache ruperstris</i>	Thread-leaf Giant-hyssop	Screened Out
<i>Agathon arizonicus</i>	Net-winged Midge	Screened Out
<i>Agathymus alliae</i>	Giant Mojave Skipper	Screened Out
<i>Agathymus aryxna</i>	Giant Aryxna Skipper	Screened Out
<i>Agathymus baueri freemani</i>	Freeman's Agave Borer	Screened Out
<i>Agathymus evansi</i>	Huachuca Giant-skipper	Screened Out
<i>Agathymus gentryi</i>	Gentry's Giant-skipper	Screened Out
<i>Agathymus neumogeni</i>	Neumogen's Giant Skipper	Screened Out
<i>Agathymus polingi</i>	Poling's Giant Skipper	Screened Out
<i>Agave arizonica</i>	Arizona Agave	Screened Out
<i>Agave delamateri</i>	Tonto Basin Agave	Screened Out
<i>Agave murpheyi</i>	Murphey Agave	Screened Out
<i>Agave parviflora</i>	Small-flower Agave	Screened Out
<i>Agave parviflora</i> ssp. <i>parviflora</i>		Screened Out
<i>Agave phillipsiana</i>	Phillips' agave	Screened Out
<i>Agave schottii</i> var. <i>treleasei</i>		Screened Out
<i>Agave toumeyana</i> var. <i>bella</i>		Screened Out
<i>Agave toumeyana</i> var. <i>toumeyana</i>		Screened Out
<i>Agave utahensis</i> var. <i>kaibabensis</i>	Utah Century Plant	Retained
<i>Agave utahensis</i> var. <i>utahensis</i>	Utah Agave	Retained
<i>Ageratina lemmonii</i>	Lemmon's Thorough-wort	Screened Out
<i>Ageratina paupercula</i>	Santa Rita Mountains Thorough-wort	Screened Out
<i>Agosia chrysogaster</i>	Longfin dace	Screened Out
<i>Agosia chrysogaster</i> ssp. <i>1</i>	Yaqui Longfin Dace	Screened Out
<i>Agylla septentrionalis</i>		Screened Out

Scientific Name	Common Name	Screening
<i>Aimophila botteri</i>	Botteri's Sparrow	Screened Out
<i>Aimophila carpalis</i>	Rufous-winged sparrow	Screened Out
<i>Aimophila cassinii</i>	Cassin's sparrow	Screened Out
<i>Aimophila quinquestriata</i>	Five-striped sparrow	Screened Out
<i>Aimophila ruficeps rupicola</i>	Yuma Rufous-crowned Sparrow	Screened Out
<i>Aix sponsa</i>	Wood duck	Screened Out
<i>Albiorix anophthalmus</i>	A Cave Obligate Pseudoscorpion	Screened Out
<i>Alectoris chukar</i>	Chukar	Screened Out
<i>Aletes macdougali</i>	Macdougall's Aletes	Screened Out
<i>Aletes sessiliflorus</i>	Sessile-flower Aletes	Screened Out
<i>Alexicles aspersa</i>	A tiger moth	Screened Out
<i>Alisotrichia arizonica</i>	A Caddisfly	Screened Out
<i>Allium atrorubens var. cristatum</i>		Screened Out
<i>Allium bigelovii</i>	Bigelow's Onion	Retained
<i>Allium bisceptrum var. palmeri</i>		Screened Out
<i>Allium parishii</i>	Parish's Onion	Screened Out
<i>Alnus oblongifolia</i>	Arizona Alder	Screened Out
<i>Amazilia beryllina</i>	Berylline hummingbird	Screened Out
<i>Amazilia violiceps</i>	Violet-crowned hummingbird	Screened Out
<i>Amblycheila baroni</i>	Montane Giant Tiger Beetle	Screened Out
<i>Amblycheila picolomini</i>	Plateau Giant Tiger Beetle	Screened Out
<i>Amblycheila schwarzi</i>	Mojave Giant Tiger Beetle	Screened Out
<i>Amblyscirtes elissa</i>	Elissa Roadside-skipper	Screened Out
<i>Amblyscirtes texanae</i>	Texas Roadside-skipper	Screened Out
<i>Amblyscirtes tolteca</i>	Toltec Roadside-skipper	Screened Out
<i>Ambrysus arizonus</i>	creeping water bug	Screened Out
<i>Ambrysus thermarum</i>	creeping water bug	Screened Out
<i>Ambystoma tigrinum nebulosum</i>	Arizona Tiger Salamander	Screened Out
<i>Amelanchier utahensis var. covillei</i>		Screened Out
<i>Ameletus falsus</i>	False Ameletus Mayfly	Screened Out
<i>Ammodramus bairdii</i>	Baird's Sparrow	Screened Out
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	Screened Out
<i>Ammodramus savannarum ammoregus</i>	Arizona grasshopper sparrow	Screened Out
<i>Ammodramus savannarum perpallidus</i>	Western Grasshopper Sparrow	Screened Out
<i>Ammoselinum gigantium</i>	Western Sand-parsley	Screened Out
<i>Ammospermophilus leucurus tersus</i>	Prospect Valley white-tailed antelope squirrel	Screened Out
<i>Amoreuxia gonzalezii</i>	Santa Rita Yellowshow	Screened Out
<i>Amphinemura apache</i>	A Stonefly	Screened Out
<i>Amphinemura mogollonica</i>	Mogollon forestfly (a stonefly)	Screened Out
<i>Amphinemura venusta</i>	A Stonefly	Screened Out
<i>Amphispiza belli</i>	Sage sparrow	Retained
<i>Amsonia grandiflora</i>	Arizona Slimpod	Screened Out
<i>Amsonia kearneyana</i>	Kearney's Slimpod	Screened Out
<i>Amsonia peeblesii</i>	Peebles' Blue-star	Screened Out
<i>Anacroneuria wipukupa</i>	A Stonefly	Screened Out
<i>Anas acuta</i>	Northern pintail	Screened Out
<i>Anas americana</i>	American wigeon	Screened Out

Scientific Name	Common Name	Screening
<i>Anas clyptea</i>	Northern shoveler	Screened Out
<i>Anas crecca</i>	Green-winged teal	Screened Out
<i>Anas cyanoptera</i>	Cinnamon teal	Screened Out
<i>Anas discors</i>	Blue-wing teal	Screened Out
<i>Anas penelope</i>	Eurasian wigeon	Screened Out
<i>Anemone multifida</i> var. <i>stylosa</i>		Screened Out
<i>Angelica pinnata</i>	Small-leaved Angelica	Screened Out
<i>Anoda abutiloides</i>	False Indian-mallow	Screened Out
<i>Anoda thurberi</i>	Arizona Anoda	Screened Out
<i>Anodonta californiensis</i>	California Floater	Screened Out
<i>Anser albifrons</i>	Greater white-fronted Goose	Screened Out
<i>Anthus rubescens</i>	American pipit	Screened Out
<i>Anthus spragueii</i>	Sprague's pipit	Screened Out
<i>Antilocapra americana</i>	Pronghorn	Retained
<i>Antilocapra americana sonoriensis</i>	Sonoran Pronghorn	Screened Out
<i>Anulocaulis leiosolenus</i> var. <i>leiosolenus</i>	Southwestern ringstem	Screened Out
<i>Apacheria chiricahuensis</i>	Cliff Brittlebush	Screened Out
<i>Apalone spinifera</i>	Spiny softshell	Screened Out
<i>Apatania arizona</i>	A Caddisfly	Screened Out
<i>Aquila chrysaetos</i>	Golden eagle	Retained
<i>Aquilegia caerulea</i> var. <i>pinetorum</i>	Columbine	Retained
<i>Arabis tricornuta</i>	Rincon Mountain Rockcress	Screened Out
<i>Aralia humilis</i>	Arizona Spikenard	Screened Out
<i>Arceuthobium apacheum</i>	Apache Dwarf-mistletoe	Screened Out
<i>Arceuthobium blumeri</i>	Southwestern White Pine Dwarf-mistletoe	Screened Out
<i>Arceuthobium microcarpum</i>	Western Spruce Dwarf-mistletoe	Screened Out
<i>Archeolarca cavicola</i>	Grand Canyon Cave Scorpion	Screened Out
<i>Archeolarca welbourni</i>	A Cave Obligate Pseudoscorpion	Screened Out
<i>Archilochus alexandri</i>	Black-chinned hummingbird	Screened Out
<i>Archoplites interruptus</i>	Sacramento Perch	Screened Out
<i>Arctomecon californica</i>	Las Vegas Bearpoppy	Screened Out
<i>Ardea alba</i>	Great egret	Screened Out
<i>Aregemone corymbosa</i> ssp. <i>arenicola</i>	Mojave Prickly-poppy	Screened Out
<i>Arenaria aberrans</i>	Mt. Dellenbaugh Sandwort	Retained
<i>Arenaria fendleri</i> var. <i>porteri</i>	Porter's sandwort	Screened Out
<i>Argemone arizonica</i>	Arizona Prickle-poppy	Screened Out
<i>Argemone corymbosa</i>	Leafy Prickly-poppy	Screened Out
<i>Argemone corymbosa</i> ssp. <i>corymbosa</i>	Mojave prickly-poppy	Screened Out
<i>Argemone pleiacanta</i> ssp. <i>ambigua</i>		Screened Out
<i>Argia pima</i>	Pima Dancer	Screened Out
<i>Argia sabino</i>	Sabino Dancer	Screened Out
<i>Argia tarascana</i>	Tarascan dancer	Screened Out
<i>Argyrochosma limitanea</i> ssp. <i>limitanea</i>	Southwestern Cloak-fern	Screened Out
<i>Argythamnia brandegeei</i>	Sonoran Silver-bush	Screened Out
<i>Argythamnia brandegeei</i> var. <i>intonsa</i>		Screened Out
<i>Artemisia ludoviciana</i> ssp. <i>redolens</i>		Screened Out
<i>Asclepias cutleri</i>	Cutler Milkweed	Screened Out
<i>Asclepias hallii</i>	Hall's Milkweed	Retained

Scientific Name	Common Name	Screening
<i>Asclepias quinqueidentata</i>	Slimpod milkweed	Retained
<i>Asclepias uncialis</i>	Greene Milkweed	Screened Out
<i>Asclepias uncialis ssp. ruthiae</i>	Ruth Milkweed	Screened Out
<i>Asclepias uncialis ssp. uncialis</i>		Screened Out
<i>Asclepias viridiflora</i>	Green comet milkweed	Screened Out
<i>Asclepias welshii</i>	Welsh's Milkweed	Screened Out
<i>Ashmunella angulata</i>	Angulate Woodlandsnail	Screened Out
<i>Ashmunella chiricahuana</i>	Cave Creek Woodlandsnail	Screened Out
<i>Ashmunella esuritor</i>	Barfoot Woodlandsnail	Screened Out
<i>Ashmunella ferrissi</i>	Reed's Mountain Woodlandsnail	Screened Out
<i>Ashmunella lenticula</i>	Horseshoe Canyon Woodlandsnail	Screened Out
<i>Ashmunella lepiderma</i>	Whitetail Woodlandsnail	Screened Out
<i>Ashmunella levettei</i>	Huachuca Woodlandsnail	Screened Out
<i>Ashmunella mogollonensis</i>	Mogollon Woodlandsnail	Screened Out
<i>Ashmunella pilsbryana</i>	Blue Mountain Woodlandsnail	Screened Out
<i>Ashmunella proxima</i>	Chiricahua Woodlandsnail	Screened Out
<i>Ashmunella varicifera</i>	Miller Canyon Woodlandsnail	Screened Out
<i>Asio flammeus</i>	Short-eared owl	Screened Out
<i>Asio otus</i>	Long-eared owl	Screened Out
<i>Aspidoscelis arizonae</i>	Arizona Striped Whiptail	Screened Out
<i>Aspidoscelis burti xanthonota</i>	Red-backed Whiptail	Screened Out
<i>Aspidoscelis pai</i>	Pai Striped Whiptail	Screened Out
<i>Asplenium adiantum-nigrum</i>	Black spleenwort	Screened Out
<i>Asplenium platyneuron</i>	Ebony spleenwort	Screened Out
<i>Astomum phascoides</i>		Screened Out
<i>Astragalus albulus</i>	A Milk-vetch	Screened Out
<i>Astragalus allochrous var. playanus</i>	Wooton's Milk-vetch	Screened Out
<i>Astragalus amphioxys var. modestus</i>	Alladin's slippers	Retained
<i>Astragalus amphioxys var. musimonum</i>	Sheep Mountain Milkvetch	Screened Out
<i>Astragalus ampullarius</i>	Gumbo Milkvetch	Retained
<i>Astragalus aragophyllus var. stocksii</i>	Dana Milkvetch	Screened Out
<i>Astragalus argophyllus var. panguicensis</i>		Screened Out
<i>Astragalus beathii</i>	Beath Milkvetch	Screened Out
<i>Astragalus brandegeei</i>	Brandegee Milkvetch	Screened Out
<i>Astragalus calycosus var. scaposus</i>	King's Milkvetch	Screened Out
<i>Astragalus casteneiformis</i>	Chestnut Milkvetch	Screened Out
<i>Astragalus chuskanus</i>	Chuska Mountain Milkvetch	Screened Out
<i>Astragalus cobrensis</i>	Copper mine milkvetch	Screened Out
<i>Astragalus cobrensis var. maguirei</i>	A Milkvetch	Screened Out
<i>Astragalus coltonii var. moabensis</i>	Colton Milkvetch	Screened Out
<i>Astragalus cremnophylax</i>	Cliff Milkvetch	Screened Out
<i>Astragalus cremnophylax var. cremnophylax</i>	Sentry Milkvetch	Screened Out
<i>Astragalus cremnophylax var. hevronii</i>	Hevron's Milkvetch	Retained
<i>Astragalus cremnophylax var. myriorrhaphis</i>	Cliff Milkvetch	Retained
<i>Astragalus desperatus var. conspectus</i>	Barneby Milkvetch	Screened Out
<i>Astragalus endopterus</i>	A Milkvetch	Screened Out

Scientific Name	Common Name	Screening
<i>Astragalus ensiformis</i>	Pagumpa Milkvetch	Screened Out
<i>Astragalus ensiformis</i> var. <i>ensiformis</i>		Screened Out
<i>Astragalus episcopus</i>	Bishop Milkvetch	Screened Out
<i>Astragalus episcopus</i> var. <i>episcopus</i>		Screened Out
<i>Astragalus episcopus</i> var. <i>lancearius</i>	Lancer Milkvetch	Retained
<i>Astragalus eurylobus</i>	Peck Station Milkvetch	Screened Out
<i>Astragalus flexuosus</i> var. <i>diehlii</i>		Screened Out
<i>Astragalus geyeri</i> var. <i>triquetrus</i>	Sand Milkvetch	Screened Out
<i>Astragalus holmgreniorum</i>	Holmgren Milkvetch	Screened Out
<i>Astragalus humistratus</i> var. <i>crispulus</i>	Groundcover milkvetch	Screened Out
<i>Astragalus humistratus</i> var. <i>tenerrimus</i>	Groundcover milkvetch	Retained
<i>Astragalus hypoxylus</i>	Huachuca Milkvetch	Screened Out
<i>Astragalus insularis</i> var. <i>harwoodii</i>	Harwood Milkvetch	Screened Out
<i>Astragalus lentiginosus</i> var. <i>ambiguus</i>	A Milkvetch	Screened Out
<i>Astragalus lentiginosus</i> var. <i>oropedii</i>	Freckled milkvetch	Retained
<i>Astragalus lentiginosus</i> var. <i>vitreus</i>	Freckled milkvetch	Retained
<i>Astragalus lentiginosus</i> var. <i>maricopae</i>	A Milkvetch	Screened Out
<i>Astragalus lentiginosus</i> var. <i>stramineus</i>		Screened Out
<i>Astragalus moencoppensis</i>	A Milkvetch	Screened Out
<i>Astragalus mokiensis</i>	Mokia Milkvetch	Screened Out
<i>Astragalus mollissimus</i> var. <i>mogollonicus</i>		Screened Out
<i>Astragalus newberryi</i> var. <i>aquarii</i>		Screened Out
<i>Astragalus newberryi</i> var. <i>blyae</i>		Screened Out
<i>Astragalus nutriosensis</i>	Nutrios Milkvetch	Screened Out
<i>Astragalus nuttallianus</i> var. <i>imperfectus</i>		Screened Out
<i>Astragalus pinonis</i>	Pinyon Milkvetch	Screened Out
<i>Astragalus pinonis</i> var. <i>atwoodii</i>	A Milkvetch	Retained
<i>Astragalus pinonis</i> var. <i>pinonis</i>		Screened Out
<i>Astragalus praelongus</i> var. <i>lonchopus</i>		Screened Out
<i>Astragalus praelongus</i> var. <i>praelongus</i>		Screened Out
<i>Astragalus preussii</i> var. <i>laxiflorus</i>	Lancaster Milkvetch	Screened Out
<i>Astragalus recurvus</i>	A Milkvetch	Screened Out
<i>Astragalus rusbyi</i>	Rusby's Milkvetch	Retained
<i>Astragalus scopulorum</i>	A Milkvetch	Screened Out
<i>Astragalus sesquiflorus</i>	Sandstone Milkvetch	Screened Out
<i>Astragalus sophoroides</i>	A Milkvetch	Screened Out
<i>Astragalus straturensis</i>	Silver Reef Milkvetch	Screened Out
<i>Astragalus striatiflorus</i>	Escarpment Milkvetch	Screened Out
<i>Astragalus subcinereus</i>	Silver Milkvetch	Retained
<i>Astragalus tephrodes</i> var. <i>brachylobus</i>	Ashen milkvetch	Screened Out
<i>Astragalus tephrodes</i> var. <i>chloridae</i>		Screened Out
<i>Astragalus tephrodes</i> var. <i>tephrodes</i>		Screened Out
<i>Astragalus titanophilus</i>	Limestone Milkvetch	Retained
<i>Astragalus troglodytus</i>	Creeping Milkvetch	Retained
<i>Astragalus xiphoides</i>	Gladiator Milkvetch	Screened Out
<i>Astragalus toanus</i> var. <i>scidulus</i>		Screened Out
<i>Astrolepis windhamii</i>	Windham's Scaly Cloak Fern	Screened Out
<i>Astyliis biedermanni</i>	A Notodontid Moth	Screened Out

Scientific Name	Common Name	Screening
<i>Astylis sp. 1</i>	A notodontid moth	Screened Out
<i>Asurina nitida maxima</i>	Northern gray hawk	Screened Out
<i>Athene cunicularia hypugaea</i>	Western burrowing owl	Retained
<i>Athya americana</i>	Redhead	Screened Out
<i>Athya collaris</i>	Ring-necked duck	Screened Out
<i>Atopsyche sperryi</i>	A Caddisfly	Screened Out
<i>Atopsyche tripunctata</i>	A Caddisfly	Screened Out
<i>Atriplex asterocarpa</i>		Screened Out
<i>Atriplex cuneata</i>	Valley Saltbush	Screened Out
<i>Atriplex cuneata ssp. cuneata</i>		Screened Out
<i>Atriplex garrettii</i>	Garrett Saltbush	Screened Out
<i>Atriplex griffithsii</i>	Griffith's Saltbush	Screened Out
<i>Atriplex pacifica</i>	Davidson's Saltbush	Screened Out
<i>Atrytonopsis cestus</i>	Cestus Skipper	Screened Out
<i>Atrytonopsis deva</i>	Deva Skipper	Screened Out
<i>Atrytonopsis edwardsi</i>	Sheep Skipper	Screened Out
<i>Atrytonopsis lunus</i>	Moon-marked Skipper	Screened Out
<i>Atrytonopsis pittacus</i>	White-barred Skipper	Screened Out
<i>Atrytonopsis python</i>	Python Skipper	Screened Out
<i>Autochton pseudocellus</i>	Sonoran Banded-skipper	Screened Out
<i>Automeris patagoniensis</i>	Patagonia Eyed Silkmoth	Screened Out
<i>Aythya affinis</i>	Lesser scaup	Screened Out
<i>Aythya marila</i>	Greater scaup	Screened Out
<i>Aythya valisineria</i>	Canvasback	Screened Out
<i>Aztecacris gloriosus</i>	Atascosa Gem Grasshopper	Screened Out
<i>Baeolophus ridgwayi</i>	Juniper titmouse	Retained
<i>Baeolophus wollweberi</i>	Bridled titmouse	Screened Out
<i>Baetodes arizonensis</i>	A mayfly	Screened Out
<i>Baetodes edmundsi</i>	A Mayfly	Screened Out
<i>Balomys taylori</i>	Northern pygmy mouse	Screened Out
<i>Barbula ehrenbergii</i>		Screened Out
<i>Bassariscus astutus</i>	Ringtail	Screened Out
<i>Beckmannia syzigachne</i>	American sloughgrass	Screened Out
<i>Berberis harrisoniana</i>	Kofka Barberry	Screened Out
<i>Bison bison</i>	Bison	Screened Out
<i>Boerhavia megaptera</i>	Tucson Mountain Spiderling	Screened Out
<i>Botaurus lentiginosus</i>	American bittern	Screened Out
<i>Bothriochloa wrightii</i>	Wright's Beardgrass	Screened Out
<i>Botrychium crenulatum</i>	Crenulate Moonwort	Screened Out
<i>Botrychium echo</i>	Reflected Moonwort	Retained
<i>Botrychium hesperium</i>	Western Moonwort	Screened Out
<i>Botrychium lanceolatum</i>	Triangle grape-fern	Screened Out
<i>Botrychium lunaria</i>	Common moonwort	Screened Out
<i>Botrychium minganense</i>	Mingan's moonwort	Screened Out
<i>Botrychium multifidum</i>	Leathery grape-fern	Screened Out
<i>Botrychium pinnatum</i>	Northern moonwort	Screened Out
<i>Botrychium virginianum</i>	Rattlesnake fern	Screened Out
<i>Bouteloua eludens</i>	Santa Rita Gramma	Screened Out

Scientific Name	Common Name	Screening
<i>Bouteloua parryi</i>	Parry's Gramma	Screened Out
<i>Bouteloua rothrockii</i>	Rothrock Gramma	Screened Out
<i>Branta canadensis</i>	Canada goose	Screened Out
<i>Branta hutchinsii</i>	Cackling goose	Screened Out
<i>Brickellia amplexicaulis</i>	Ear-leaf Brickelbush	Screened Out
<i>Brickellia amplexicaulis</i> var. <i>amplexicaulis</i>		Screened Out
<i>Brickellia amplexicaulis</i> var. <i>lanceolata</i>		Screened Out
<i>Brickellia baccharidea</i>	Resin-leaved Brickell-bush	Screened Out
<i>Brickellia floribunda</i>	Chihuahuan Desert Brickellbush	Screened Out
<i>Brickellia lemmonii</i> var. <i>lemmonii</i>	Lemmon's Beggar-ticks	Screened Out
<i>Brickellia parvula</i>	Mt. Davis Brickell-bush	Screened Out
<i>Brickellia rusbyi</i>	Stinking Brickell-bush	Screened Out
<i>Brickellia simplex</i>	Sonoran Brickel-bush	Screened Out
<i>Brickellia squamulosa</i>	Mule Mountain Brickell-bush	Screened Out
<i>Bromus arizonicus</i>	Arizona Brome	Screened Out
<i>Bromus mucroglumis</i>	Sharpglume brome	Screened Out
<i>Browallia eludens</i>	Bush-violet	Screened Out
<i>Bubulcus ibis</i>	Cattle egret	Screened Out
<i>Bucephala islandica</i>	Barrow's goldeneye	Screened Out
<i>Buchloe dactyloides</i>	Buffalograss	Screened Out
<i>Buchnera arizonica</i>	Arizona Bluehearts	Screened Out
<i>Bufo microscaphus</i>	Arizona toad	Retained
<i>Buteo brachyurus</i>	Short-tailed hawk	Screened Out
<i>Buteo platypterus</i>	Broad-winged hawk	Screened Out
<i>Buteo regalis</i>	Ferruginous hawk	Retained
<i>Buteo swainsoni</i>	Swainson's hawk	Screened Out
<i>Buteogallus anthracinus</i>	Common black hawk	Screened Out
<i>Calamospiza melanocorys</i>	Lark bunting	Screened Out
<i>Calathorax lucifer</i>	Lucifer hummingbird	Screened Out
<i>Calcarius lapponicus</i>	Lapland longspur	Screened Out
<i>Calcarius mccownii</i>	McCown's longspur	Screened Out
<i>Calcarius ornatus</i>	Chestnut collared longspur	Screened Out
<i>Calephelis arizonensis</i>	Arizona Metalmark	Screened Out
<i>Calephelis wrighti</i>	Wright's Metalmark	Screened Out
<i>Calidris alba</i>	Sanderling	Screened Out
<i>Calidris mauri</i>	Western sandpiper	Screened Out
<i>Calidris pusilla</i>	Semipalmated plover	Screened Out
<i>Calliandra schottii</i>	Schott Stick-pea	Screened Out
<i>Callipepla gambelli</i>	Gambel's quail	Screened Out
<i>Callipepla squamata</i>	Scaled quail	Screened Out
<i>Callophrys sheridanii comstocki</i>	Desert Green Hairstreak	Retained
<i>Callophrys xami</i>	Xami hairstreak	Screened Out
<i>Callophrys fotis</i>	Early Elfin	Screened Out
<i>Calypte costae</i>	Costa's hummingbird	Screened Out
<i>Calystegia macounii</i>	Macoun's false bindweed	Screened Out
<i>Camissonia brevipes</i> ssp. <i>arizonica</i>		Screened Out
<i>Camissonia cardiophylla</i>	Heart-leaf Suncup	Screened Out
<i>Camissonia cardiophylla</i> ssp. <i>cardiophylla</i>		Screened Out

Scientific Name	Common Name	Screening
<i>Camissonia claviformis ssp. rubescens</i>		Screened Out
<i>Camissonia confertiflora</i>	Bunch Flower Evening Primrose	Screened Out
<i>Camissonia confusa</i>		Screened Out
<i>Camissonia exilis</i>	Cottonwood Spring Suncup	Screened Out
<i>Camissonia gouldii</i>	Diamond Valley Suncup	Retained
<i>Camissonia multijuga</i>	Frost-stem Suncup	Screened Out
<i>Camissonia pallida</i>	Pale Yellow Suncup	Screened Out
<i>Camissonia pallida ssp. pallida</i>		Screened Out
<i>Camissonia palmeri</i>	Palmer's Suncup	Screened Out
<i>Camissonia parryi</i>	Parry's Evening-primrose	Screened Out
<i>Camissonia scapoidea ssp. macrocarpa</i>		Screened Out
<i>Camissonia specuicola</i>	Kaibab Suncup	Screened Out
<i>Camissonia specuicola ssp. hesperia</i>	Ditch Evening Primrose	Screened Out
<i>Camissonia specuicola ssp. specuicola</i>		Screened Out
<i>Camptostoma ornatum</i>	Mexican Stoneroller	Screened Out
<i>Camptostoma imberbe</i>	Northern beardless-tyrannulet	Screened Out
<i>Canis lupus</i>	Gray Wolf	Screened Out
<i>Canis lupus baileyi</i>	Mexican Gray Wolf	Screened Out
<i>Caprimulgus ridgwayi</i>	Buff-collared nightjar	Screened Out
<i>Caprimulgus vociferus</i>	Whip-poor-will	Screened Out
<i>Caracara cheriway</i>	Crested caracara	Screened Out
<i>Cardellina rubrifrons</i>	Red-faced warbler	Retained
<i>Carduelis lawrencei</i>	Lawrence's goldfinch	Screened Out
<i>Carduelis tristis</i>	American goldfinch	Screened Out
<i>Carex chihuahuensis</i>	A Sedge	Screened Out
<i>Carex curatorum</i>	Kaibab Sedge	Screened Out
<i>Carex elynoides</i>	Blackroot sedge	Screened Out
<i>Carex heteroneura</i>	Different-nerve sedge	Screened Out
<i>Carex leucodonta</i>	A Sedge	Screened Out
<i>Carex oreocharis</i>	A Sedge	Retained
<i>Carex specuicola</i>	Navajo Sedge	Screened Out
<i>Carex ultra</i>	Cochise Sedge	Screened Out
<i>Carex wootonii</i>	A Sedge	Screened Out
<i>Carpodacus cassinii</i>	Cassin's Finch	Screened Out
<i>Carpodacus purpureus</i>	Purple finch	Screened Out
<i>Castela emoryi</i>	Crucifixion Thorn	Screened Out
<i>Castilleja integra var. gloriosa</i>	Wholeleaf Indian-paintbrush	Screened Out
<i>Castilleja kaibabensis</i>	Kaibab Indian-paintbrush	Retained
<i>Castilleja nervata</i>	Trans-Pecos Indian Paintbrush	Screened Out
<i>Castor canadensis</i>	Beaver	Screened Out
<i>Catharus fuscescens</i>	Veery	Screened Out
<i>Catharus ustulatus</i>	Swainson's thrush	Screened Out
<i>Catocala frederici</i>	An Underwing Moth	Screened Out
<i>Catostomus clarki</i>	Desert sucker	Screened Out
<i>Catostomus discobolus</i>	Bluehead sucker	Screened Out
<i>Catostomus discobolus jarrovii</i>	Zuni Bluehead Sucker	Screened Out
<i>Catostomus insignis</i>	Sonora Sucker	Screened Out
<i>Catostomus latipinnis</i>	Flannelmouth sucker	Screened Out

Scientific Name	Common Name	Screening
<i>Catostomus plebeius</i>	Rio Grande Sucker	Screened Out
<i>Catostomus sp. 3</i>	Little Colorado Sucker	Screened Out
<i>Centaurea americana</i>	American star-thistle	Screened Out
<i>Centrocercus minimus</i>	Gunnison sage-grouse	Screened Out
<i>Centrocercus urophasianus</i>	Greater sage-grouse	Screened Out
<i>Ceratopsyche venada</i>	A Caddisfly	Screened Out
<i>Cercyonis meadii alamosa</i>	Alamosa Satyr	Screened Out
<i>Cercyonis oetus</i>	Small wood nymph	Screened Out
<i>Cervus elaphus</i>	Elk	Screened Out
<i>Ceryle alcyon</i>	Belted kingfisher	Screened Out
<i>Chaetodipus hispidus</i>	Hispid pocket mouse	Screened Out
<i>Chaetodipus intermedius</i>	Rock pocket mouse	Screened Out
<i>Chamaesyce platysperma</i>	Flatseed Spurge	Screened Out
<i>Charadrius alexandrinus</i>	Snowy plover	Screened Out
<i>Charadrius alexandrinus nivosus</i>	Western Snowy Plover	Screened Out
<i>Charadrius montanus</i>	Mountain plover	Screened Out
<i>Charina trivirgata</i>	Rosy boa	Screened Out
<i>Charina trivirgata gracia</i>	Desert Rosy Boa	Screened Out
<i>Charina trivirgata trivirgata</i>	Mexican Rosy Boa	Screened Out
<i>Cheilanthes arizonica</i>	Arizona lipfern	Screened Out
<i>Cheilanthes yavapensis</i>	Yavapai Lip Fern	Screened Out
<i>Chen caerulescens</i>	Snow goose	Screened Out
<i>Chen rossii</i>	Ross' goose	Screened Out
<i>Chenopodium incanum var. occidentale</i>		Screened Out
<i>Cheumatopsyche gelita</i>	A caddisfly	Screened Out
<i>Chimarra adella</i>	A Caddisfly	Screened Out
<i>Chimarra primula</i>	A Caddisfly	Screened Out
<i>Chimarra ridleyi</i>	A Caddisfly	Screened Out
<i>Chimarra schiza</i>	A caddisfly	Screened Out
<i>Chionactis occipitalis klauberi</i>	Tucson Shovel-nose Snake	Screened Out
<i>Chionactis parastrotris</i>	Sonoran Shovel-nosed Snake	Screened Out
<i>Chionactis parastrotris organica</i>	Organ Pipe Shovel-nosed Snake	Screened Out
<i>Chitrellina chiricahuae</i>	A Cave Obligate Pseudoscorpion	Screened Out
<i>Chloris virgata</i>	Feather fingergrass	Screened Out
<i>Chloroceryle americana</i>	Green kingfisher	Screened Out
<i>Chlorostyryon simaethis</i>	Silver-banded hairstreak	Screened Out
<i>Chlosyne acastus neumogeni</i>	Neumogen's Checkerspot	Screened Out
<i>Chlosyne definitiva</i>	Definite Patch	Screened Out
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	Screened Out
<i>Choisya dumosa var. mollis</i>	Soft Mexican-orange	Screened Out
<i>Chrysemys picta</i>	Northern painted turtle	Screened Out
<i>Chrysemys picta bellii</i>	Western painted turtle	Screened Out
<i>Chrysothamnus molestus</i>	Disturbed (Tusayan) rabbitbrush	Retained
<i>Chrysothamnus viscidiflorus ssp. planifolius</i>		Screened Out
<i>Cicindela fulgoris erronea</i>	Glittering Tiger Beetle	Screened Out
<i>Cicindela hirticollis coloradula</i>	Hairy-necked Tiger Beetle	Screened Out
<i>Cicindela hirticollis corpuscula</i>	Hairy-necked Tiger Beetle	Screened Out

Scientific Name	Common Name	Screening
<i>Cicindela hornii</i>	Horn's Tiger Beetle	Screened Out
<i>Cicindela lepida</i>	Ghost Tiger Beetle	Screened Out
<i>Cicindela nevadica citata</i>	Nevada Tiger Beetle	Screened Out
<i>Cicindela nevadica olmosa</i>	Los Olmos Tiger Beetle	Screened Out
<i>Cicindela nevadica tubensis</i>	Nevada Tiger Beetle	Screened Out
<i>Cicindela oregona maricopa</i>	Maricopa Tiger Beetle	Screened Out
<i>Cicindela praetextata</i>	Riparian Tiger Beetle	Screened Out
<i>Cicindela praetextata pallidofemora</i>	Riparian Tiger Beetle	Screened Out
<i>Cicindela praetextata praetextata</i>	Riparian Tiger Beetle	Screened Out
<i>Cicindela purpurea cimarrona</i>	Cow Path Tiger Beetle	Screened Out
<i>Cicindela terricola kaibabensis</i>	Kaibab Variable Tiger Beetle	Retained
<i>Cicindela trifasciata sigmoidea</i>	S-banded Tiger Beetle	Screened Out
<i>Cicuta maculata var. bolanderi</i>	Bolander Water-hemlock	Screened Out
<i>Cinclus mexicanus</i>	American dipper	Screened Out
<i>Circus cyaneus</i>	Northern harrier	Screened Out
<i>Cirsium mohavense</i>	Mohave Thistle	Screened Out
<i>Cirsium parryi</i>	Parry's thistle	Screened Out
<i>Cirsium parryi ssp. mogollonicum</i>	Mogollon Thistle	Screened Out
<i>Cirsium rothrockii</i>	Rose-color Thistle	Retained
<i>Cirsium rusbyi</i>	Rusby's Thistle	Screened Out
<i>Cirsium rydbergii</i>	Rydberg's Thistle	Screened Out
<i>Cirsium virginense</i>	Virgin Thistle	Screened Out
<i>Cirsium wheeleri</i>	Wheeler Thistle	Screened Out
<i>Cirsium wrightii</i>	Wright's Marsh Thistle	Screened Out
<i>Cistanthe parryi</i>		Screened Out
<i>Cisthene coronado</i>		Screened Out
<i>Cistothorus palustris</i>	Marsh wren	Screened Out
<i>Clangula hyemalis</i>	Long-tailed duck	Screened Out
<i>Clematis hirsutissima</i>	Arizona leatherflower, Clustered leatherflower	Screened Out
<i>Clematis hirsutissima var. arizonica</i>	Arizona Leatherflower	Screened Out
<i>Clematis hirsutissima var. hirsutissima</i>	Hairy clematis	Retained
<i>Clematis palmeri</i>	Palmer's Virgin's-bower	Screened Out
<i>Clematodes vanduzeei</i>	A Grasshopper	Screened Out
<i>Cleodes excogitatus</i>	A mayfly	Screened Out
<i>Cleome lutea var. jonesii</i>	Jones' Spider-flower	Retained
<i>Cleome multicaulis</i>	Many-stemmed Spider-flower	Screened Out
<i>Cleomella longipes</i>	Chiricahua Mountains Rhombo-pod	Screened Out
<i>Cleomella obtusifolia</i>	Bushy Rhombo-pod	Screened Out
<i>Clistronia maculata</i>	A Caddisfly	Screened Out
<i>Cloeodes excogitatus</i>	A mayfly	Screened Out
<i>Cloeodes macrolamellus</i>	A Mayfly	Screened Out
<i>Cloeodes peninsulus</i>	A Mayfly	Screened Out
<i>Coccothraustes vespertinus</i>	Evening grosbeak	Retained
<i>Coccyzus americanus occidentalis</i>	Western yellow-billed cuckoo	Screened Out
<i>Coeloglossum viride</i>	Longbract frog orchid	Screened Out
<i>Coenonympha tullia furcae</i>	Grand Canyon Ringlet	Screened Out
<i>Coenonympha tullia subfusca</i>	White Mountains Ringlet	Screened Out

Scientific Name	Common Name	Screening
<i>Colaptes chrysoides</i>	Gilded flicker	Screened Out
<i>Colias eurytheme</i>	Orange sulphur	Screened Out
<i>Colinus virginianus</i>	Northern bobwhite	Screened Out
<i>Colinus virginianus ridgewayi</i>	Masked Bobwhite	Screened Out
<i>Coluber constrictor mormon</i>	Western Racer	Screened Out
<i>Columba fasciata</i>	Band-tailed pigeon	Screened Out
<i>Columbina passerina</i>	Common ground dove	Screened Out
<i>Columbina talpacoti</i>	Ruddy ground-dove	Screened Out
<i>Conalcaea cantralli</i>	A Grasshopper	Screened Out
<i>Condalia globosa var. pubescens</i>	Spiny Abrojo	Screened Out
<i>Conioselinum mexicanum</i>	Mexican Hemlock-parsley	Screened Out
<i>Contopus cooperi</i>	Olive-sided flycatcher	Retained
<i>Contopus pertinax</i>	Greater pewee	Screened Out
<i>Coragyps atratus</i>	Black vulture	Screened Out
<i>Cordulegaster diadema</i>	Apache spiketail	Screened Out
<i>Cordylanthus laxiflorus</i>	Nodding Bird's-beak	Screened Out
<i>Cordylanthus nevinii</i>	Nevin Bird's-beak	Screened Out
<i>Cordylanthus wrightii ssp. kaibabensis</i>	Wright's Bird's-beak	Retained
<i>Coreocarpus arizonicus</i>	Arizona Coreocarpus	Screened Out
<i>Coreopsis douglasii</i>	Douglas' Tickseed	Screened Out
<i>Corispermum welshii</i>	Welsh's Bugseed	Screened Out
<i>Corvus brachyrhynchos</i>	American crow	Screened Out
<i>Corvus corax</i>	Common raven	Screened Out
<i>Corynorhinus townsendii</i>	Townsend's big eared bat	Screened Out
<i>Corynorhinus townsendii pallescens</i>	Pale Townsend's Big-Eared Bat	Retained
<i>Coryphantha recurvata</i>	Recurved Corycactus	Screened Out
<i>Coryphantha scheeri var. robustispina</i>	Pima Pineapple Cactus	Screened Out
<i>Coryphantha scheeri var. scheeri</i>	Scheer's Pincushion Cactus	Screened Out
<i>Coursetia glabella</i>		Screened Out
<i>Crassula viridis</i>	Pricky-seed Pygmyweed	Screened Out
<i>Crataegus erythropoda</i>	Cerro Hawthorn	Screened Out
<i>Crataegus rivularis</i>	River hawthorne	Screened Out
<i>Crepis runcinata ssp. barberi</i>		Screened Out
<i>Crossosoma bigelovii var. bigelovii</i>		Screened Out
<i>Crossosoma bigelovii var. glaucum</i>		Screened Out
<i>Crotalus cerberus</i>	Arizona black rattlesnake	Retained
<i>Crotalus viridis</i>	Prairie rattlesnake	Screened Out
<i>Crotalus willardi</i>	Ridgenose rattlesnake	Screened Out
<i>Crotalus willardi obscurus</i>	New Mexico Ridgenose Rattlesnake	Screened Out
<i>Croton texensis var. utahensis</i>		Screened Out
<i>Croton wigginsii</i>	Wiggins' Croton	Screened Out
<i>Crotophaga sulcirostris</i>	Groove-billed ani	Screened Out
<i>Cryptantha abata</i>	Dent-nut Cat's-eye	Retained
<i>Cryptantha atwoodii</i>	Atwood's Cat's-eye	Screened Out
<i>Cryptantha cinerea</i>	James' cryptantha	Screened Out
<i>Cryptantha cinerea var. arenicola</i>		Screened Out
<i>Cryptantha dumetorum</i>	Bush-loving Cat's-eye	Screened Out
<i>Cryptantha ganderi</i>	Gander's Cryptantha	Screened Out

Scientific Name	Common Name	Screening
<i>Cryptantha holoptera</i>	Winged Cryptantha	Screened Out
<i>Cryptantha maritima</i> var. <i>maritima</i>		Screened Out
<i>Cryptantha maritima</i> var. <i>pilosa</i>		Screened Out
<i>Cryptantha muricata</i>	Pointed Cat's-eye	Screened Out
<i>Cryptantha muricata</i> var. <i>denticulata</i>		Screened Out
<i>Cryptantha nevadensis</i> var. <i>rigida</i>		Screened Out
<i>Cryptantha osterhoutii</i>	Osterhout Cat's-eye	Screened Out
<i>Cryptantha pterocarya</i> var. <i>stenoloba</i>		Screened Out
<i>Cryptantha semiglabra</i>	Pipe Springs Cryptantha	Screened Out
<i>Cryptantha tenuis</i>	Pretty Cat's-eye	Screened Out
<i>Culoptila kimminsi</i>	A Caddisfly	Screened Out
<i>Culoptila moselyi</i>	A Caddisfly	Screened Out
<i>Cuscuta dentatasquamata</i>	Los Pinitos Dodder	Screened Out
<i>Cuscuta erosa</i>	Sonoran Desert Dodder	Screened Out
<i>Cuscuta indecora</i> var. <i>indecora</i>	Bigseed Alfalfa Dodder	Screened Out
<i>Cuscuta mitriformis</i>	Cochise Dodder	Screened Out
<i>Cuscuta odontolepis</i>	Santa Rita Dodder	Screened Out
<i>Cuscuta tuberculata</i>	Tubercle Dodder	Screened Out
<i>Cycladenia humilis</i>	Sacramento Cycladenis	Screened Out
<i>Cycladenia humilis</i> var. <i>jonesii</i>	Jones Cycladenia	Screened Out
<i>Cygnus buccinator</i>	Trumpeter swan	Screened Out
<i>Cygnus columbianus</i>	Tundra swan	Screened Out
<i>Cylloepus parkeri</i>	Parker's Cylloepus Riffle Beetle	Screened Out
<i>Cymbiodyta arizonica</i>	Arizona Cymbiodytan Water Scavenger Beetle	Screened Out
<i>Cymopterus beckii</i>	Pinnate Spring-parsley	Screened Out
<i>Cymopterus constancei</i>	Constance's Spring-parsley	Screened Out
<i>Cymopterus megacephalus</i>	Large-leaf Spring-parsley	Screened Out
<i>Cynanchum arizonicum</i>	Arizona Swallow-wort	Screened Out
<i>Cynanchum wigginsii</i>	Narrow-leaf or Wiggins Swallow-wort	Screened Out
<i>Cynanthus latirostris</i>	Broad billed hummingbird	Screened Out
<i>Cynomys gunnisoni</i>	Gunnison's prairie dog	Retained
<i>Cynomys ludovicianus</i>	Black-tailed Prairie Dog	Screened Out
<i>Cyprinella formosa</i>	Beautiful Shiner	Screened Out
<i>Cyprinella formosa mearnsi</i>	Yaqui shiner	Screened Out
<i>Cyprinodon eremus</i>	Quitobaquito Pupfish	Screened Out
<i>Cyprinodon macularius</i>	Desert Pupfish	Screened Out
<i>Cypripedium parviflorum</i>	lesser yellow lady's slipper	Screened Out
<i>Cypseloides niger</i>	Black swift	Screened Out
<i>Cyrtonyx montezumae mearnsi</i>	Montezuma quail	Screened Out
<i>Cystopteris utahensis</i>	Utah Bladder Fern	Retained
<i>Daihinibaenetes arizonensis</i>	Arizona Giant Sand Treader Cricket	Screened Out
<i>Dalea pulchra</i>	Santa Catalina Prairie-clover	Screened Out
<i>Dalea tentaculoides</i>	Gentry's Indigobush	Screened Out
<i>Dalea urceolata</i>		Screened Out
<i>Dalea versicolor</i> var. <i>sessilis</i>		Screened Out
<i>Danaus plexippus</i>	Monarch	Screened Out
<i>Delphinium andesicola</i>	Chiricahua Mountains Larkspur	Screened Out

Scientific Name	Common Name	Screening
<i>Delphinium geraniifolium</i>	Clark Valley Larkspur	Screened Out
<i>Delphinium parishii</i> ssp. <i>parishii</i>		Screened Out
<i>Delphinium scopulorum</i>	Rocky Mountain Larkspur	Screened Out
<i>Dendragapus obscurus</i>	Dusky (blue) grouse	Retained
<i>Dendrocygna autumnalis</i>	Black-bellied whistling duck	Screened Out
<i>Dendroica caerulescens</i>	Black-throated blue warbler	Screened Out
<i>Dendroica graciae</i>	Grace's warbler	Retained
<i>Dendroica nigrescens</i>	Black-throated gray warbler	Retained
<i>Dendroica palmarum</i>	Palm warbler	Screened Out
<i>Dendroica pennsylvanica</i>	Chestnut sided warbler	Screened Out
<i>Dendroica townsendi</i>	Townsend's warbler	Screened Out
<i>Descurainia obtusa</i> ssp. <i>adenophora</i>		Screened Out
<i>Descurainia obtusa</i> ssp. <i>obtusa</i>		Screened Out
<i>Descurainia pinnata</i> ssp. <i>paysonii</i>		Screened Out
<i>Desmanthus covillei</i>	Coville's Bundle-flower	Screened Out
<i>Desmodium gramineum</i>	Narrow-leaf Tick-trefoil	Screened Out
<i>Desmodium metcalfei</i>	Metcalfe's ticktrefoil	Screened Out
<i>Desmodium psilocarpum</i>	Santa Cruz Tick-trefoil	Screened Out
<i>Desmodium scopulorum</i>	Sonoran Tick-trefoil	Screened Out
<i>Dicoria canescens</i> ssp. <i>canescens</i>		Screened Out
<i>Dicoria canescens</i> ssp. <i>brandegeei</i>	Brandegeee Dicoria	Screened Out
<i>Dicoria canescens</i> ssp. <i>clarkiae</i>		Screened Out
<i>Dicoria canescens</i> ssp. <i>hispidula</i>		Screened Out
<i>Didelphis virginiana</i>	Virginia opossum	Screened Out
<i>Dipodomys microps celsus</i>	Chisel-toothed Kangaroo Rat	Screened Out
<i>Dipodomys microps leucotis</i>	House Rock Valley chisel-toothed kangaroo rat	Retained
<i>Discus shimekii cockerelli</i>	Cockerell's Striate Disc (Snail)	Screened Out
<i>Dithyrea californica</i>	California Wild-mercury	Screened Out
<i>Dodecatheon alpinum</i>	Alpine Shooting-star	Screened Out
<i>Dodecatheon alpinum</i> ssp. <i>majus</i>		Screened Out
<i>Dolichonyx oryzivorous</i>	Bobolink	Screened Out
<i>Draba asprella</i>	Rough Whitlow-grass	Screened Out
<i>Draba asprella</i> var. <i>asprella</i>	Rough Whitlow-grass	Retained
<i>Draba asprella</i> var. <i>kaibabensis</i>	Rough Whitlow-grass	Retained
<i>Draba asprella</i> var. <i>stelligera</i>	Rough Whitlow-grass	Retained
<i>Draba cuneifolia</i> var. <i>sonorae</i>		Screened Out
<i>Draba helleriana</i> var. <i>bifurcata</i>		Screened Out
<i>Draba helleriana</i> var. <i>blumeri</i>		Screened Out
<i>Draba petrophila</i>	Rock Whitlow-grass	Screened Out
<i>Draba petrophila</i> var. <i>viridis</i>		Screened Out
<i>Draba rectifruca</i>	Mountain Whitlow-grass	Retained
<i>Draba spectabilis</i>	Showy Whitlow-grass	Screened Out
<i>Draba spectabilis</i> var. <i>spectabilis</i>		Screened Out
<i>Draba standleyi</i>	Standley's Whitlow-grass	Screened Out
<i>Drymaria effusa</i> var. <i>effusa</i>		Screened Out
<i>Drymaria viscosa</i>		Screened Out
<i>Dryopteris rossii</i>	Ros's Woodfern	Screened Out

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<i>Dumetella carolinensis</i>	Gray catbird	Screened Out
<i>Dythemis maya</i>	Mayan Setwing	Screened Out
<i>Echinocactus horizonthalonius</i> var. <i>nicholii</i>	Nichol's Turk's-head Cactus	Screened Out
<i>Echinocactus polycephalus</i>	Cotton-top Cactus	Screened Out
<i>Echinocactus polycephalus</i> var. <i>polycephalus</i>		Screened Out
<i>Echinocactus polycephalus</i> var. <i>xeranthemoides</i>		Screened Out
<i>Echinocereus coccineus</i> var. <i>arizonicus</i>	Arizona Hedgehog Cactus	Screened Out
<i>Echinocereus engelmannii</i> var. <i>chrysoctrus</i>		Screened Out
<i>Echinocereus engelmannii</i> var. <i>variegatus</i>	Engelmann's Hedgehog Cactus	Screened Out
<i>Egretta thula</i>	Snowy egret	Screened Out
<i>Egretta tricolor</i>	Tricolored heron	Screened Out
<i>Elanus leucurus</i>	White-tailed kite	Screened Out
<i>Eleutherodactylus augusti</i>	Barking frog	Screened Out
<i>Emesis ares</i>	Ares metalmark	Screened Out
<i>Emesis zela</i>	Zela metalmark	Screened Out
<i>Empidonax fulvifrons</i>	Buff-breasted flycatcher	Screened Out
<i>Empidonax fulvifrons pygmaeus</i>	Northern buff-breasted flycatcher	Screened Out
<i>Empidonax hammondi</i>	Hammond's flycatcher	Screened Out
<i>Empidonax occidentalis</i>	Cordilleran flycatcher	Screened Out
<i>Empidonax traillii extimus</i>	Southwestern willow flycatcher	Screened Out
<i>Empidonax wrightii</i>	Gray flycatcher	Screened Out
<i>Enallagma semicirculare</i>	Claw-tipped Bluet	Screened Out
<i>Encelia virginensis</i>	Virgin River Brittlebush	Screened Out
<i>Enceliopsis argophylla</i>	Silver-leaf Sunray	Screened Out
<i>Entosthodon rubiginosus</i>		Screened Out
<i>Eocyclus concavus</i>	Swaybacked Clam Shrimp	Screened Out
<i>Epargyreus clarus</i>	Silver-spotted skipper	Screened Out
<i>Ephedra californica</i>	California Mormon-tea	Screened Out
<i>Ephedra fasciculata</i>	Nevada Mormon-tea	Screened Out
<i>Ephedra funerea</i>	Death Valley Mormon-tea	Screened Out
<i>Epilobium foliosum</i>	California willowherb	Screened Out
<i>Epilobium lactiflorum</i>	milkflower willowherb	Screened Out
<i>Epilobium oregonense</i>	Oregon willowherb	Screened Out
<i>Epipactis gigantea</i>	Giant Helleborine	Screened Out
<i>Epixiphium wislizeni</i>	Wislizenus' Snapdragon	Screened Out
<i>Eremarionta rowelli</i>	Eastern Desertsnailed	Screened Out
<i>Eremocrinum albomarginatum</i>	Intermountain False-wheatgrass	Screened Out
<i>Eriastrum eremicum</i> ssp. <i>yageri</i>		Screened Out
<i>Ericameria cervina</i>	Deer Golden-weed	Screened Out
<i>Ericameria nauseosa</i> var. <i>nitida</i>	Rubber Rabbitbrush	Screened Out
<i>Ericameria watsonii</i>	Watson's Golden-weed	Screened Out
<i>Erigeron anchana</i>		Screened Out
<i>Erigeron arisolius</i>		Screened Out
<i>Erigeron arizonicus</i>	Arizona Fleabane	Screened Out

Scientific Name	Common Name	Screening
<i>Erigeron compactus</i>	Mound Daisy	Screened Out
<i>Erigeron heliographis</i>		Screened Out
<i>Erigeron kuschei</i>	A Fleabane	Screened Out
<i>Erigeron lemmonii</i>	Lemmon's Fleabane	Screened Out
<i>Erigeron oxyphyllus</i>	Wand-like Fleabane	Screened Out
<i>Erigeron piscaticus</i>	Fish Creek Fleabane	Screened Out
<i>Erigeron pringlei</i>	Pringle's Fleabane	Screened Out
<i>Erigeron rhizomatus</i>	Thizome Fleabane	Screened Out
<i>Erigeron saxatilis</i>	Cliff Fleabane	Retained
<i>Erigeron scopulinus</i>	Winn Falls Fleabane	Screened Out
<i>Erigeron sivinskii</i>	Sivinski's Fleabane	Screened Out
<i>Erigeron utahensis</i> var. <i>sparsifolius</i>	Utah Fleabane	Screened Out
<i>Eriogonum arizonicum</i>	A Wild buckwheat	Screened Out
<i>Eriogonum corymbosum</i> var. <i>glutinosum</i>	Wild Buckwheat	Retained
<i>Eriogonum darrovii</i>	Darrow's Buckwheat	Retained
<i>Eriogonum ericifolium</i>	Yavapai Wild Buckwheat	Screened Out
<i>Eriogonum ericifolium</i> var. <i>ericifolium</i>	Heathleaf Wild Buckwheat	Screened Out
<i>Eriogonum ericifolium</i> var. <i>pulchrum</i>	Yavapai wild buckwheat	Retained
<i>Eriogonum heermannii</i> var. <i>apachense</i>	Apache Wild Buckwheat	Screened Out
<i>Eriogonum heermannii</i> var. <i>argense</i>	Heerman's Wild Buckwheat	Screened Out
<i>Eriogonum heermannii</i> var. <i>floccosum</i>	Clark Mountain Wild Buckwheat	Screened Out
<i>Eriogonum heermannii</i> var. <i>subspinosum</i>		Screened Out
<i>Eriogonum heermannii</i> var. <i>sulcatum</i>		Screened Out
<i>Eriogonum insigne</i>	A Wild buckwheat	Screened Out
<i>Eriogonum jonesii</i>	Jones' Wild Buckwheat	Retained
<i>Eriogonum leptocladon</i> var. <i>papiliunculi</i>	Dune Buckwheat	Screened Out
<i>Eriogonum leptophyllum</i>	Slenderleaf Buckwheat	Screened Out
<i>Eriogonum mortonianum</i>	Morton Wild Buckwheat	Retained
<i>Eriogonum pharnaceoides</i> var. <i>cervinum</i>	Wire-stemmed Wild buckwheat	Screened Out
<i>Eriogonum plumatella</i>	Flat-topped Wild buckwheat	Screened Out
<i>Eriogonum ripleyi</i>	Ripley's Wild buckwheat	Screened Out
<i>Eriogonum subreniforme</i>	A Wild buckwheat	Screened Out
<i>Eriogonum thompsoniae</i> var. <i>albiflorum</i>	White-flow Thompson Wild Buckwheat	Screened Out
<i>Eriogonum thompsoniae</i> var. <i>atwoodii</i>	Atwood's Wild Buckwheat	Retained
<i>Eriogonum viscidulum</i>	Sticky Buckwheat	Screened Out
<i>Eriogonum wrightii</i> var. <i>pringlei</i>		Screened Out
<i>Eriogonum zionis</i> var. <i>coccineum</i>	A Wild-buckwheat	Screened Out
<i>Eriogonum zionis</i> var. <i>zionis</i>	A Zion Wild Buckwheat	Screened Out
<i>Eriophyllum multicaule</i>	Many-stem Woolly-sunflower	Screened Out
<i>Errazurizia rotundata</i>	Round Dunebroom	Screened Out
<i>Eryngium sparganophyllum</i>	Arizona Eryngo	Screened Out
<i>Escobaria orcuttii</i>	Orcutt's Foxtail Cactus	Screened Out
<i>Escobaria robbinsiorum</i>	Cochise Pincushion Cactus	Screened Out
<i>Escobaria vivipara</i> var. <i>bisbeeana</i>	Bisbee Pincushion Cactus	Screened Out
<i>Escobaria vivipara</i> var. <i>buoflama</i>	Yavapai Beehive Cactus	Screened Out
<i>Escobaria vivipara</i> var. <i>deserti</i>	Spinystar	Screened Out
<i>Escobaria vivipara</i> var. <i>kaibabensis</i>	Spinystar	Retained
<i>Escobaria vivipara</i> var. <i>rosea</i>	Viviparous Foxtail Cactus	Screened Out

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<i>Euchaetes fusca</i>		Screened Out
<i>Euchaetes gigantea</i>		Screened Out
<i>Eucnide rupestris</i>	Rock Stingbush	Screened Out
<i>Eucrypta chrysanthemifolia</i> var. <i>bipinnatifida</i>	Spotted Hideseed	Screened Out
<i>Euderma maculatum</i>	Spotted bat	Retained
<i>Eugenes fulgens</i>	Magnificent Hummingbird	Screened Out
<i>Euhyparpax rosea</i>	A notodontid moth	Screened Out
<i>Eumeces callicephalus</i>	Mountain skink	Screened Out
<i>Eumeces gilberti arizonensis</i>	Arizona Skink	Screened Out
<i>Eumeces skiltonianus</i>	Western skink	Retained
<i>Eumops perotis</i>	Greater bonneted bat	Screened Out
<i>Eumops perotis californicus</i>	Greater Western Mastiff Bat	Retained
<i>Eumops underwoodi</i>	Underwood's bonneted bat	Screened Out
<i>Eumorsea balli</i>	Ball's Monkey Grasshopper	Screened Out
<i>Eumorsea pinaleno</i>	Pinaleno Monkey Grasshopper	Screened Out
<i>Eupatorium bigelovii</i>	Bigelow Thoroughwort	Screened Out
<i>Euphilotes baueri</i>	Bauer's Blue	Screened Out
<i>Euphilotes bernardino</i>	Bernadino Blue	Screened Out
<i>Euphilotes mojave</i>	Mojave Blue	Screened Out
<i>Euphilotes mojave virginensis</i>	Mojave Blue	Screened Out
<i>Euphilotes pallenscens</i>	Pallid Blue	Screened Out
<i>Euphilotes rita</i>	Rita Dotted-blue	Screened Out
<i>Euphilotes rita emmeli</i>	Emmel's Blue	Screened Out
<i>Euphilotes spaldingi</i>	Spalding's Blue	Screened Out
<i>Euphorbia aaron-rossii</i>		Screened Out
<i>Euphorbia palmeri</i> var. <i>subpubens</i>		Screened Out
<i>Euphydryas chalcedona chuskae</i>	Chalcedon Checkerspot	Screened Out
<i>Euphyes vestris</i>	Dun skipper	Screened Out
<i>Euproserpinus wiesti</i>	Wiest's Sphinx Moth	Screened Out
<i>Euptilotis neoxenus</i>	Eared quetzal	Screened Out
<i>Euptoieta claudia</i>	Variiegated fritillary	Screened Out
<i>Eurybia pulchra</i>		Screened Out
<i>Eutamias umbrinus</i>	Uinta Chipmunk	Screened Out
<i>Falco femoralis</i>	Aplomado flacon	Screened Out
<i>Falco femoralis septentrionalis</i>	Northern aplomado falcon	Screened Out
<i>Falco mexicanus</i>	Prairie falcon	Screened Out
<i>Falco peregrinus anatum</i>	American peregrine falcon	Retained
<i>Fallceon eatoni</i>	A Mayfly	Screened Out
<i>Felis rufus</i>	Bobcat	Screened Out
<i>Fendlerella utahensis</i> var. <i>cymosa</i>		Screened Out
<i>Ferocactus cylindraceus</i> var. <i>eastwoodiae</i>	Eastwood's Barrel-cactus	Screened Out
<i>Flaveria macdougalii</i>	Grand Canyon Flaveria	Screened Out
<i>Frangula betulifolia</i> ssp. <i>obovata</i>	obovate buckthorn	Screened Out
<i>Frangula betulifolia</i> ssp. <i>obovata</i>		Screened Out
<i>Fraxinum gooddingii</i>	Goodding's Ash	Screened Out
<i>Fraxinum papillosa</i>	Chihuahua Ash	Screened Out
<i>Fremontodendron californicum</i>	California flannelbush	Screened Out

Scientific Name	Common Name	Screening
<i>Fulica americana</i>	Coot	Screened Out
<i>Gaillardia arizonica</i> var. <i>pringlei</i>		Screened Out
<i>Gaillardia multiceps</i>	Onion Blanket-flower	Screened Out
<i>Gaillardia multiceps</i> var. <i>multiceps</i>		Screened Out
<i>Gaillardia parryi</i>	Parry's Blanket-flower	Retained
<i>Galactia wrightii</i> var. <i>mollissima</i>		Screened Out
<i>Galium collomiae</i>	Fossil Creek Bedstraw	Screened Out
<i>Galium fendleri</i>	Fendler's bedstraw	Screened Out
<i>Galium wrightii</i>	Wright Bedstraw	Screened Out
<i>Gallinago delicata</i>	Wilson's snipe	Screened Out
<i>Gallinula chloropus</i>	Common moorhen	Screened Out
<i>Gardinia anopla</i>		Screened Out
<i>Garrya flavescens</i>	Ashy Silktassel	Screened Out
<i>Gastrocopta ashmuni</i>	Sluice Snaggletooth	Screened Out
<i>Gastrocopta cochisensis</i>	Apache Snaggletooth	Screened Out
<i>Gastrocopta dalliana</i>	Shortneck Snaggletooth	Screened Out
<i>Gastrocopta prototypus</i>	Sonoran Snaggletooth	Screened Out
<i>Gastrocopta quadridens</i>	Cross Snaggletooth	Screened Out
<i>Gastrophryne olivacea</i>	Great Plains narrow-mouthed toad	Screened Out
<i>Gavia immer</i>	Common loon	Screened Out
<i>Gavia pacifica</i>	Pacific loon	Screened Out
<i>Gentiana fremontii</i>	Moss gentian	Screened Out
<i>Gentianella amarella</i> ssp. <i>wrightii</i>		Screened Out
<i>Gentianella microcalyx</i>	Chiricahua Mountains Dwarf-gentian	Screened Out
<i>Gentianella tenella</i>	Dane's dwarf gentian	Screened Out
<i>Gentianella wislizeni</i>	Chiricahua Gentian	Screened Out
<i>Gentianopsis barbellata</i>	Bearded gentian	Screened Out
<i>Geranium lentum</i>	Mogollon Crane's-bill	Screened Out
<i>Geranium wislizeni</i>	Huachuca Crane's-bill	Screened Out
<i>Gila cypha</i>	Humpback Chub	Screened Out
<i>Gila ditaenia</i>	Sonora Chub	Screened Out
<i>Gila elegans</i>	Bonytail	Screened Out
<i>Gila intermedia</i>	Gila Chub	Screened Out
<i>Gila nigra</i>	Headwater Chub	Screened Out
<i>Gila purpurea</i>	Yaqui Chub	Screened Out
<i>Gila robusta</i>	Roundtail Chub	Screened Out
<i>Gila seminuda</i>	Virgin River Chub	Screened Out
<i>Gilia hutchinsifolia</i>	Hutchins' Gilia	Screened Out
<i>Gilia latifolia</i> var. <i>latifolia</i>		Screened Out
<i>Gilia minor</i>	Little Gilia	Screened Out
<i>Gilia triodon</i>		Screened Out
<i>Glandularia chiricahensis</i>	Chiricahua Vervain	Screened Out
<i>Glaucidium brasilianum cactorum</i>	Cactus ferruginous pygmy-owl	Screened Out
<i>Glaucopsyche lygdamus</i>	Silvery blue	Screened Out
<i>Glaucopsyche lygdamus minipunctum</i>	Silvery Blue	Screened Out
<i>Glaucopsyche piasus</i>	Arrowhead blue	Screened Out
<i>Glaucidium brasilianum</i>	Ferruginous pygmy-owl	Screened Out
<i>Gnaphalium arizonicum</i>	Arizona Cudweed	Screened Out

Scientific Name	Common Name	Screening
<i>Gnaphalium exilifolium</i>		Screened Out
<i>Goodyera repens</i>	Lesser rattlesnake plantain	Screened Out
<i>Gopherus agassizii pop. 1</i>	Desert Tortoise - Mohave Population	Screened Out
<i>Grammia allectans</i>		Screened Out
<i>Graptopetalum bartramii</i>	Patagonia Mountain Leather-petal	Screened Out
<i>Grindelia laciniata</i>	Cut-leaf Gumweed	Screened Out
<i>Grus canadensis</i>	Sandhill crane	Screened Out
<i>Gumaga nigricula</i>	A Bushtailed Caddisfly	Screened Out
<i>Gutierrezia wrightii</i>	Wright's snakeweed	Screened Out
<i>Gyalopion quadrangulare</i>	Thornscrub hook-nosed snake	Screened Out
<i>Gymnocarpium dryopteris</i>	Northern oak fern	Screened Out
<i>Gymnogyps californianus</i>	California condor	Retained
<i>Gymnorhinus cyanocephalus</i>	Pinyon jay	Retained
<i>Hackelia besseyi</i>	Bessey Stickseed	Screened Out
<i>Hackelia ursina</i>	Chihuahuan Stickseed	Screened Out
<i>Hackelia ursina var. diaboli</i>		Screened Out
<i>Hackelia ursina var. pustulata</i>		Screened Out
<i>Hackelia ursina var. ursina</i>		Screened Out
<i>Haliaeetus leucocephalus</i>	Bald eagle	Retained
<i>Haliaeetus leucocephalus pop. 3</i>	Bald eagle, Sonoran Desert population	Retained
<i>Harpagonella palmeri var. arizonica</i>		Screened Out
<i>Harpagonella palmeri var. palmeri</i>	Palmer Grappling Hook	Screened Out
<i>Hebrus longivillus</i>	a velvet water bug	Screened Out
<i>Hedeoma dentata</i>	Arizona False-penny-royal	Screened Out
<i>Hedeoma diffusa</i>	Flagstaff Pennyroyal	Retained
<i>Hedeoma hyssopifolia</i>		Screened Out
<i>Hedeoma nana ssp. macrocalyx</i>		Screened Out
<i>Hedeoma oblongifolia</i>		Screened Out
<i>Helenium arizonicum</i>	Arizona Sneezeweed	Screened Out
<i>Helianthella microcephala</i>	Small-head Rockrose	Screened Out
<i>Helianthella parryi</i>	Parry's dwarf-sunflower	Screened Out
<i>Helianthus anomalus</i>	Western Sunflower	Screened Out
<i>Helianthus arizonensis</i>	Arizona sunflower	Retained
<i>Helianthus niveus ssp. tephrodes</i>	Algodones Dunes Sunflower	Screened Out
<i>Helioomeris multiflora var. brevifolia</i>		Screened Out
<i>Heliopterus ericetorum</i>	Northern white skipper	Screened Out
<i>Heliotropium convolvulaceum var. californicum</i>		Screened Out
<i>Heloderma suspectum cinctum</i>	Gila monster (banded)	Screened Out
<i>Heloderma suspectum suspectum</i>	Gila monster (reticulate)	Screened Out
<i>Hemiargus isola</i>	Reakirt's blue	Screened Out
<i>Hemileuca griffini</i>	Griffin's Sheepmoth	Screened Out
<i>Hemileuca grotei diana</i>	A Buckmoth	Screened Out
<i>Hemileuca hera magnifica</i>	Magnificent Sheepmoth	Screened Out
<i>Hemileuca hualapai</i>	Hualapai Buckmoth	Screened Out
<i>Hemileuca stonei</i>	Stone's Buckmoth	Screened Out
<i>Hermannia pauciflora</i>	Santa Catalina Burstwort	Screened Out
<i>Hesperia colorado susanae</i>		Screened Out

Scientific Name	Common Name	Screening
<i>Hesperia lindseyi</i>	Lindsey's Skipper	Screened Out
<i>Hesperia woodgatei</i>	Apache Skipper	Screened Out
<i>Hesperocallis undulata</i>	Desert Lily	Screened Out
<i>Hesperochiron pumilus</i>	Dwarf hesperochiron	Screened Out
<i>Hesperodoria salicina</i>	Willow Glow-weed	Screened Out
<i>Hesperopsis graciellae</i>	Mcneill's Saltbush Sootywing	Screened Out
<i>Heteranthera peduncularis</i>		Screened Out
<i>Heterelmis stephani</i>	Stephan's Heterelmis Riffle Beetle	Screened Out
<i>Heterocampa amanda</i>	A notodontid moth	Screened Out
<i>Heterocampa averta</i>	A Notodontid Moth	Screened Out
<i>Heterocampa incongrua</i>	A notodontid moth	Screened Out
<i>Heterocampa ruficornis</i>	A Notodontid Moth	Screened Out
<i>Heterocampa sp. 1 nr. amanda</i>	A notodontid moth	Screened Out
<i>Heterodermia appalachensis</i>		Screened Out
<i>Heterotheca rutteri</i>	Rutter's Golden-aster	Screened Out
<i>Heterotheca zionensis</i>	Zion Goldenaster	Screened Out
<i>Heuchera eastwoodiae</i>	Senator Mine Alum-root	Screened Out
<i>Heuchera glomerulata</i>	Chiricahua Mountain Alum-root	Screened Out
<i>Heuchera novomexicana</i>	New Mexico Alum-root	Retained
<i>Heuchera parvifolia</i> var. <i>arizonica</i>		Screened Out
<i>Heuchera sanguinea</i> var. <i>pulchra</i>		Screened Out
<i>Heuchera sanguinea</i> var. <i>sanguinea</i>		Screened Out
<i>Hexalectris revoluta</i>	Chisos Coral-root	Screened Out
<i>Hexalectris spicata</i> var. <i>arizonica</i>		Screened Out
<i>Hexalectris warnockii</i>	Purple-spike Coralroot	Screened Out
<i>Hieracium carneum</i>	Smooth Hawkweed	Screened Out
<i>Hieracium fendleri</i> var. <i>mogollense</i>	Yellow Hawkweed	Screened Out
<i>Hieracium fendleri</i> vari. <i>discolor</i>		Screened Out
<i>Hieracium lemmonii</i>	Lemmon's Hawkweed	Screened Out
<i>Hieracium pringlei</i>	Pringle's Hawkweed	Screened Out
<i>Hieracium rusbyi</i>	Ruby's Hawkweed	Screened Out
<i>Himantopus mexicanus</i>	Black-necked stilt	Screened Out
<i>Holospira arizonensis</i>	Arizona Holospira	Screened Out
<i>Holospira campestris</i>		Screened Out
<i>Holospira chiricahuana</i>	Cave Creek Holospira	Screened Out
<i>Holospira cionella</i>		Screened Out
<i>Holospira danielsi</i>	Strongrib Holospira	Screened Out
<i>Holospira ferrissi</i>	Stock Holospira	Screened Out
<i>Holospira millestriata</i>		Screened Out
<i>Holospira montivaga</i>	Vagabond Holospira	Screened Out
<i>Holospira sherbrookei</i>	Silver Creek Holospira	Screened Out
<i>Holospira tantalus</i>	Teasing Holospira	Screened Out
<i>Holospira whetstonensis</i>	Whetstone Holospira	Screened Out
<i>Homoleptohyphes quercus</i>	A mayfly	Screened Out
<i>Hordeum arizonicum</i>	Arizona Barley	Screened Out
<i>Hulechius marroni carolus</i>	Marron's San Carlos Riffle Beetle	Screened Out
<i>Hulsea heterochroma</i>	Red-ray Hulsea	Screened Out
<i>Hyla arenicolor</i>	Canyon Treefrog	Screened Out

Scientific Name	Common Name	Screening
<i>Hyla wrightorum</i>	Arizona (mountain) treefrog	Retained
<i>Hylocharis leucotis</i>	White-eared hummingbird	Screened Out
<i>Hymenopappus filifolius</i> var. <i>tomentosus</i>	Cobweb Hymenopappus	Screened Out
<i>Hymenopappus mexicanus</i>	Mexican Woolly-white	Screened Out
<i>Hymenothrix loomisii</i>	Loomis' Hymenothrix	Screened Out
<i>Hymenoxys ambigens</i>	Pinaleno Mountains Rubberweed	Screened Out
<i>Hymenoxys ambigens</i> var. <i>ambigens</i>	Pinaleno Mountains Rubberweed	Screened Out
<i>Hymenoxys ambigens</i> var. <i>floribunda</i>		Screened Out
<i>Hymenoxys bigelovii</i>		Screened Out
<i>Hymenoxys helenioides</i>	Intermountain Bitterweed	Screened Out
<i>Hymenoxys jamesii</i>	James' Rubberweed	Screened Out
<i>Hymenoxys lemmonii</i>	Lemmon's Bitter-weed	Screened Out
<i>Hymenoxys quinquesquamata</i>	Rincon Bitter-weed	Screened Out
<i>Hymenoxys rusbyi</i>	Ruby's Bitter-weed	Screened Out
<i>Hypaurotis crysalus intermedia</i>	Colorado Hairstreak	Screened Out
<i>Hypericum anagalloides</i>	Tinker's penny	Screened Out
<i>Icaricia icarioides</i>	Boisduval's blue	Screened Out
<i>Icaricia lupini</i>	Lupine blue	Screened Out
<i>Ictalurus pricei</i>	Yaqui Catfish	Screened Out
<i>Icteria virens</i>	Yellow-breasted Chat	Screened Out
<i>Icterus cucullatus</i>	Hooded oriole	Screened Out
<i>Ictinia mississippiensis</i>	Mississippi kite	Screened Out
<i>Idionycteris phyllotis</i>	Allen's Lappet-Browed Bat	Retained
<i>Iliamna grandiflora</i>	Large-flower Globe-mallow	Screened Out
<i>Imperata brevifolia</i>	California Satintail	Screened Out
<i>Inopsis funerea</i>	A tiger moth	Screened Out
<i>Ipomoea longifolia</i>	Pink-throat Morning-glory	Screened Out
<i>Ipomoea plummerae</i> var. <i>cuneifolia</i>		Screened Out
<i>Ipomoea tenuiloba</i> var. <i>lemmonii</i>	Lemmon's Morning-glory	Screened Out
<i>Ipomoea thurberi</i>	Thurber's Morning-glory	Screened Out
<i>Ipomopsis arizonica</i>		Screened Out
<i>Ipomopsis congest</i> ssp. <i>frutescens</i>	Shrub Gilia	Screened Out
<i>Ipomopsis macombii</i>	Macomb's Standing-cypress	Screened Out
<i>Ipomopsis tenuifolia</i>	Slenderleaf Ipomopsis	Screened Out
<i>Ipomopsis tenuituba</i> ssp. <i>latiloba</i>	Slendertube Skyrocket	Screened Out
<i>Isocoma tenuisecta</i>	Shrine Golden-weed	Screened Out
<i>Isoetes bolanderi</i>	Bollander's quillwort	Screened Out
<i>Ithytrichia mexicana</i>	A Caddisfly	Screened Out
<i>Ivesia arizonica</i>	Arizona Whitefeather	Retained
<i>Ivesia arizonica</i> var. <i>arizonica</i>	Arizona Whitefeather	Retained
<i>Ixobrychus exilis hesperis</i>	Western least bittern	Screened Out
<i>Ixoreus naevius</i>	Varied thrush	Screened Out
<i>Jatropha cardiophylla</i>	Sangre-de-cristo	Screened Out
<i>Junonia coenia</i>	Common buckeye	Screened Out
<i>Junonia genoveva nigrosuffusa</i>	Dark Peacock	Screened Out
<i>Kinosternon flavescens</i>	Yellow mud turtle	Screened Out
<i>Kinosternon sonoriense</i>	Sonora mud turtle	Screened Out
<i>Kinosternon sonoriense longifemorale</i>	Sonoyta Mud Turtle	Screened Out

Scientific Name	Common Name	Screening
<i>Laennecia eriophylla</i>	Cochise Marshell	Screened Out
<i>Lampropeltis getula nigrita</i>	Western Black Kingsnake	Screened Out
<i>Lampropeltis pyromelana infralabialis</i>	Utah Mountain Kingsnake	Retained
<i>Lampropeltis triangulum</i>	Milksnake	Retained
<i>Lanius excubitor</i>	Northern shrike	Screened Out
<i>Lanius ludovicianus</i>	Loggerhead shrike	Screened Out
<i>Larus argentatus</i>	Herring gull	Screened Out
<i>Larus heermanni</i>	Heermann's gull	Screened Out
<i>Lasionycteris noctivagans</i>	Silver haired bat	Screened Out
<i>Lasiurus blossevillii</i>	Western red bat	Screened Out
<i>Lasiurus xanthinus</i>	Western yellow bat	Screened Out
<i>Laterallus jamaicensis</i>	Black rail	Screened Out
<i>Laterallus jamaicensis coturniculus</i>	California black rail	Screened Out
<i>Lathyrus pauciflorus var. utahensis</i>	Utah Pea	Screened Out
<i>Lepidium alyssoides var. junceum</i>	Mesa Pepperwort	Screened Out
<i>Lepidium montanum var. glabrum</i>	Mountain Pepperweed	Retained
<i>Lepidomeda mollispinis</i>	Virgin Spinedace	Screened Out
<i>Lepidomeda mollispinis mollispinis</i>	Virgin River Spinedace	Screened Out
<i>Lepidomeda vittata</i>	Little Colorado Spinedace	Screened Out
<i>Lepidostoma acarolum</i>	A Caddisfly	Screened Out
<i>Lepidostoma knulli</i>	A Caddisfly	Screened Out
<i>Lepidostoma lacinatum</i>	A Caddisfly	Screened Out
<i>Leptochloa viscida</i>	Sticky Sprangle-top	Screened Out
<i>Leptogium rugosum</i>		Screened Out
<i>Leptonycteris yerbabuenae</i>	Lesser long-nosed bat	Screened Out
<i>Leptotes marina</i>	Marine blue	Screened Out
<i>Lesquerella arizonica</i>	Arizona Bladderpod	Retained
<i>Lesquerella cinerea</i>	Basin Bladder-pod	Screened Out
<i>Lesquerella gooddingii</i>	Goodding's Bladderpod	Screened Out
<i>Lesquerella kaibabensis</i>	Kaibab Bladder-pod	Retained
<i>Lesquerella pinetorum</i>	White Mountain Bladderpod	Screened Out
<i>Lessingia lemmonii</i>	Lemmon's Lessingia	Screened Out
<i>Leucanopsis perdentata</i>		Screened Out
<i>Leuronotina ritensis</i>	Lichen Grasshopper	Screened Out
<i>Lewisia rediviva</i>	Bitter root	Screened Out
<i>Leymus salinus ssp. mojavensis</i>	Mohave Wildrye	Screened Out
<i>Libellula composita</i>	Bleached Skimmer	Screened Out
<i>Libellula nodisticta</i>	Hoary skimmer	Retained
<i>Ligusticum porteri</i>	Porter Lovage	Screened Out
<i>Ligusticum porteri var. porteri</i>		Screened Out
<i>Lilaeopsis schaffneriana var. recurva</i>		Screened Out
<i>Lilium parryi</i>	Lemon Lily	Screened Out
<i>Limenitis archippus obsoleta</i>	Arizona Viceroy	Screened Out
<i>Limenitis weidemeyerii</i>	Weidemeyer's admiral	Screened Out
<i>Limnephilus acnestus</i>	A Caddisfly	Screened Out
<i>Limnephilus arizona</i>	A Caddisfly	Screened Out
<i>Limnephilus granti</i>	A Caddisfly	Screened Out
<i>Limnephilus rothi</i>	A Caddisfly	Screened Out

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<i>Limnephilus sp. 1</i>	A Caddisfly	Screened Out
<i>Limnephilus sperryi</i>	A Caddisfly	Screened Out
<i>Limosa fedoa</i>	Marbled godwit	Screened Out
<i>Linanthus jonesii</i>	Jones' Desert-gold	Screened Out
<i>Linnaea borealis</i>	Twinflower	Screened Out
<i>Listera convallarioides</i>	Broadlipped twayblade	Screened Out
<i>Lithospermum confine</i>	Arizona Gromwell	Screened Out
<i>Litodonta aonides</i>	A Notodontid Moth	Screened Out
<i>Litodonta contrasta</i>	A Notodontid Moth	Screened Out
<i>Litodonta sp. 1 nr. alpina</i>	A Notodontid Moth	Screened Out
<i>Lobelia fenestralis</i>	Fringeleaf lobelia	Screened Out
<i>Lobelia laxiflora var. angustifolia</i>	Mexican Lobelia	Screened Out
<i>Lomatium bicolor var. leptocarpum</i>	Wasatch Biscuitroot	Screened Out
<i>Lomatium mohavense ssp. mohavense</i>	Mojave Desertparsley	Screened Out
<i>Lomatium scabrum</i>	Rough Desert-parsley	Screened Out
<i>Lomatium scabrum var. tripinnatum</i>	Goodrich Rough Desertparsley	Screened Out
<i>Lontra canadensis</i>	North American river otter	Screened Out
<i>Lontra canadensis sonora</i>	Southwestern river otter	Screened Out
<i>Lophocampa mixta</i>		Screened Out
<i>Lophocampa pura</i>		Screened Out
<i>Lophodytes cucullatus</i>	Hooded merganser	Screened Out
<i>Lotus alamosanus</i>	Sonoran Trefoil	Screened Out
<i>Lotus mearnsii</i>	Mearns Birds-foot Trefoil	Screened Out
<i>Lotus mearnsii var. equisolensis</i>		Screened Out
<i>Lotus mearnsii var. mearnsii</i>	Mearns lotus	Retained
<i>Lupinus ammophilus</i>	Sand Lupine	Screened Out
<i>Lupinus caudatus</i>	Tailcup lupine	Screened Out
<i>Lupinus caudatus ssp. cutleri</i>	Cutler's Spurred Lupine	Screened Out
<i>Lupinus hillii</i>	Hill's Lupine	Screened Out
<i>Lupinus hillii var. arizonicus</i>	Hill's Lupine	Screened Out
<i>Lupinus hillii var. hillii</i>	Hill's Lupine	Screened Out
<i>Lupinus huachucanus</i>	Huachuca Mountain Lupine	Screened Out
<i>Lupinus kingii</i>	King's Lupine	Screened Out
<i>Lupinus kingii var. kingii</i>	King's Lupine	Screened Out
<i>Lupinus latifolius</i>	Broadleaf lupine	Screened Out
<i>Lupinus latifolius ssp. leucanthus</i>	Broadleaf Lupine	Screened Out
<i>Lupinus lemmonii</i>	Lemmon's Lupine	Screened Out
<i>Lupinus neomexicanus</i>	New Mexico Lupine	Screened Out
<i>Lupinus odoratus</i>	Mojave Lupine	Screened Out
<i>Lupinus sericeus ssp. huffmanii</i>	Silky Lupine	Screened Out
<i>Lupinus volutans</i>	Pinyon Lupine	Screened Out
<i>Lycaeides melissa</i>	Melissa blue	Screened Out
<i>Lycaena ferrisi</i>	Ferris's Copper	Screened Out
<i>Lycaena heteronea</i>	Blue copper	Screened Out
<i>Lycium andersonii var. deserticola</i>	Water Jacket	Screened Out
<i>Lycium berlandieri var. longistylum</i>	Berlandier's Wolfberry	Screened Out
<i>Lycium parishii</i>	Parish's Desert Thorn	Screened Out
<i>Lycomorpha fulgens</i>		Screened Out

Scientific Name	Common Name	Screening
<i>Lysimachia hybrida</i>	Lowland yellow loosestrife	Screened Out
<i>Mabrya acerifolia</i>	Maple-leaf Snapdragon	Screened Out
<i>Machaeranthera arida</i>	Arid Tansy-aster	Screened Out
<i>Machaeranthera bigelovii</i> var. <i>mucronata</i>	Bristle-tipped Aster	Screened Out
<i>Machaeranthera canescens</i> var. <i>ambigua</i>	Pinon Aster	Screened Out
<i>Machaeranthera carnosa</i>	Shrubby Alkali Aster	Screened Out
<i>Machaeranthera grindelioides</i>	Rayless tansy aster	Screened Out
<i>Machaeranthera grindelioides</i> var. <i>depressa</i>	Rayless Tansy Aster	Screened Out
<i>Machaeranthera pinnatifida</i> ssp. <i>gooddingii</i>	Rayless Tansy Aster	Screened Out
<i>Machaeranthera pinnatifida</i> var. <i>paradoxa</i>		Screened Out
<i>Macromeria viridiflora</i> var. <i>thurberi</i>	Giant-trumpets	Screened Out
<i>Macromeria viridiflora</i> var. <i>viridiflora</i>	Giant-trumpets	Retained
<i>Macrosiphonia brachysiphon</i>	Huachuca Rocktrumpet	Screened Out
<i>Macrothemis inacuta</i>	Straw-colored sylph	Screened Out
<i>Malacothrix sonora</i>	Sonoran Desert-dandelion	Screened Out
<i>Malacothrix stebbinsii</i>	Stebbins Desert-dandelion	Screened Out
<i>Malaxis porphyrea</i>	Cochise adder's-mouth orchid	Screened Out
<i>Mammillaria tetrancistra</i>	Southwestern Prickly-pear	Screened Out
<i>Mammillaria grahamii</i> var. <i>oliviae</i>	Olive Pincushion	Screened Out
<i>Mammillaria heyderi</i> var. <i>bullingtoniana</i>	Little Nipple Cactus	Screened Out
<i>Mammillaria heyderi</i> var. <i>macdougalii</i>	Macdougals Nipple Cactus	Screened Out
<i>Mammillaria heyderi</i> var. <i>meiacantha</i>		Screened Out
<i>Mammillaria mainiae</i>	Main's Nipple-cactus	Screened Out
<i>Mammillaria wrightii</i> var. <i>wrightii</i>	Wright Fishhook Cactus	Screened Out
<i>Mannia californica</i>		Screened Out
<i>Margaranthus solanaceus</i>	Netted globecherry	Screened Out
<i>Maricopella allynsmithi</i>	Squaw Park Talussnail	Screened Out
<i>Marilia nobscia</i>	A Caddisfly	Screened Out
<i>Matelea balbisii</i>	Balbis' Milkvine	Screened Out
<i>Meda fulgida</i>	Spikedace	Screened Out
<i>Megascops trichopsis</i>	Whiskered screech owl	Screened Out
<i>Megathymus ursus deserti</i>	Desert Yucca Borer	Screened Out
<i>Megathymus ursus ursus</i>	Ursine Giant Skipper	Screened Out
<i>Melampodium longicorne</i>	Arizona Blackfoot	Screened Out
<i>Melanerpes lewis</i>	Lewis's woodpecker	Retained
<i>Melanitta fusca</i>	White-winged scoter	Screened Out
<i>Melanitta perspicillata</i>	Surf scoter	Screened Out
<i>Melanoplus chiricahuae</i>	A Spur-throat Grasshopper	Screened Out
<i>Melanoplus desultorius</i>	Red Whiskers Grasshopper	Screened Out
<i>Melanoplus magdalenae</i>	A Spur-throat Grasshopper	Screened Out
<i>Melanoplus</i> sp. 21	Grasshopper	Screened Out
<i>Melanoplus</i> sp. 52	Grasshopper	Screened Out
<i>Melanoplus splendidus</i>	A Spur-throat Grasshopper	Screened Out
<i>Meleagris gallopavo merriami</i>	Merriam's wild turkey	Screened Out
<i>Mellanoplus pinaleno</i>	A Spur-throat Grasshopper	Screened Out
<i>Melospiza georgiana</i>	Swamp sparrow	Screened Out

Scientific Name	Common Name	Screening
<i>Melospiza lincolnii</i>	Lincoln's sparrow	Screened Out
<i>Mentzelia cronquistii</i>	Cronquist's Stickleaf	Screened Out
<i>Mentzelia desertorum</i>	Desert Stickleaf	Screened Out
<i>Mentzelia eremophila</i>	Pinon Blazing Star	Screened Out
<i>Mentzelia jonesii</i>	Jones' Stickleaf	Screened Out
<i>Mentzelia oreophila</i>	Argus Stickleaf	Screened Out
<i>Menyanthes trifoliata</i>	Buckbean	Screened Out
<i>Mertensia macdougallii</i>	Macdougall's Bluebells	Retained
<i>Mesocapnia wernerii</i>	A Stonefly	Screened Out
<i>Mestra amymone</i>	Common mestra	Screened Out
<i>Metrichia arizonensis</i>	A Caddisfly	Screened Out
<i>Metrichia volada</i>	Page Springs Microcaddisfly	Screened Out
<i>Micrasema arizonica</i>	A Caddisfly	Screened Out
<i>Micrathene whitneyi</i>	Elf owl	Screened Out
<i>Microdynerus arenicolus</i>	Antioch Potter Wasp	Screened Out
<i>Microtus longicaudus</i>	Long-tailed vole	Retained
<i>Microtus longicaudus leucophaeus</i>	White-bellied Vole	Screened Out
<i>Microtus mogollonensis hualpaiensis</i>	Hualapai Vole	Screened Out
<i>Microtus mogollonensis navaho</i>	Navajo Mogollon vole	Retained
<i>Microtus montanus arizonensis</i>	Arizona montane vole	Screened Out
<i>Microvelia glabrosulcata</i>	a water strider bug	Screened Out
<i>Mimulus dentilobus</i>	Southwest Monkey-flower	Screened Out
<i>Mimulus eastwoodiae</i>	Easatwood Monkeyflower	Screened Out
<i>Mimulus parryi</i>	Parry Monkeyflower	Screened Out
<i>Mimulus spissus</i>	Compact Monkey-flower	Screened Out
<i>Mimulus verbenaceus</i>	Crimson Monkeyflower	Screened Out
<i>Minuartia filiorum</i>	Threat-branch Stitchwort	Screened Out
<i>Mirabilis pumila</i>	Dwarf Umbrella-wort	Screened Out
<i>Mniotilta varia</i>	Black-and-white warbler	Screened Out
<i>Molendoa sendtneriana</i>		Screened Out
<i>Molothrus ater</i>	Brown-headed cowbird	Screened Out
<i>Monardella linoides ssp. linoides</i>	Flat-leaf Wild-mint	Screened Out
<i>Monardella linoides ssp. stricta</i>		Screened Out
<i>Moneses uniflora</i>	Wood nymph	Retained
<i>Morsea dumicola</i>	A Monkey Grasshopper	Screened Out
<i>Morsea kaibabensis</i>	A Monkey Grasshopper	Screened Out
<i>Muhlenbergia curtifolia</i>	Rock Muhly	Screened Out
<i>Muhlenbergia dumosa</i>	Bamboo Muhly	Screened Out
<i>Muhlenbergia gooddingii</i>	Goodding's Muhly	Screened Out
<i>Muhlenbergia thurberi</i>	Thurber's Muhly	Screened Out
<i>Mus musculus</i>	House mouse	Screened Out
<i>Mustela frenata</i>	Longtail weasel	Screened Out
<i>Mustela nigripes</i>	Black-footed ferret	Screened Out
<i>Myadestes townsendi</i>	Townsend's solitaire	Screened Out
<i>Mycteria americana</i>	Wood stork	Screened Out
<i>Myioborus pictus</i>	Painted redstart	Screened Out
<i>Myiodynastes luteiventris</i>	Sulphur-bellied flycatcher	Screened Out
<i>Myodes gapperi</i>	Southern red-backed vole	Screened Out

Scientific Name	Common Name	Screening
<i>Myosurus nitidus</i>	Western Mouse-tail	Retained
<i>Myotis auriculus</i>	Southwestern myotis	Retained
<i>Myotis californicus</i>	California Myotis	Screened Out
<i>Myotis ciliolabrum</i>	Western small footed myotis	Screened Out
<i>Myotis evotis</i>	Long-eared myotis	Screened Out
<i>Myotis occultus</i>	Arizona Myotis	Screened Out
<i>Myotis thysanodes</i>	Fringed myotis	Screened Out
<i>Myotis volans</i>	Long-legged myotis	Screened Out
<i>Myotophallus rooseveltianus</i>	Roosevelt Talussnail	Screened Out
<i>Naesiotus christenseni</i>	Santa Rita Rabdotus	Screened Out
<i>Nama retrorsum</i>	Betatakin Nama	Screened Out
<i>Nasua narica</i>	White-nosed coati	Screened Out
<i>Nectopsyche dorsalis</i>	A Caddisfly	Screened Out
<i>Nectopsyche minuta</i>	A Caddisfly	Screened Out
<i>Nemacaulis denudata</i>	Woolly-heads	Screened Out
<i>Nemacaulis denudata var. gracilis</i>	Slender Woolly-heads	Screened Out
<i>Nemacladus gracilis</i>	Slender Nemacladus	Screened Out
<i>Nemacladus longiflorus var. breviflorus</i>		Screened Out
<i>Neogaerrhinum filipes</i>	Yellow-twining Snapdragon	Screened Out
<i>Neominois ridingsii</i>	Ridings' Satyr	Screened Out
<i>Neophasia menapia</i>	Pine white	Screened Out
<i>Neophasia terlooii</i>	Chiricahua White	Screened Out
<i>Neotamias cinereicollis</i>	Gray-collared chipmunk	Screened Out
<i>Neotamias minimus arizonensis</i>	White Mountains chipmunk	Screened Out
<i>Neotamias minimus consobrinus</i>	Kaibab least chipmunk	Retained
<i>Neotamias rufus</i>	Hopi chipmunk	Screened Out
<i>Neotoma cinerea</i>	Bushy-tailed woodrat	Screened Out
<i>Neotrichia osmena</i>	A Caddisfly	Screened Out
<i>Nissolia wislizeni</i>		Screened Out
<i>none</i>	North Canyon Ground Beetle	Screened out
<i>none</i>	Green stonefly	Screened out
<i>Notholaena californica</i>	California Cloakfern	Screened Out
<i>Notholaena californica ssp. californica</i>	California Cloakfern	Screened Out
<i>Notholaena grayi ssp. sonorensis</i>	Gray's Cloakfern	Screened Out
<i>Notholaena lemmonii</i>	Lemmon's Cloak-fern	Screened Out
<i>Nothoscordum texanum</i>	Texas False-garlic	Screened Out
<i>Nucifraga columbiana</i>	Clark's nutcracker	Screened Out
<i>Numenius americanus</i>	Long-billed curlew	Screened Out
<i>Numenius phaeopus</i>	Whimbrel	Screened Out
<i>Nuphar lutea</i>	Pond lily	Retained
<i>Nyctinomops femorosaccus</i>	Pocketed free-tailed bat	Screened Out
<i>Nyctinomops macrotis</i>	Big free-tailed bat	Retained
<i>Nymphaea mexicana</i>	Banana Water-lily	Screened Out
<i>Nymphalis antiopa</i>	Mourning cloak	Screened Out
<i>Oarisma garita</i>	Garita skipperling	Screened Out
<i>Ochrotrichia argentea</i>	A Caddisfly	Screened Out
<i>Ochrotrichia ildria</i>	A Caddisfly	Screened Out
<i>Ochrotrichia rothi</i>	A Caddisfly	Screened Out

Scientific Name	Common Name	Screening
<i>Ochrotrichia spinulata</i>	A Caddisfly	Screened Out
<i>Odocoileus hemionus</i>	Mule Deer	Screened Out
<i>Odocoileus hemionus crooki</i>	Desert mule deer	Screened Out
<i>Odocoileus hemionus hemionus</i>	Rocky Mtn. mule deer	Screened Out
<i>Odocoileus virginianus couesi</i>	Coues' white-tailed deer	Screened Out
<i>Oecetis arizonica</i>	A Caddisfly	Screened Out
<i>Oecetis metlacensis</i>	A Caddisfly	Screened Out
<i>Oecetis sp. G</i>	A Caddisfly	Screened Out
<i>Oeneis alberta daura</i>	Alberta Arctic	Screened Out
<i>Oenothera cavernae</i>	Cave Evening-primrose	Screened Out
<i>Oenothera deltoides ssp. ambigua</i>		Screened Out
<i>Oenothera neomexicana</i>	New Mexico Evening-primrose	Screened Out
<i>Oliarces clara</i>	Lacewing or Ally	Screened Out
<i>Oligocentria alpica</i>	A notodontid moth	Screened Out
<i>Oligocentria delicata</i>	A notodontid moth	Screened Out
<i>Oligocentria sp. 1</i>	A notodontid moth	Screened Out
<i>Omphalora arizonica</i>		Screened Out
<i>Oncorhynchus apache</i>	Apache (Arizona) Trout	Retained
<i>Oncorhynchus gilae gilae</i>	Gila Trout	Screened Out
<i>Oncorhynchus mykiss aguabonita</i>	California Golden Trout	Screened Out
<i>Ondatra zibethicus</i>	Common muskrat	Screened Out
<i>Opeia atascosa</i>	A Grasshopper	Screened Out
<i>Ophiogomphus arizonicus</i>	Arizona Snaketail	Screened Out
<i>Oporornis formosus</i>	Kentucky warbler	Screened Out
<i>Oporornis tolmiei</i>	MacGillivray's warbler	Retained
<i>Opuntia acanthocarpa var. coloradensis</i>		Screened Out
<i>Opuntia aurea</i>		Screened Out
<i>Opuntia basilaris var. longiareolata</i>		Screened Out
<i>Opuntia bigelovii</i>	Teddy-bear Cactus	Screened Out
<i>Opuntia clavata</i>	Club Cholla	Screened Out
<i>Opuntia echinocarpa</i>	Straw-top Cholla	Screened Out
<i>Opuntia engelmannii var. flavispina</i>		Screened Out
<i>Opuntia erinacea var. ursina</i>		Screened Out
<i>Opuntia fragilis var. brachyarthra</i>		Screened Out
<i>Opuntia gosseliniana</i>		Screened Out
<i>Opuntia kunzei</i>	Devil's Prickly-pear	Screened Out
<i>Opuntia littoralis</i>	Coastal Prickly-pear	Screened Out
<i>Opuntia littoralis var. vaseyi</i>		Screened Out
<i>Opuntia macrocentra</i>		Screened Out
<i>Opuntia macrocentra var. macrocentra</i>	Purple Prickly-pear	Screened Out
<i>Opuntia martiniana</i>	Seashore Cactus	Screened Out
<i>Opuntia phaeacantha var. laevis</i>		Screened Out
<i>Opuntia pinkavae</i>	Bulrush Canyon Prickly-pear	Screened Out
<i>Opuntia polyacantha var. juniperina</i>		Screened Out
<i>Opuntia ramosissima</i>	Lead-pencil Cholla	Screened Out
<i>Opuntia spinosior</i>	Cane Prickly-pear	Screened Out
<i>Opuntia whipplei</i>	Whipple cholla	Screened Out
<i>Opuntia wigginsii</i>	Wiggins Cholla	Screened Out

Scientific Name	Common Name	Screening
<i>Orconectes causeyi</i>	A Crayfish	Screened Out
<i>Oreohelix anchana</i>	Ancha Mountainsnail	Screened Out
<i>Oreohelix barbata</i>	Bearded Mountainsnail	Screened Out
<i>Oreohelix concentrata</i>	Huachuca Mountainsnail	Screened Out
<i>Oreohelix grahamensis</i>	Pinaleno Mountainsnail	Screened Out
<i>Oreohelix houghi</i>	Diablo Mountainsnail	Screened Out
<i>Oreohelix yavapai cummingsi</i>		Screened Out
<i>Oreoscoptes montanus</i>	Sage thrasher	Retained
<i>Oreoxis alpina</i>		Screened Out
<i>Orthocarpus purpureoalbus</i>	Purple-white Owl's clover	Screened Out
<i>Osmorhiza brachypoda</i>	California sweetcicely	Screened Out
<i>Ostrya knowltonii</i>	Knowlton Hop-hornbeam	Screened Out
<i>Otus flammeolus</i>	Flammulated owl	Screened Out
<i>Ovis canadensis canadensis</i>	Rocky Mountain Bighorn Sheep	Screened Out
<i>Ovis canadensis mexicana</i>	Desert Bighorn Sheep	Screened Out
<i>Ovis canadensis nelsoni</i>	Desert bighorn sheep	Retained
<i>Oxalis albicans ssp. californica</i>		Screened Out
<i>Oxalis alpina</i>	Alpine Woodsorrel	Screened Out
<i>Oxybelis aeneus</i>	Brown vinesnake	Screened Out
<i>Oxyethira arizona</i>	A Caddisfly	Screened Out
<i>Oxyloma haydeni</i>	Niobrara Ambersnail	Screened Out
<i>Oxyloma haydeni kanabensis</i>	Kanab Ambersnail	Screened Out
<i>Oxyura jamicensis</i>	Ruddy duck	Screened Out
<i>Pachyramphus aglaiae</i>	Rose-throated becard	Screened Out
<i>Packera cardamine</i>	Bitter-cress Groundsel	Screened Out
<i>Packera cynthioides</i>	White Mountain Groundsel	Screened Out
<i>Packera franciscana</i>	San Francisco Peaks groundsel	Screened Out
<i>Packera hartiana</i>	Hart Groundsel	Screened Out
<i>Packera neomexicana var. metcalfei</i>	Metcalf's Groundsel	Screened Out
<i>Packera neomexicana var. toumeyii</i>	Toumey Groundsel	Screened Out
<i>Packera quaerens</i>	New Mexico Groundsel	Screened Out
<i>Palaemnema domina</i>	Desert Shadowdamsel	Screened Out
<i>Palafoxia arida var. gigantea</i>	Giant Spanishneedle	Screened Out
<i>Pallifera pilsbryi</i>	Arizona Mantleslug	Screened Out
<i>Pandion haliaetus</i>	Osprey	Screened Out
<i>Panicum mohavense</i>	Mojave Panicgrass	Screened Out
<i>Panicum sonorum</i>	Sonoran Panicgrass	Screened Out
<i>Pannaria conoplea</i>		Screened Out
<i>Panthera onca</i>	Jaguar	Screened Out
<i>Papaipema circumlucens</i>	Hop Borer	Screened Out
<i>Papilio indra kaibabensis</i>	Kaibab Indra Swallowtail	Retained
<i>Papilio rutulus</i>	Western tiger swallowtail	Screened Out
<i>Paronychia sessiliflora</i>	Creeping nailwort	Screened Out
<i>Parryella filifolia</i>	Narrowleaf Dunebroom	Screened Out
<i>Parthenice mollis</i>		Screened Out
<i>Parula americana</i>	Northern parula	Screened Out
<i>Paspalum virletii</i>	Virlet's Paspalum	Screened Out
<i>Passerculus sandwichensis</i>	Savannah sparrow	Retained

Scientific Name	Common Name	Screening
<i>Passerculus sandwichensis rufofuscus</i>	Chihuahua savannah sparrow	Screened Out
<i>Passerella iliaca</i>	Fox sparrow	Screened Out
<i>Passerina ciris</i>	Painted bunting	Screened Out
<i>Passerina versicolor</i>	Varied bunting	Screened Out
<i>Pectis imberbis</i>	Beardless Chinch Weed	Screened Out
<i>Pectis rusbyi</i>	Rusby's Cinchweed	Screened Out
<i>Pedicularis parryi ssp. mogollonica</i>		Screened Out
<i>Pediocactus bradyi</i>	Brady Pincushion Cactus	Screened Out
<i>Pediocactus paradinei</i>	Park Pincushion-cactus	Retained
<i>Pediocactus peeblesianus</i>	Peebles Hedgehog-cactus	Screened Out
<i>Pediocactus peeblesianus var. fickeiseniae</i>	Fickeisen Hedgehog-cactus	Retained
<i>Pediocactus peeblesianus var. peeblesianus</i>	Peebles Navajo Cactus	Screened Out
<i>Pediocactus sileri</i>	Siler Pincushion Cactus	Screened Out
<i>Pediocactus simpsonii var. simpsonii</i>		Screened Out
<i>Pediomelum aromaticum</i>	Aromatic Scurf Pea	Screened Out
<i>Pediomelum castoreum</i>	Beaver Scurf-pea	Screened Out
<i>Pediomelum megalanthum var. epipsilum</i>	Kane Breadroot	Screened Out
<i>Pediomelum megalanthum var. megalanthum</i>	Intermountain Scurf-pea	Screened Out
<i>Pediomelum megalanthum var. retrorsum</i>		Screened Out
<i>Pediomelum mephiticum</i>	Skunk-top Scurfpea	Retained
<i>Pediomelum pentaphyllum</i>	Chihuahua Scurf Pea	Screened Out
<i>Pelecanus erythrorhynchos</i>	American white pelican	Screened Out
<i>Pelecanus occidentalis</i>	Brown pelican	Screened Out
<i>Pelecanus occidentalis californicus</i>	California brown pelican	Screened Out
<i>Pellaea lyngholmii</i>	Lyngholm's Cliffbrake	Screened Out
<i>Pellaea ternifolia ssp. arizonica</i>	Three-leaved Cliffbrake	Screened Out
<i>Peniocereus greggi var. greggii</i>	Desert Night-blooming Cereus	Screened Out
<i>Peniocereus greggii</i>	Desert Night-blooming Cereus	Screened Out
<i>Peniocereus greggii var. transmontanus</i>	Desert Night-blooming Cereus	Screened Out
<i>Penstemon albomarginatus</i>	White-margin Beardtongue	Screened Out
<i>Penstemon ambiguus var. laevissimus</i>		Screened Out
<i>Penstemon barbatus ssp. trichander</i>		Screened Out
<i>Penstemon bicolor</i>	Two-color Beardtongue	Screened Out
<i>Penstemon bicolor ssp. roseus</i>	Rosey Bicolored Beardtongue	Screened Out
<i>Penstemon breviculus</i>	Short-stem Beardtongue	Screened Out
<i>Penstemon caespitosus var. desertipicti</i>	Mat Penstemon	Retained
<i>Penstemon clutei</i>	Sunset Crater Beardtongue	Screened Out
<i>Penstemon deaveri</i>	Mt. Graham Beardtongue	Screened Out
<i>Penstemon discolor</i>	A Beardtongue	Screened Out
<i>Penstemon distans</i>	Mt. Turnbull Beardtongue	Screened Out
<i>Penstemon eatonii ssp. exsertus</i>		Screened Out
<i>Penstemon laevis</i>	Southwestern Beardtongue	Retained
<i>Penstemon lentus var. lentus</i>		Screened Out
<i>Penstemon linarioides ssp. compactifolius</i>	Toadflax Beardtongue	Screened Out
<i>Penstemon linarioides ssp. maguirei</i>	Maguire's Penstemon	Screened Out
<i>Penstemon nudiflorus</i>	Flagstaff Beardtongue	Retained

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<i>Penstemon oliganthus</i>	Apache Beardtongue	Screened Out
<i>Penstemon ophianthus</i>	Arizona Beardtongue	Screened Out
<i>Penstemon palmeri</i> var. <i>eglandulosus</i>		Screened Out
<i>Penstemon petiolatus</i>	Petiolate Beardtongue	Screened Out
<i>Penstemon pinifolius</i>	Pineneedle Beardtongue	Screened Out
<i>Penstemon pseudoputus</i>	Kaibab Beardtongue	Retained
<i>Penstemon putus</i>	Black River Beardtongue	Screened Out
<i>Penstemon ramosus</i>	Branching Penstemon	Screened Out
<i>Penstemon rydbergii</i>	Rydberg's penstemon	Retained
<i>Penstemon strictiformis</i>	Stiff Beardtongue	Screened Out
<i>Penstemon superbus</i>	Superb Beardtongue	Screened Out
<i>Penstemon thompsoniae</i> ssp. <i>thompsoniae</i>	Thompson's Beardtongue	Screened Out
<i>Pentagramma triangularis</i> ssp. <i>maxonii</i>	Western Gold Fern	Screened Out
<i>Perideridia parishii</i> ssp. <i>parishii</i>	Parish's Yampah	Screened Out
<i>Perisoreus canadensis</i>	Gray jay	Screened Out
<i>Perityle ajoensis</i>	Ajo Rock Daisy	Screened Out
<i>Perityle ambrosiifolia</i>	Lace-leaf Rock Daisy	Screened Out
<i>Perityle cochisensis</i>	Cochise Rock Daisy	Screened Out
<i>Perityle congesta</i>	Compacted Rock Daisy	Retained
<i>Perityle coronopifolia</i>	Arizona Rock Daisy	Screened Out
<i>Perityle dissecta</i>	Slimlobe Rockdaisy	Screened Out
<i>Perityle gilensis</i>	Gila Rockdaisy	Screened Out
<i>Perityle gilensis</i> var. <i>gilensis</i>		Screened Out
<i>Perityle gilensis</i> var. <i>salensis</i>		Screened Out
<i>Perityle gracilis</i>	Grass-like Rockdaisy	Retained
<i>Perityle saxicola</i>	Fish Creek Rock Daisy	Screened Out
<i>Perityle tenella</i>		Screened Out
<i>Perognathus amplus cineris</i>	Wupatki Arizona Pocket Mouse	Screened Out
<i>Perognathus flavescens caryi</i>	A Pocket Mouse	Screened Out
<i>Perognathus flavus</i>	Silky pocket mouse	Screened Out
<i>Perognathus flavus goodpasteri</i>	Springerville Pocket Mouse	Screened Out
<i>Peromyscus merriami</i>	Merriam's deer mouse	Screened Out
<i>Peromyscus nasutus</i>	Northern rock mouse	Screened Out
<i>Petalonyx parryi</i>	Parry Sandpaper-plant	Screened Out
<i>Peteria scoparia</i>	Rush peteria	Screened Out
<i>Peucedramus taeniatus</i>	Olive warbler	Screened Out
<i>Phacelia arizonica</i>	Arizona Phacelia	Screened Out
<i>Phacelia crenulata</i> var. <i>angustifolia</i>	Cleftleaf Scorpionweed	Screened Out
<i>Phacelia demissa</i> var. <i>demissa</i>	A Phacelia	Screened Out
<i>Phacelia glechomifolia</i>	Pennyroyal-leaf Scorpion-weed	Screened Out
<i>Phacelia howelliana</i>	Howell Phacelia	Screened Out
<i>Phacelia laxiflora</i>	Nodding-flower Scorpion-weed	Screened Out
<i>Phacelia neomexicana</i>	New Mexico phacelia	Screened Out
<i>Phacelia palmeri</i>	Palmer's Scorpion-weed	Screened Out
<i>Phacelia parishii</i>	Parish's Phacelia	Screened Out
<i>Phacelia pulchella</i> var. <i>gooddingii</i>	Goodding's Phacelia	Screened Out
<i>Phacelia rafaensis</i>	Plateau Scorpionweed	Screened Out
<i>Phacelia saxicola</i>	Stonecrop Scorpion-weed	Screened Out

Scientific Name	Common Name	Screening
<i>Phacelia scopulina</i> var. <i>submutica</i>	Debeque Phacelia	Screened Out
<i>Phacelia serrata</i>	Serrate Phacelia	Retained
<i>Phacelia welshii</i>	A Phacelia	Screened Out
<i>Phaeophyscia kairamoi</i>		Screened Out
<i>Phalacrocorax brasilianus</i>	Neotropic cormorant	Screened Out
<i>Phalaropus fulicarius</i>	Red phalarope	Screened Out
<i>Phalaropus tricolor</i>	Wilson's phalarope	Screened Out
<i>Phaseolous supinus</i>	Supine Bean	Screened Out
<i>Phaseolus parvulus</i>	Pinos Altos Mountain Bean	Screened Out
<i>Phaseolus ritensis</i>	Santa Rita Mountain Bean	Screened Out
<i>Phemeranthus validulus</i>	Western Flame-flower	Retained
<i>Philadelphus crinitus</i>	Bearded Mock-orange, Trans Pecos Mock-orange	Screened Out
<i>Philadelphus madrensis</i>	Madrean Mockorange	Screened Out
<i>Philotiella speciosa</i>	Small Blue	Screened Out
<i>Phlox amabilis</i>	Arizona Phlox	Retained
<i>Phlox cluteana</i>	Navajo Mountain Phlox	Screened Out
<i>Phlox griseola</i>	Grayleaf Phlox	Screened Out
<i>Phlox griseola</i> ssp. <i>griseola</i>	Grayleaf Phlox	Screened Out
<i>Phlox tenuifolia</i>	Santa Catalina Mountains Phlox	Screened Out
<i>Pholisma arenarium</i>	Pholisma	Screened Out
<i>Pholisma sonorae</i>	Sand Food	Screened Out
<i>Pholistoma auritum</i> var. <i>arizonicum</i>	Arizona Pholistoma	Screened Out
<i>Phoradendron bolleanum</i> ssp. <i>pauciflorum</i>	Fir Mistletoe	Screened Out
<i>Phrynosoma hernandesi</i>	Hernandez short horned lizard	Screened Out
<i>Phrynosoma mcallii</i>	Flat-tailed Horned Lizard	Screened Out
<i>Phrynosoma platyrhinos goodei</i>	Goode's Desert Horned Lizard	Screened Out
<i>Phyciodes batesii anasazi</i>	Canyon Crescent	Screened Out
<i>Phyciodes mylitta</i>	Mylitta crescent	Screened Out
<i>Phyciodes pratensis</i>	Field crescent	Screened Out
<i>Phyllorhynchus browni lucidus</i>	Maricopa Leafnose Snake	Screened Out
<i>Physalis carassifolia</i> vari. <i>crassifolia</i>	Greene Ground-cherry	Screened Out
<i>Physalis caudella</i>	Southwestern Ground-cherry	Screened Out
<i>Physalis latiphysa</i>	Broad-leaf Ground-cherry	Screened Out
<i>Physaria newberryi</i>	Newberry's Twinpod	Screened Out
<i>Physaria newberryi</i> var. <i>newberryi</i>		Screened Out
<i>Physaria newberryi</i> var. <i>racemosa</i>		Screened Out
<i>Physcia albinea</i>		Screened Out
<i>Physcia callosa</i>		Screened Out
<i>Physella humerosa</i>	Corkscrew Physa	Screened Out
<i>Physella osculans</i>	Cayuse Physa	Screened Out
<i>Pica hudsonia</i>	Black-billed magpie	Screened Out
<i>Picea pungens</i>	Blue spruce	Screened Out
<i>Picoides arizonae</i>	Arizona woodpecker	Screened Out
<i>Picoides dorsalis</i>	Three-toed woodpecker	Screened Out
<i>Picoides pubescens</i>	Downy woodpecker	Screened Out
<i>Picoides villosus</i>	Hairy woodpecker	Screened Out
<i>Pinaropappus roseus</i> var. <i>foliosus</i>		Screened Out

Scientific Name	Common Name	Screening
<i>Pinicola enucleator</i>	Pine grosbeak	Screened Out
<i>Pinus aristata</i>	Bristlecone Pine	Screened Out
<i>Pinus arizonica</i> var. <i>arizonica</i>	Arizona pine	Screened Out
<i>Pinus arizonica</i> var. <i>stormiae</i>	Pino Real	Screened Out
<i>Pipilo aberti</i>	Abert's Towhee	Screened Out
<i>Pipilo chlorurus</i>	Green-tailed towhee	Retained
<i>Pipistrellus hesperus</i>	Western Pipistrelle	Screened Out
<i>Piranga flava</i>	Hepatic tanager	Screened Out
<i>Piruna polingii</i>	Four-spotted Skipperling	Retained
<i>Plagiobothrys pringlei</i>	Pringle Popcorn-flower	Screened Out
<i>Plagiochasma wrightii</i>		Screened Out
<i>Plagopterus argentissimus</i>	Woundfin	Screened Out
<i>Plantago bigelovii</i> ssp. <i>californica</i>		Screened Out
<i>Platanthera zothecina</i>	Alcove Bog-orchid	Screened Out
<i>Platyvelia summersi</i>	Summers' Small Water Strider	Screened Out
<i>Plebejus glandon punctatus</i>	Arctic Blue	Screened Out
<i>Plebejus saepiolus</i>	Greenish blue	Screened Out
<i>Plegadis chihi</i>	White-faced ibis	Screened Out
<i>Pluvialis dominica</i>	American golden-plover	Screened Out
<i>Pluvialis squatarola</i>	Black-bellied plover	Screened Out
<i>Poanes taxiles</i>	Taxiles skipper	Screened Out
<i>Podiceps auritus</i>	Horned grebe	Screened Out
<i>Podiceps nigricollis</i>	Eared grebe	Screened Out
<i>Poecile atricapillus</i>	Black-capped chickadee	Screened Out
<i>Poeciliopsis occidentalis</i>	Sonoran topminnow	Screened Out
<i>Poeciliopsis occidentalis occidentalis</i>	Gila topminnow	Screened Out
<i>Poeciliopsis occidentalis sonoriensis</i>	Yaqui Topminnow	Screened Out
<i>Pohlia drummondii</i>		Screened Out
<i>Poladryas minuta</i>	Dotted checkerspot	Screened Out
<i>Polemonium foliosissimum</i> var. <i>flavum</i>	Leafy Jacob's Ladder	Screened Out
<i>Polemonium pauciflorum</i> ssp. <i>hinckleyi</i>	Hinckley Jacob's-ladder	Screened Out
<i>Polemonium pulcherrimum</i> ssp. <i>delicatum</i>	Beautiful Jacob's Ladder	Screened Out
<i>Polemonium viscosum</i>	Sticky polemonium	Screened Out
<i>Poliptila nigriceps</i>	Black-capped gnatcatcher	Screened Out
<i>Polites draco</i>	Draco skipper	Screened Out
<i>Polycentropus arizonensis</i>	A Caddisfly	Screened Out
<i>Polycentropus gertschi</i>	A Caddisfly	Screened Out
<i>Polygala intermontana</i>	Intermountain Milkwort	Screened Out
<i>Polygala lindheimeri</i> var. <i>parvifolia</i>	Tweedy Milkwort	Screened Out
<i>Polygala rusbyi</i>	Rusby's Milkwort	Screened Out
<i>Polygonia gracilis</i>	Hoary comma	Screened Out
<i>Polygonum polygaloides</i> ssp. <i>confertiflorum</i>	Dense-flower Knotweed	Screened Out
<i>Polystichum scopulinum</i>	Mountain holly fern	Screened Out
<i>Pontia protodice</i>	Checkered white	Screened Out
<i>Populus tremuloides</i>	Quaking aspen	Screened Out
<i>Porterella carnosula</i>	Western Porterella	Screened Out
<i>Porzana carolina</i>	Sora	Screened Out

Scientific Name	Common Name	Screening
<i>Potamogeton latifolius</i>	Broad-leaf Pondweed	Screened Out
<i>Potentilla albiflora</i>	White-flowered Cinquefoil	Screened Out
<i>Potentilla crinita</i>	Bearded Cinquefoil	Screened Out
<i>Potentilla crinita</i> var. <i>crinita</i>		Screened Out
<i>Potentilla crinita</i> var. <i>lemmonii</i>	Bearded Cinquefoil	Retained
<i>Potentilla glandulosa</i> ssp. <i>arizonica</i>		Screened Out
<i>Potentilla subviscosa</i> var. <i>ramulosa</i>		Screened Out
<i>Potentilla subviscosa</i> var. <i>subviscosa</i>		Screened Out
<i>Potentilla thurberi</i>	Thurber's Cinquefoil	Screened Out
<i>Potentilla thurberi</i> var. <i>atrorubens</i>		Screened Out
<i>Potentilla thurberi</i> var. <i>sanguinea</i>	Thurber's Cinquefoil	Screened Out
<i>Potentilla thurberi</i> var. <i>thurberi</i>		Screened Out
<i>Potentilla wheeleri</i>	Wheeler's Cinquefoil	Screened Out
<i>Primula specuicola</i>	Cave-dwelling primrose	Screened Out
<i>Progne subis arboricola</i>	Purple martin (western ssp.)	Retained
<i>Prorocorypha snowi</i>	Snow's Toothpick Grasshopper	Screened Out
<i>Proserpinus terlooii</i>	Terloo's Sphinx	Screened Out
<i>Proserpinus vega</i>	Vega Sphinx	Screened Out
<i>Protonotaria citrea</i>	Prothonotary warbler	Screened Out
<i>Protoptila balmorhea</i>	Balmorhea Saddle-case Caddisfly	Screened Out
<i>Psathyrotes pilifera</i>	Hairy-beast Brittle-stem	Screened Out
<i>Psephenus montanus</i>	White Mountains Water Penny Beetle	Screened Out
<i>Psephenus arizonensis</i>	Arizona Water Penny Beetle	Screened Out
<i>Pseudacris regilla</i>	Pacific chorus frog	Screened Out
<i>Pseudacris triseriata</i>	Western chorus frog	Screened Out
<i>Pseudocopaodes eunus</i>	Alkali Skipper	Screened Out
<i>Pseudocopaodes eunus eunus</i>	Alkali Skipper	Screened Out
<i>Pseudogarypus hypogeus</i>	A Cave Obligate Pseudoscorpion	Screened Out
<i>Psilactis gentryi</i>	Gentry's Bare-ray-aster	Screened Out
<i>Psoralidium junceum</i>	Rush Scurf Pea	Screened Out
<i>Psorothamnus arborescens</i> var. <i>pubescens</i>	Mojave Indigo-bush	Screened Out
<i>Psorothamnus arborescens</i> var. <i>pubescens</i>		Screened Out
<i>Psorothamnus fremontii</i> var. <i>attenuatus</i>		Screened Out
<i>Psorothamnus schottii</i>	Schott's Psorothamnus	Screened Out
<i>Psorothamnus scoparius</i>	Broom dalea	Screened Out
<i>Psorothamnus thompsoniae</i>	Thompson's Indigo-bush	Screened Out
<i>Psorothamnus thompsoniae</i> var. <i>whitingii</i>	Whiting Indigo Bush	Screened Out
<i>Ptelea trifoliata</i> var. <i>lutescens</i>	Pale Yellow Hoptree	Screened Out
<i>Pternohyla fodiens</i>	Lowland burrowing treefrog	Screened Out
<i>Pteryxia davidsonii</i>	Davidson's Wavewing	Screened Out
<i>Ptomaphagus cocytus</i>	A Cave Obligate Beetle	Screened Out
<i>Ptychocheilus lucius</i>	Colorado Pikeminnow	Screened Out
<i>Ptychomitrium leibergii</i>		Screened Out
<i>Puccinellia parishii</i>	Parish's Alkali Grass	Screened Out
<i>Puma concolor</i>	Mountain lion	Screened Out
<i>Puma concolor browni</i>	Yuma Mountain Lion	Screened Out
<i>Purshia subintegra</i>	Arizona Cliffrose	Screened Out
<i>Pygarctia flavidorsalis</i>		Screened Out

Scientific Name	Common Name	Screening
<i>Pygarctia neomexicana</i>		Screened Out
<i>Pyrgulopsis arizonae</i>	Bylas Springsnail	Screened Out
<i>Pyrgulopsis bacchus</i>	Grand Wash Springsnail	Screened Out
<i>Pyrgulopsis bernardina</i>	San Bernadino Springsnail	Screened Out
<i>Pyrgulopsis conica</i>	Kingman Springsnail	Screened Out
<i>Pyrgulopsis deserta</i>	Desert Springsnail	Screened Out
<i>Pyrgulopsis glandulosa</i>	Verde Rim Springsnail	Screened Out
<i>Pyrgulopsis montezumensis</i>	Montezuma Well Springsnail	Screened Out
<i>Pyrgulopsis morrisoni</i>	Page springsnail	Screened Out
<i>Pyrgulopsis simplex</i>	Fossil Springsnail	Screened Out
<i>Pyrgulopsis sola</i>	Brown Springsnail	Screened Out
<i>Pyrgulopsis thompsoni</i>	Huachuca Springsnail	Screened Out
<i>Pyrgulopsis trivialis</i>	Black River Springsnail	Screened Out
<i>Pyrgus communis</i>	Common checkered skipper	Screened Out
<i>Pyrgus xanthus</i>	Mountain Checkered-skipper	Screened Out
<i>Pyrocoma crocea</i> var. <i>genuflexa</i>		Screened Out
<i>Quercus ajoensis</i>	Ajo Mountain Scrub Oak	Screened Out
<i>Quercus havardii</i> var. <i>tuckeri</i>	Havard Oak	Screened Out
<i>Radiocentrum chiricahuana</i>	Chiricahua Mountainsnail	Screened Out
<i>Radiocentrum clappi</i>	Cave Creek Mountainsnail	Screened Out
<i>Radiodiscus millecostatus</i>	Ribbed Pinwheel	Screened Out
<i>Rallus limicola</i>	Virginia rail	Screened Out
<i>Rallus longirostris yumanensis</i>	Yuma clapper rail	Screened Out
<i>Rana blairi</i>	Plains leopard frog	Screened Out
<i>Rana catesbeiana</i>	bullfrog	Screened Out
<i>Rana chiricahuensis</i>	Chiricahua Leopard Frog	Screened Out
<i>Rana pipiens</i>	Northern leopard frog	Retained
<i>Rana yavapaiensis</i>	Lowland leopard frog	Screened Out
<i>Ranunculus eschscholtzii</i>	Eschscholtz's buttercup	Screened Out
<i>Ranunculus hydrocharoides</i> var. <i>stolonifera</i>	Frog's-bit Buttercup	Screened Out
<i>Ranunculus inamoenus</i>	Graceful buttercup	Screened Out
<i>Ranunculus inamoenus</i> var. <i>subaffinis</i>	A Buttercup	Screened Out
<i>Ranunculus oreogenes</i>	Oregon Buttercup	Retained
<i>Ranunculus pedatifidus</i>	Surefoot buttercup	Screened Out
<i>Ranunculus uncinatus</i>	Woodland buttercup	Screened Out
<i>Rattus norvegicus</i>	Norway rat	Screened Out
<i>Recurvirostra americana</i>	American avocet	Screened Out
<i>Regulus calendula</i>	Ruby-crowned kinglet	Screened Out
<i>Regulus satrapa</i>	Golden-crowned kinglet	Retained
<i>Reithrodontomys montanus</i>	Plains harvest mouse	Screened Out
<i>Rhamnus crocea</i> ssp. <i>pilosa</i>		Screened Out
<i>Rhamnus serrata</i>	Sawleaf buckthorn	Screened Out
<i>Rhinanthus minor</i>	little yellowrattle	Screened Out
<i>Rhinichthys cobitis</i>	Loach Minnow	Screened Out
<i>Rhinichthys osculus</i>	Speckled dace	Screened Out
<i>Rhithrogena plana</i>	A Mayfly	Screened Out
<i>Rhus trilobata</i> var. <i>racemulosa</i>	skunkbush sumac	Screened Out

Scientific Name	Common Name	Screening
<i>Rhyacophila chordata</i>	A Caddisfly	Screened Out
<i>Rhynchopsitta pachyrhyncha</i>	Thick-billed parrot	Screened Out
<i>Ribes pinetorum</i>	Orange Gooseberry	Screened Out
<i>Ribes quercetorum</i>	Oakwoods gooseberry	Screened Out
<i>Robinia neomexicana</i> var. <i>rusbyi</i>	New Mexico locust	Screened Out
<i>Rosa manca</i>	Mancos Rose	Screened Out
<i>Rosa stellata</i>	Desert rose	Screened Out
<i>Rosa stellata</i> ssp. <i>abyssa</i>	Grand Canyon Rose	Retained
<i>Rubus leucodermis</i>	Whitebark raspberry	Screened Out
<i>Rumex nematopodus</i>	Arizona Dock	Screened Out
<i>Rumex orthoneurus</i>	Blumer's Dock	Screened Out
<i>Salix arizonica</i>	Arizona willow	Screened Out
<i>Salix bebbiana</i>	Bebb's willow	Retained
<i>Salvia amissa</i>	Catalina Mountain Sage	Screened Out
<i>Salvia arizonica</i>	Arizona Sage	Screened Out
<i>Salvia davidsonii</i>	Davidson Sage	Screened Out
<i>Salvia dorrii</i> ssp. <i>mearnsii</i>	Verde Valley Sage	Screened Out
<i>Salvia pachyphylla</i>	Blue sage	Screened Out
<i>Salvia parryi</i>	Perry Sage	Screened Out
<i>Samolus vagans</i>	Chiricahua Mountain Brookweed	Screened Out
<i>Satyrium saepium latalinea</i>	Hedgerow Hairstreak	Screened Out
<i>Sauromalus ater</i> pop. <i>1</i>	Glen Canyon Chuckwalla	Screened Out
<i>Saxifraga caespitosa</i> ssp. <i>exaratooides</i>	Tufted saxifrage	Screened Out
<i>Saxifraga cespitosa</i>	Tufted alpine saxifrage	Screened Out
<i>Saxifraga flagellaris</i>	Spider saxifrage	Screened Out
<i>Sayornis phoebe</i>	Eastern phoebe	Screened Out
<i>Sceloporus clarkii vallaris</i>	Plateau Spiny Lizard	Screened Out
<i>Sceloporus slevini</i>	Slevin's bunchgrass lizard	Screened Out
<i>Schizura biedermani</i>	A Notodontid Moth	Screened Out
<i>Sciurus aberti</i>	Abert's Squirrel	Retained
<i>Sciurus aberti chuscensis</i>	Chuska squirrel	Screened Out
<i>Sciurus aberti kaibabensis</i>	Kaibab tree squirrel	Retained
<i>Sciurus arizonensis</i>	Arizona gray squirrel	Screened Out
<i>Sciurus nayaritensis</i>	Mexican fox squirrel	Screened Out
<i>Sciurus nayaritensis chiricahuae</i>	Chiricahua Squirrel	Screened Out
<i>Sclerocactus erectocentrus</i>	Red-spine Butterfly-cactus	Screened Out
<i>Sclerocactus erectocentrus</i> var. <i>1</i>	Acuna Cactus	Screened Out
<i>Sclerocactus johnsonii</i>	Johnson's Fish-hook Cactus	Screened Out
<i>Sclerocactus papyracanthus</i>		Screened Out
<i>Sclerocactus parviflorus</i> ssp. <i>intermedius</i>	intermediate fishhook cactus	Screened Out
<i>Sclerocactus sileri</i>	Siler's Fish-hook Cactus	Screened Out
<i>Scopelophila cataractae</i>	Agoyan Cataract Moss	Screened Out
<i>Scutellaria tessellata</i>	Huachuca Mountains Skullcap	Screened Out
<i>Sebastiania bilocularis</i>	Arrow Poison	Screened Out
<i>Sedum stelliforme</i>	Huachuca Mountains Stonecrop	Screened Out
<i>Seiurus aurocapilla</i>	Ovenbird	Screened Out
<i>Seiurus motacilla</i>	Louisiana waterthrush	Screened Out
<i>Seiurus noveboracensis</i>	Northern waterthrush	Screened Out

Scientific Name	Common Name	Screening
<i>Selaginella densa</i>	Dense spikemoss	Screened Out
<i>Selaginella leucobryoides</i>	Mohave Spikemoss	Screened Out
<i>Selaginella watsonii</i>	Watson's spikemoss	Screened Out
<i>Selasphorus sasin</i>	Allen's hummingbird	Screened Out
<i>Senecio bigelovii</i> var. <i>bigelovii</i>	Nodding Ragwort	Screened Out
<i>Senecio bigelovii</i> var. <i>hallii</i>		Screened Out
<i>Senecio multidentatus</i>		Screened Out
<i>Senecio multidentatus</i> var. <i>huachucanus</i>	Huachuca Groundsel	Screened Out
<i>Setaria arizonica</i>	Arizona Foxtail	Screened Out
<i>Setophaga ruticilla</i>	American redstart	Screened Out
<i>Shepherdia rotundifolia</i>	Roundleaf Buffaloberry	Retained
<i>Sialia mexicana</i>	Western bluebird	Screened Out
<i>Sialia sialis fulva</i>	Eastern (azure) bluebird	Screened Out
<i>Sicyosperma gracile</i>		Screened Out
<i>Sigmodon arizonae</i>	Arizona cotton rat	Screened Out
<i>Sigmodon arizonae plenus</i>	Colorado River Cotton Rat	Screened Out
<i>Sigmodon hispidus eremicus</i>	Yuma Cotton Rat	Screened Out
<i>Silene rectiramea</i>	Grand Canyon Catchfly	Screened Out
<i>Siphonoglossa longiflora</i>	Long-flower Tubetongue	Screened Out
<i>Sistrurus catenatus</i>	Massasauga	Screened Out
<i>Sistrurus catenatus edwardsii</i>	Desert Massasauga	Screened Out
<i>Sisyrinchium arizonicum</i>	Arizona Blue-eyed-grass	Screened Out
<i>Sisyrinchium longipes</i>	Timberland Blue-eye-grass	Screened Out
<i>Sitta pygmaea</i>	Pygmy Nuthatch	Screened Out
<i>Smicridea arizonensis</i>	A Caddisfly	Screened Out
<i>Smicridea dispar</i>	A Caddisfly	Screened Out
<i>Solanum lumholtzianum</i>	Sonoran Nightshade	Screened Out
<i>Sonorarctia fervida</i>	A tiger moth	Screened Out
<i>Sonorella ambigua verdensis</i>	Papago Verde talussnail	Screened Out
<i>Sonorella anchana</i>	Sierra Ancha Talussnail	Screened Out
<i>Sonorella apache</i>	Apache Talussnail	Screened Out
<i>Sonorella ashmuni</i>	Richinbar Talussnail	Screened Out
<i>Sonorella bagnarai</i>	Rincon Talussnail	Screened Out
<i>Sonorella barthschi</i>	Escabrosa Talussnail	Screened Out
<i>Sonorella bequaerti</i>	Happy Valley Talussnail	Screened Out
<i>Sonorella bicipitis</i>	Dos Cabezas Talussnail	Screened Out
<i>Sonorella binneyi</i>	Horsehoe Canyon Talussnail	Screened Out
<i>Sonorella bowiensis</i>	Quartzite Hill Talussnail	Screened Out
<i>Sonorella bradshaveana</i>	Bradshaw Talussnail	Screened Out
<i>Sonorella caerulifluminis</i>	Blue Talussnail	Screened Out
<i>Sonorella christenseni</i>	Clark Peak Talussnail	Screened Out
<i>Sonorella clappi</i>	Madera Talussnail	Screened Out
<i>Sonorella coloradoensis</i>	Colorado River Talussnail	Screened Out
<i>Sonorella coltoniana</i>	Walnut Canyon Talussnail	Screened Out
<i>Sonorella compar</i>	Oak Creek Talussnail	Screened Out
<i>Sonorella dalli</i>	Garden Canyon Talussnail	Screened Out
<i>Sonorella danielsi</i>	Bear Canyon Talussnail	Screened Out
<i>Sonorella delicata</i>	Tollhouse Canyon Talussnail	Screened Out

Scientific Name	Common Name	Screening
<i>Sonorella dragoonensis</i>	Stronghold Canyon Talussnail	Screened Out
<i>Sonorella eremita</i>	San Xavier Talussnail	Screened Out
<i>Sonorella ferrissi</i>	Dragoon Talussnail	Screened Out
<i>Sonorella franciscana</i>	San Francisco River Talussnail	Screened Out
<i>Sonorella galiuensis</i>	Galiuro Talussnail	Screened Out
<i>Sonorella grahamensis</i>		Screened Out
<i>Sonorella grahamensis superioris</i>	Pinaleno Talussnail	Screened Out
<i>Sonorella granulatisima</i>	Ramsey Canyon Talussnail	Screened Out
<i>Sonorella imitator</i>	Mimic Talussnail	Screened Out
<i>Sonorella imperatrix</i>	Total Wreck Talussnail	Screened Out
<i>Sonorella imperialis</i>	Empire Mountain Talussnail	Screened Out
<i>Sonorella insignis</i>	Whetsone Talussnail	Screened Out
<i>Sonorella macrophallus</i>	Wet Canyon Talussnail	Screened Out
<i>Sonorella magdalenensis</i>	Sonoran Talussnail	Screened Out
<i>Sonorella meadi</i>	Aqua Dulce Talussnail	Screened Out
<i>Sonorella micra</i>	Pygmy Sonorella	Screened Out
<i>Sonorella micromphala</i>	Milk Ranch Talussnail	Screened Out
<i>Sonorella mustang</i>	Mustang Tallussnail	Screened Out
<i>Sonorella neglecta</i>	Portal Talussnail	Screened Out
<i>Sonorella odorata</i>	Pungent Talussnail	Screened Out
<i>Sonorella optata</i>	Big Emigrant Talussnail	Screened Out
<i>Sonorella papagorum</i>	Black Mountain Talussnail	Screened Out
<i>Sonorella reederi</i>	Rampart Talussnail	Screened Out
<i>Sonorella rinconensis</i>	Posta Quemada Talussnail	Screened Out
<i>Sonorella rooseveltiana</i>	Roosevelt Talussnail	Screened Out
<i>Sonorella rosemontensis</i>	Rosemont Talussnail	Screened Out
<i>Sonorella russelli</i>	Black Mesa Talussnail	Screened Out
<i>Sonorella santaritana</i>	Aqua Caliente Talussnail	Screened Out
<i>Sonorella simmonsii</i>	Picacho Talussnail	Screened Out
<i>Sonorella superstitionis</i>	Superstition Mountains Talussnail	Screened Out
<i>Sonorella tortillita</i>	Tortolita Talussnail	Screened Out
<i>Sonorella tryoniana</i>	Sanford Talussnail	Screened Out
<i>Sonorella vespertina</i>	Evening talussnail	Screened Out
<i>Sonorella virilis</i>	Chiricahua Talussnail	Screened Out
<i>Sonorella waltoni</i>	Doubtful Canyon Talussnail	Screened Out
<i>Sonorella xanthenes</i>	Kitt Peak Talussnail	Screened Out
<i>Sophora arizonica</i>	Arizona Necklace	Screened Out
<i>Sorex merriami</i>	Merriam's Shrew	Retained
<i>Sorex nanus</i>	Dwarf shrew	Retained
<i>Sorex palustris</i>	American water shrew	Screened Out
<i>Spea intermontana</i>	Great basin spadefoot	Retained
<i>Spermophilus lateralis</i>	Golden-mantled ground squirrel	Screened Out
<i>Spermophilus pilosoma</i>	Spotted ground squirrel	Screened Out
<i>Spermophilus tridecemlineatus</i>	Thirteen-lined ground squirrel	Screened Out
<i>Spermophilus tridecemlineatus monticola</i>	White Mountains Ground Squirrel	Screened Out
<i>Speyeria atlantis schellbachi</i>	Schellbach's Atlantis Fritillary	Screened Out
<i>Speyeria hesperis</i>	Northwestern fritillary	Screened Out
<i>Speyeria mormonia luski</i>	Atronis Fritillary	Screened Out

Scientific Name	Common Name	Screening
<i>Speyeria nokomis</i>	Nokomis Fritillary	Retained
<i>Speyeria nokomis coerulescens</i>	Bluish Fritillary	Screened Out
<i>Speyeria nokomis nitocris</i>	Nitocris Fritillary	Screened Out
<i>Speyeria nokomis nokomis</i>	Nokomis Fritillary ssp. Nokomis	Retained
<i>Sphaeralcea gierischii</i>	Gierisch Globemallow	Screened Out
<i>Sphingicampa raspa</i>	A Royal Moth	Screened Out
<i>Sphinx smithi</i>	A Sphinx Moth	Screened Out
<i>Sphyrapicus nuchalis</i>	Red-naped sapsucker	Retained
<i>Sphyrapicus ruber</i>	Red-breasted sapsucker	Screened Out
<i>Sphyrapicus thyroideus</i>	Williamson's sapsucker	Screened Out
<i>Sphyrapicus varius</i>	Yellow-bellied sapsucker	Screened Out
<i>Spiranthes delitescens</i>	Canelo Hills ladies'-tresses	Screened Out
<i>Spiranthes romanzoffiana</i>	Hooded lady's tresses	Screened Out
<i>Spiza americana</i>	Dickcissel	Screened Out
<i>Spizella arborea</i>	American tree sparrow	Screened Out
<i>Spizella atrogularis</i>	Black-chinned sparrow	Screened Out
<i>Spizella breweri</i>	Brewer's sparrow	Retained
<i>Spizella pallida</i>	Clay-colored sparrow	Screened Out
<i>Sporobolus interruptus</i>	Black Dropseed	Retained
<i>Stachys rothrockii</i>	Rothrock's Hedge-nettle	Retained
<i>Stanley albescens</i>	Arizona Prince-plume	Screened Out
<i>Stellaria porsildii</i>	Porsild's Starwort	Screened Out
<i>Stenopelmatus navajo</i>	Navajo Jerusalem Cricket	Screened Out
<i>Stephanomeria schottii</i>	Schott's Wire-lettuce	Screened Out
<i>Stephanomeria thurberi</i>	Thurber's Skeletonplant	Screened Out
<i>Stereocaulon nanodes</i>	a lichen	Screened Out
<i>Sterna antillarum</i>	Least tern	Screened Out
<i>Sterna caspia</i>	Caspian tern	Screened Out
<i>Sterna forsteri</i>	Forster's tern	Screened Out
<i>Stevia lemmonii</i>	Lemmon's Stevia	Screened Out
<i>Stevia plummerae</i>	Plummer's Stevia	Screened Out
<i>Stevia plummerae</i> var. <i>alba</i>		Screened Out
<i>Stevia plummerae</i> var. <i>plummerae</i>		Screened Out
<i>Stipa coronata</i>	Giant Needlegrass	Screened Out
<i>Streptanthus carinatus</i> ssp. <i>arizonicus</i>	Arizona Twistflower	Screened Out
<i>Streptanthus carinatus</i> ssp. <i>carinatus</i>		Screened Out
<i>Streptopelia decaocto</i>	Eurasian collared dove	Screened Out
<i>Streptopus amplexifolius</i>		Screened Out
<i>Strix occidentalis lucida</i>	Mexican Spotted Owl	Retained
<i>Strymon melinus</i>	Gray hairstreak	Screened Out
<i>Sturnus vulgaris</i>	European starling	Screened Out
<i>Stygobromus arizonensis</i>	Arizona Cave Amphipod	Screened Out
<i>Stygobromus blinni</i>	Blinn's amphipod	Screened Out
<i>Stygobromus boultoni</i>	Boulton's Amphipod	Screened Out
<i>Sylvilagus floridanus</i>	Eastern cottontail	Screened Out
<i>Sylvilagus nuttallii grangeri</i>	Mountain Cottontail	Screened Out
<i>Symmerista zacualpana</i>	A notodontid moth	Screened Out
<i>Sympetrum signiferum</i>	Spot-winged Meadowhawk	Screened Out

Scientific Name	Common Name	Screening
<i>Symphyotrichum potosinum</i>	Santa Rita Mountain Aster	Screened Out
<i>Tachycineta bicolor</i>	Tree swallow	Screened Out
<i>Tadarida brasiliensis</i>	Mexican Free-tailed Bat	Screened Out
<i>Taenionema jacobii</i>	A Stonefly	Screened Out
<i>Talinum gooddingii</i>	Goodding's Flameflower	Screened Out
<i>Talinum humile</i>	Pinos Altos Mountains Flameflower	Screened Out
<i>Talinum marginatum</i>	Tepic Flameflower	Screened Out
<i>Tamiasciurus hudsonicus</i>	Red Squirrel	Retained
<i>Tamiasciurus hudsonicus grahamensis</i>	Mt Graham Red Squirrel	Screened Out
<i>Tantilla hobartsmithi</i>	Smith's black-headed snake	Screened Out
<i>Tantilla wilcoxi</i>	Chihuahuan black-headed snake	Screened Out
<i>Tantilla yaquia</i>	Yaqui black-headed snake	Screened Out
<i>Taxidea taxus</i>	Badger	Screened Out
<i>Tayassu tajacu</i>	Javelina	Screened Out
<i>Tayloria acuminata</i>	acuminate dung moss	Screened Out
<i>Tayloria splachnoides</i>	splachnoid dung moss	Screened Out
<i>Tetraneuris argentea</i>	Perkysue	Screened Out
<i>Tetraneuris verdiensis</i>	A Hymenoxys	Screened Out
<i>Thalictrum dasycarpum</i>	Purple meadow-rue	Screened Out
<i>Thamnophis cyrtopsis cyrtopsis</i>	Western Black-necked Gartersnake	Screened Out
<i>Thamnophis eques</i>	Mexican gartersnake	Screened Out
<i>Thamnophis rufipunctatus</i>	Narrow-headed gartersnake	Screened Out
<i>Thelypodopsis ambigua</i>	Long Valley Tumble Mustard	Screened Out
<i>Thelypodopsis ambigua</i> var. <i>ambigua</i>	Long Valley tumbled mustard	Retained
<i>Thelypodopsis ambigua</i> var. <i>erecta</i>		Screened Out
<i>Thelypodium integrifolium</i> ssp. <i>longicarpum</i>		Screened Out
<i>Thelypteris puberula</i>	Showy maidenfern	Retained
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Aravaipa Wood Fern	Screened Out
<i>Thomomys talpoides kaibabensis</i>	Kaibab northern pocket gopher	Retained
<i>Thomomys ubrinus intermedius</i>	Southern Pocket Gopher	Screened Out
<i>Thorybes pylades</i>	Northern cloudy wing	Screened Out
<i>Thymoites minero</i>	A Cave Obligate Pseudoscorpion	Screened Out
<i>Thymophylla concinna</i>	Sonoran Dogweed	Screened Out
<i>Thysanophora hornii</i>	Southwestern Fringed-snail	Screened Out
<i>Tinodes parvulus</i>	A Caddisfly	Screened Out
<i>Tiquilia canescens</i> var. <i>pulchella</i>		Screened Out
<i>Tiquilia latior</i>	Matted Tiquilia	Screened Out
<i>Townsendia formosa</i>	New Mexico Townsend-daisy	Screened Out
<i>Townsendia jonesii</i> var. <i>jonesii</i>	Jones Grounddaisy	Screened Out
<i>Townsendia smithii</i>	Black Rock Ground-daisy	Screened Out
<i>Toxostoma bendirei</i>	Bendire's thrasher	Screened Out
<i>Toxostoma crissale</i>	Crissal thrasher	Screened Out
<i>Toxostoma lecontei</i>	LeConte's thrasher	Screened Out
<i>Toxostoma rufum</i>	Brown thrasher	Screened Out
<i>Trachemys scripta</i>	Pond (red)slider	Screened Out
<i>Tragia laciniata</i>	Sonoita Noseburn	Screened Out
<i>Trautvetteria caroliniensis</i>	Carolina bugbane	Screened Out

Scientific Name	Common Name	Screening
<i>Tricorythypes condylus</i>	A Mayfly	Screened Out
<i>Trifolium andinum</i>	Intermountain Clover	Screened Out
<i>Trifolium andinum</i> var. <i>andinum</i>	Intermountain Clover	Screened Out
<i>Trifolium kingii</i> ssp. <i>macilentum</i>		Screened Out
<i>Trifolium mucronatum</i> ssp. <i>lacerum</i>		Screened Out
<i>Trifolium neurophyllum</i>	Mogollon Clover	Screened Out
<i>Trifolium pinetorum</i>	Pinewoods Clover	Screened Out
<i>Trimerotropis arizonensis</i>	A Grasshopper	Screened Out
<i>Tringa solitaria</i>	Solitary sandpiper	Screened Out
<i>Tripterocalyx carneus</i> var. <i>wootonii</i>	Winged Sand-verbena	Screened Out
<i>Triteleia lemmoniae</i>	Oak Creek Tritelia	Retained
<i>Triteleiopsis palmeri</i>	Blue Sand Lily	Screened Out
<i>Troglodytes troglodytes</i>	Winter wren	Screened Out
<i>Trogon elegans</i>	Elegant trogon	Screened Out
<i>Tryonia gilae</i>	Gilae Tryonia	Screened Out
<i>Tryonia quitobaquitae</i>	Quitobaquito Tryonia	Screened Out
<i>Tuberochernes ubicki</i>	A Cave Obligate Pseudoscorpion	Screened Out
<i>Turdus rufopalliatas</i>	Rufous-backed robin	Screened Out
<i>Tyrannus crassirostris</i>	Thick-billed kingbird	Screened Out
<i>Tyrannus melancholicus</i>	Tropical kingbird	Screened Out
<i>Tyrannus vociferans</i>	Cassin's kingbird	Screened Out
<i>Uma notata</i>	Colorado Desert Fringe-toed Lizard	Screened Out
<i>Uma rufopunctata</i>	Yuman Desert Fringe-toed Lizard	Screened Out
<i>Uma scoparia</i>	Mojave Fringe-toed Lizard	Screened Out
<i>Urosaurus graciosus shannoni</i>	Arizona Long-tailed Brush Lizard	Screened Out
<i>Ursus americanus</i>	Black bear	Screened Out
<i>Ursus arctos</i>	Grizzly Bear	Screened Out
<i>Utricularia vulgaris</i>	Common bladderwort	Screened Out
<i>Vanclevea stylosa</i>	Vanclevea	Screened Out
<i>Vanessa anabella</i>	West Coast lady	Screened Out
<i>Vanessa cardui</i>	Painted lady	Screened Out
<i>Various</i>	Aquatic macroinvertebrates	Screened Out
<i>Vauquelinia californica</i> ssp. <i>californica</i>		Screened Out
<i>Vauquelinia californica</i> ssp. <i>pauciflora</i>	Arizona Limestone Rosewood	Screened Out
<i>Vauquelinia californica</i> ssp. <i>sonorensis</i>	Sonoran Mountain Rosewood	Screened Out
<i>Verbena pinetorum</i>	Chihuahua Vervain	Screened Out
<i>Vermivora celata</i>	Orange-crowned warbler	Retained
<i>Vermivora luciae</i>	Lucy's warbler	Screened Out
<i>Vermivora peregrina</i>	Tennessee warbler	Screened Out
<i>Vermivora virginiae</i>	Virginia's warbler	Screened Out
<i>Vertigo berryi</i>		Screened Out
<i>Vertigo hinkleyi</i>	Heart Vertigo	Screened Out
<i>Viguiera dentata</i> var. <i>lancifolia</i>		Screened Out
<i>Viguiera triloba</i>	Gray's Zaluzania	Screened Out
<i>Viola charlestonensis</i>	Charleston Violet	Screened Out
<i>Viola umbraticola</i>	Ponderosa Violet	Screened Out
<i>Viola umbraticola</i> var. <i>glaberrima</i>		Screened Out
<i>Vireo bellii</i>	Bell's vireo	Screened Out

Scientific Name	Common Name	Screening
<i>Vireo bellii arizonae</i>	Arizona Bell's vireo	Screened Out
<i>Vireo olivaceus</i>	Red-eyed vireo	Screened Out
<i>Vireo plumbeous</i>	Plumbeous vireo	Screened Out
<i>Vireo vicinior</i>	Gray vireo	Retained
<i>Vulpes macrotis</i>	Kit fox	Screened Out
<i>Vulpes vulpes</i>	Red Fox	Screened Out
<i>Wilsonia citrina</i>	Hooded warbler	Screened Out
<i>Woodsia cochisensis</i>	Cochise Woodsia	Screened Out
<i>Woodsia phillipsii</i>	Phillip's Cliff Fern	Screened Out
<i>Wormaldia arizonensis</i>	A Caddisfly	Screened Out
<i>Xanthoparmelia ajoensis</i>		Screened Out
<i>Xanthoparmelia dissensa</i>		Screened Out
<i>Xanthoparmelia huachucensis</i>	Huachuca xanthoparmelia lichen	Screened Out
<i>Xanthoparmelia maricopensis</i>		Screened Out
<i>Xanthoparmelia nigropsomifera</i>	Xanthoparmelia lichen	Screened Out
<i>Xanthoparmelia tucsonensis</i>		Screened Out
<i>Xantoparmelia huachucensis</i>		Screened Out
<i>Xantusia arizonae</i>	Arizona Night Lizard	Screened Out
<i>Xantusia bezyi</i>	Bezy's Night Lizard	Screened Out
<i>Xema sabini</i>	Sabine's gull	Screened Out
<i>Xylorhiza tortifolia</i> var. <i>tortifolia</i>		Screened Out
<i>Xyrauchen texanus</i>	Razorback sucker	Screened Out
<i>Yucca angustissima</i> var. <i>kanabensis</i>		Screened Out
<i>Yucca elata</i> var. <i>utahensis</i>		Screened Out
<i>Yucca whipplei</i> var. <i>caespitosa</i>		Screened Out
<i>Zapus hudsonius</i>	Meadow jumping mouse	Screened Out
<i>Zapus hudsonius luteus</i>	New Mexican Jumping Mouse	Screened Out
<i>Zenaida asiatica</i>	White-winged dove	Screened Out
<i>Zenaida macroura</i>	mourning dove	Screened Out
<i>Zonotrichia albicollis</i>	White-throated sparrow	Screened Out
<i>Zonotrichia atricapilla</i>	Golden-crowned sparrow	Screened Out
<i>Zonotrichia leucophrys</i>	White-crowned sparrow	Screened Out
<i>Zonotrichia querula</i>	Harris' sparrow	Screened Out
<i>Zuckia brandegeei</i> var. <i>arizonica</i>	Brandege siltbush	Screened Out
<i>Zumatrichia notosa</i>	A Caddisfly	Screened Out

APPENDIX C: Species carried forward for further analysis, their associated habitat types, and other category assignments.

Headings. Status: Threatened, Endangered, Species Of Concern, or Species Of Interest; MIS: Kaibab National Forest Management Indicator Species (1987); R3SS: Forest Service Region 3 Sensitive Species (2007). PJW: Pinyon Juniper Woodland; PP: Ponderosa Pine; DMC: Dry Mixed Conifer; MCA: Mixed Conifer with Aspen; SbS: Sagebrush Shrubland; MSG: Montane Subalpine Grassland; GBG: Great Basin Grassland; SF: Spruce Fir; SdG: Semi-desert Grassland; DC: Desert Communities; GOS: Gambel Oak Shrubland; W/C: Wetland / Cienega; CWRP: Cottonwood-Willow Riparian Forest; W: Water; Multi: Multi-PNVT.

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRP	W	Multi
<i>Accipiter gentilis</i>	Bird	SOI	X	X		X	X												
<i>Amphispiza belli</i>	Bird	SOI							X										
<i>Aquila chrysaetos</i>	Bird	SOI							X	X	X		X						
<i>Athene cunicularia hypugaea</i>	Bird	SOI		X						X	X		X						
<i>Baeolophus ridgwayi</i>	Bird	SOI	X		X														
<i>Buteo regalis</i>	Bird	SOI		X					X		X		X						
<i>Cardellina rubrifrons</i>	Bird	SOI					X	X											
<i>Coccothraustes vespertinus</i>	Bird	SOI					X	X											
<i>Contopus cooperi</i>	Bird	SOI				X	X	X				X							
<i>Dendragapus obscurus</i>	Bird	SOI						X				X							
<i>Dendroica graciae</i>	Bird	SOI				X													
<i>Dendroica nigrescens</i>	Bird	SOI			X														
<i>Falco peregrinus anatum</i>	Bird	SOC		X															X

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Gymnogyps californianus</i>	Bird	E																	X
<i>Gymnorhinus cyanocephalus</i>	Bird	SOI			X														
<i>Haliaeetus leucocephalus</i>	Bird	SOC		X		X										X		X	
<i>Haliaeetus leucocephalus pop. 3</i>	Bird	T		X		X										X		X	
<i>Melanerpes lewis</i>	Bird	SOI				X													
<i>Oporornis tolmiei</i>	Bird	SOI				X	X	X											
<i>Oreoscoptes montanus</i>	Bird	SOI							X										
<i>Passerculus sandwichensis</i>	Bird	SOI								X	X								
<i>Pipilo chlorurus</i>	Bird	SOI				X	X		X						X				
<i>Progne subis arboricola</i>	Bird	SOI				X													
<i>Regulus satrapa</i>	Bird	SOI						X				X							
<i>Sphyrapicus nuchalis</i>	Bird	SOI	X					X											
<i>Spizella breweri</i>	Bird	SOI			X				X										
<i>Strix occidentalis lucida</i>	Bird	T	X			X	X	X											
<i>Vermivora celata</i>	Bird	SOI					X	X											
<i>Vireo vicinior</i>	Bird	SOI			X														
<i>Oncorhynchus apache</i>	Fish	T																	X
<i>Bufo microscaphus</i>	Herpetofauna	SOI		X												X	X	X	
<i>Crotalus cerberus</i>	Herpetofauna	SOI			X	X					X				X				

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Eumeces skiltonianus</i>	Herpetofauna	SOI			X	X													
<i>Hyla wrightorum</i>	Herpetofauna	SOI				X										X		X	
<i>Lampropeltis pyromelana infralabialis</i>	Herpetofauna	SOC			X	X							X		X				
<i>Lampropeltis triangulum</i>	Herpetofauna	SOI									X		X						
<i>Rana pipiens</i>	Herpetofauna	SOC		X												X		X	
<i>Spea intermontana</i>	Herpetofauna	SOI			X				X		X		X			X		X	
<i>Acrolophitus nevadensis</i>	Invertebrate	SOC				X													
<i>Aeshna persephone</i>	Invertebrate	SOC				X										X		X	
<i>Callophrys sheridanii comstocki</i>	Invertebrate	SOC			X				X										
<i>Cicindela terricola kaibabensis</i>	Invertebrate	SOI								X									
<i>Libellula nodisticta</i>	Invertebrate	SOI														X		X	
<i>Papilio indra kaibabensis</i>	Invertebrate	SOC			X		X				X								
<i>Piruna polingii</i>	Invertebrate	SOC		X						X						X			
<i>Speyeria nokomis</i>	Invertebrate	SOC				X	X	X								X			
<i>Speyeria nokomis nokomis</i>	Invertebrate	SOC		X		X	X	X								X			
<i>Antilocapra americana</i>	Mammal	SOI	X						X	X	X		X						

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Corynorhinus townsendii pallescens</i>	Mammal	SOI		X															X
<i>Cynomys gunnisoni</i>	Mammal	SOI									X		X						
<i>Dipodomys microps leucotis</i>	Mammal	SOI		X									X						
<i>Euderma maculatum</i>	Mammal	SOI		X					X	X	X		X						
<i>Eumops perotis californicus</i>	Mammal	SOI		X						X									
<i>Idionycteris phyllotis</i>	Mammal	SOI		X		X	X												
<i>Microtus longicaudus</i>	Mammal	SOI		X						X									
<i>Microtus mogollonensis navaho</i>	Mammal	SOI		X						X	X								
<i>Myotis auriculus</i>	Mammal	SOI				X	X	X											
<i>Neotamias minimus consobrinus</i>	Mammal	SOI		X				X				X							
<i>Nyctinomops macrotis</i>	Mammal	SOI			X				X	X				X					
<i>Ovis canadensis nelsoni</i>	Mammal	SOI		X										X					
<i>Sciurus aberti</i>	Mammal	SOI	X			X													
<i>Sciurus aberti kaibabensis</i>	Mammal	SOI	X	X		X													
<i>Sorex merriami</i>	Mammal	SOI		X		X	X												
<i>Sorex nanus</i>	Mammal	SOI		X						X									
<i>Tamiasciurus hudsonicus</i>	Mammal	SOI	X					X				X							

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Thomomys talpoides kaibabensis</i>	Mammal	SOI		X				X		X		X							
<i>Actaea arizonica</i>	Plant	SOC	X	X				X											
<i>Agave utahensis</i> var. <i>kaibabensis</i>	Plant	SOC			X									X					
<i>Agave utahensis</i> var. <i>utahensis</i>	Plant	SOC									X								
<i>Allium bigelovii</i>	Plant	SOC											X	X					
<i>Aquilegia caerulea</i> var. <i>pinetorum</i>	Plant	SOC						X				X							
<i>Arenaria aberrans</i>	Plant	SOC		X						X									
<i>Asclepias hallii</i>	Plant	SOC			X														
<i>Asclepias quinqueidentata</i>	Plant	SOI				X													
<i>Astragalus amphioxys</i> var. <i>modestus</i>	Plant	SOC			X				X										
<i>Astragalus ampullarius</i>	Plant	SOC		X	X									X					
<i>Astragalus cremnophylax</i> var. <i>hevronii</i>	Plant	SOC		X										X					
<i>Astragalus cremnophylax</i> var. <i>myriorrhaphis</i>	Plant	SOC		X	X		X												
<i>Astragalus episcopus</i> var. <i>lancearius</i>	Plant	SOC			X				X										

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Astragalus humistratus</i> var. <i>tenerrimus</i>	Plant	SOC				X						X							
<i>Astragalus lentiginosus</i> var. <i>oropedii</i>	Plant	SOC			X	X													
<i>Astragalus lentiginosus</i> var. <i>vitreus</i>	Plant	SOC			X				X		X								
<i>Astragalus pinonis</i> var. <i>atwoodii</i>	Plant	SOC			X														
<i>Astragalus rusbyi</i>	Plant	SOC		X		X		X											
<i>Astragalus subcinereus</i>	Plant	SOC			X	X	X												
<i>Astragalus titanophilus</i>	Plant	SOC									X								
<i>Astragalus troglodytus</i>	Plant	SOC			X	X													
<i>Botrychium echo</i>	Plant	SOC								X		X							
<i>Camissonia gouldii</i>	Plant	SOC			X														
<i>Carex oreocharis</i>	Plant	SOC								X									
<i>Castilleja kaibabensis</i>	Plant	SOC		X						X									
<i>Chrysothamnus molestus</i>	Plant	SOC		X	X				X										
<i>Cirsium rothrockii</i>	Plant	SOC				X													
<i>Clematis hirsutissima</i> var. <i>hirsutissima</i>	Plant	SOI		X		X													

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Cleome lutea</i> <i>var. jonesii</i>	Plant	SOC			X												X		
<i>Cordylanthus</i> <i>wrightii ssp.</i> <i>kaibabensis</i>	Plant	SOC			X	X			X										
<i>Cryptantha</i> <i>abata</i>	Plant	SOC			X	X			X										
<i>Cystopteris</i> <i>utahensis</i>	Plant	SOC			X	X													
<i>Draba asprella</i> <i>var. asprella</i>	Plant	SOC				X													
<i>Draba asprella</i> <i>var. kaibabensis</i>	Plant	SOC			X	X													
<i>Draba asprella</i> <i>var. stelligera</i>	Plant	SOC				X													
<i>Draba</i> <i>rectifruca</i>	Plant	SOC						X											
<i>Erigeron</i> <i>saxatilis</i>	Plant	SOC		X		X													
<i>Eriogonum</i> <i>corymbosum var.</i> <i>glutinosum</i>	Plant	SOC			X														
<i>Eriogonum</i> <i>darrovii</i>	Plant	SOC									X								
<i>Eriogonum</i> <i>ericifolium var.</i> <i>pulchrum</i>	Plant	SOC			X	X													
<i>Eriogonum</i> <i>jonesii</i>	Plant	SOC			X				X										
<i>Eriogonum</i> <i>mortonianum</i>	Plant	SOC		X					X										
<i>Eriogonum</i> <i>thompsoniae var.</i> <i>atwoodii</i>	Plant	SOC		X					X										

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Escobaria vivipara</i> var. <i>kaibabensis</i>	Plant	SOC			X														
<i>Gaillardia parryi</i>	Plant	SOC			X														
<i>Hedeoma diffusa</i>	Plant	SOC		X		X													
<i>Helianthus arizonensis</i>	Plant	SOI		X	X														
<i>Heuchera novomexicana</i>	Plant	SOC																	
<i>Ivesia arizonica</i>	Plant	SOC				X													
<i>Ivesia arizonica</i> var. <i>arizonica</i>	Plant	SOC				X													
<i>Lepidium montanum</i> var. <i>glabrum</i>	Plant	SOC			X									X					
<i>Lesquerella arizonica</i>	Plant	SOC			X	X													
<i>Lesquerella kaibabensis</i>	Plant	SOC		X						X									
<i>Lotus mearnsii</i> var. <i>mearnsii</i>	Plant	SOC											X	X					
<i>Macromeria viridiflora</i> var. <i>viridiflora</i>	Plant	SOC				X													
<i>Mertensia maddougalii</i>	Plant	SOC				X													
<i>Moneses uniflora</i>	Plant	SOI				X		X				X							
<i>Myosurus nitidus</i>	Plant	SOC				X													
<i>Nuphar lutea</i>	Plant	SOI														X		X	
<i>Pediocactus paradinei</i>	Plant	SOC		X	X				X		X								
<i>Pediocactus peeblesianus</i> var. <i>fickeiseniae</i>	Plant	SOC		X					X		X								

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Pediomelum mephiticum</i>	Plant	SOC											X	X					
<i>Penstemon caespitosus</i> var. <i>desertipicti</i>	Plant	SOC			X														
<i>Penstemon laevis</i>	Plant	SOC			X	X													
<i>Penstemon nudiflorus</i>	Plant	SOC		X	X	X													
<i>Penstemon pseudoputus</i>	Plant	SOC				X				X									
<i>Penstemon rydbergii</i>	Plant	SOI								X									
<i>Perityle congesta</i>	Plant	SOC				X													
<i>Perityle gracilis</i>	Plant	SOC			X														
<i>Phacelia serrata</i>	Plant	SOC				X													
<i>Phemeranthus validulus</i>	Plant	SOC			X	X													
<i>Phlox amabilis</i>	Plant	SOC		X	X	X													
<i>Potentilla crinita</i> var. <i>lemmonii</i>	Plant	SOC				X													
<i>Ranunculus oreogenes</i>	Plant	SOC				X													
<i>Rosa stellata</i> ssp. <i>abyssa</i>	Plant	SOC		X	X				X										
<i>Salix bebbiana</i>	Plant	SOI		X												X			
<i>Shepherdia rotundifolia</i>	Plant	SOC			X														
<i>Sporobolus interruptus</i>	Plant	SOC				X				X									
<i>Stachys rothrockii</i>	Plant	SOC			X	X													

Scientific Name	Taxa	Status	MIS	R3SS	PJW	PP	DMC	MCA	SbS	MSG	GBG	SF	SdG	DC	GOS	W/C	CWRF	W	Multi
<i>Thelypodopsis ambigua</i> var. <i>ambigua</i>	Plant	SOC			X									X					
<i>Thelypteris puberula</i>	Plant	SOI															X		
<i>Triteleia lemmoniae</i>	Plant	SOC				X													

APPENDIX D: Description of threats not associated with Ecosystem Diversity Characteristics.

- Inappropriate timber harvest: Some timber harvest practices can modify habitat components in the forest to a degree that the harvested area becomes unsuitable habitat for desired species.
- Collection/harvest: Collecting specimens for research or personal use, or harvesting legally hunted game species.
- Fragmentation: Habitat fragmentation can be caused by activities on land in other ownership, roads, fencing, and areas of concentrated use by people.
- Disease: One frog species is susceptible to a serious fungal disease that can be transmitted by human activities, bighorn sheep are susceptible to multiple diseases transmitted by domestic sheep and goats, and prairie dogs are susceptible to plague.
- Livestock grazing on aspen, wetland vegetation, and facilitation of nest parasitism: Inappropriate livestock use can alter or inhibit growth of woody and herbaceous plants, and facilitate the spread of brown-headed cowbird nest parasitism.
- Nonnative / Invasive species: Non-native species threaten native species through competition, predation, and hybridization.
- Ungulate herbivory: At high population densities, elk and mule deer herbivory can alter or inhibit growth of woody and herbaceous plants (e.g., aspen, cliffrose, grassland and wetland vegetation).