



U.S. Forest Service
Pacific Southwest Region



June 2016

Species of Conservation Concern

Frequently Asked Questions

What is a Species of Conservation Concern?

A species of conservation concern (SCC) is a plant or animal for which we have concerns about its ability to remain on a landscape for a long time. Each forest plan has its own SCC list, which is approved by the Regional Forester. The Regional Forester coordinated with each Forest Supervisor and approved the SCC lists for the draft Inyo, Sequoia and Sierra National Forest plans.

What is the Species of Conservation Concern list identification process?

We evaluate species for SCC listing by following a process outlined in a Forest Service national directive (FSH 1909.12 § 12.52c-d). As species are considered, Forest Service specialists conduct research using databases, scientific studies, local information, and expert knowledge. In May and December 2015, the Forest Service shared the draft proposed Species of Conservation Concern lists and the criteria we used to develop the lists for public review. See the attached *SCC Identification Process* for more information.

How do SCCs influence forest plan revisions?

Once we have an SCC list, we determine the needs of each species. We then design forest plans to guide management that sustains habitat or conditions to support or restore secure SCC populations to the extent we are capable of doing so. Forest plans help us maintain a forest that provides SCCs with the habitat and ecological conditions they need to survive.

For instance, each forest plan will have certain components, including desired conditions and standards or guidelines, to sustain or restore ecosystem diversity and habitats. Where we meet the needs of multiple species by taking care of the ecosystem as a whole, we consider these “coarse” filter plan components. If the coarse filter plan components do not provide the conditions each SCC requires to persist on the forest, then we include additional species-specific plan components. These latter components are sometimes called “fine” filters.

What is the difference between an “SCC” and a Threatened or Endangered species?

A species of conservation concern is a Forest Service-specific classification that comes from the 2012 Planning Rule and subsequent direction in the Forest Service Handbook (FSH 1909 Chapter 12). The regulations describe an SCC as a species for which the best available science indicates there is a substantial concern about the species’ capability to persist over the long-term in the plan area. An SCC is not a federally threatened, endangered, proposed or candidate species under the Endangered Species Act. We create an SCC list using the best available science in a proactive step intended to prevent species from becoming federally listed.

Threatened and endangered species are federally designated under the Endangered Species Act of 1973. This Act was created to protect critically imperiled species from extinction. Similarly to how we address SCCs, if species that are listed or candidates for listing under the Endangered Species Act are present on the forest, then the forest plan would contain direction designed to prevent further decline and contribute to their recovery. Even if a federally listed species is not currently known to be present on the forest but “Critical Habitat” for their recovery (as designated by the US Fish and Wildlife Service) has been identified on the forest, our forest plan would contain direction to maintain that habitat.

Have the SCC lists changed from what the Forest Service shared with the public in 2015?

Yes. As we continued our analysis, our findings evolved because we uncovered new information about the species within these forests based on our own internal reviews and information provided by the public. In our continued internal review of the SCC lists, we identified some species that needed to be re-evaluated for a variety of reasons such as new or contradictory information. For instance, the plant Ramshaw Meadows abronia was added to our list for the Inyo National Forest and the animal species Pacific fisher was added to the Sequoia and Sierra National Forest lists because they are no longer being evaluated as candidate species under the Endangered Species Act but they meet the criteria to be an SCC.

Are these SCC lists and rationale final?

No. While we’ve shared our SCC lists for each forest, the lists and the rationale documents that support them are considered “living” documents. The lists may change from the draft forest plans to the final forest plans based on the information we gather during upcoming public comment periods. Even after the forest plans are final, the SCC lists will continue to be updated as new scientific information may indicate some species should be added or removed from the list.



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Identification Process

As part of the process for revising the forest plans for the Inyo, Sequoia and Sierra National Forests, we compiled a list of Species of Conservation Concern for each forest. The Species of Conservation Concern list is required by the 2012 Planning Rule, and identifies species at risk of being lost from a forest.

We evaluated species for Species of Conservation Concern listing by following a process outlined in a Forest Service national directive (FSH 1909.12 § 12.52c-d). As species were considered, Forest Service specialists conducted research using databases, scientific studies, local information, and expert knowledge.

In addition to research conducted by Forest Service specialists, the national directive required use of threat status rankings, determined in large part through [NatureServe](#), a non-profit organization that provides proprietary wildlife conservation-related data, tools, and services. The conservation status rank of a species is represented by a letter and a number. The letter represents one of two distinct geographic scales: global (G) and state (S). The status rank number is on a scale of one to five, where a ranking of one indicates a species at the highest level of risk and a ranking of five indicates the lowest level of risk (Table 1). For example, a status rank of G5 represents a species that has an extensive range of distribution and has a low risk of extinction.

Subspecies, varieties, and other designations below the level of species is indicated by a supplementary T-rank, following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1.

A description of the process used in evaluating species is provided below and, since it is not a completely linear process, is also displayed in a flowchart (Figure 1). The flowchart visually captures the main steps in the Species of Conservation Concern determination process.

Species of Conservation Concern Identification Process:

Mandatory criteria that must be met in order for a species to be considered a Species of Conservation Concern:

- The species is native to, and known to occur in, the area covered by the forest plan.
- The best available scientific information about the species indicates substantial concern about the species' capability to persist over the long term in the forest plan area.

Species that must be considered:

- Species with a NatureServe G/T1 or G/T2 status rank (Table 1).
- Species that were removed within the past 5 years from the Federal list of threatened or endangered (T&E) species, and other delisted species that regulatory agencies (e.g. US Fish & Wildlife Service) still monitor.

Species that should be considered:

- Species with NatureServe status rank of G/T3 or S1 or S2 (Table 1).
- Species listed as threatened or endangered by relevant states or federally recognized Tribes.
- Species identified by Federal, State and federally recognized Tribes as a high priority for conservation.
- Species that have been petitioned for Federal listing and for which a positive “90-day finding” has been made by a regulatory agency (e.g. US Fish & Wildlife Service).
- Species for which the best available scientific information indicates there is local conservation concern about the species' capability to persist over the long-term in the plan area due to:
 - Significant threats, caused by stressors on and off the plan area, to populations or the ecological conditions they depend upon (habitat), including threats from climate change;
 - Declining trends in populations or habitat in the plan area;
 - Restricted ranges (with corresponding narrow endemics, disjunct populations, or species at the edge of their range); and
 - Low population numbers or restricted ecological conditions (habitat) within the plan area.

Table 1. NatureServe¹ conservation status ranks and definitions.

Status Rank	Status Rank Definition
1	<i>Species is Critically Imperiled:</i> At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
2	<i>Species is Imperiled:</i> At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
3	<i>Species is Vulnerable:</i> At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
4	<i>Species is Apparently Secure:</i> At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
5	<i>Species is Secure:</i> At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.

¹[NatureServe](#) is a non-profit organization that provides proprietary wildlife conservation-related data, tools, and services to private and government clients, partner organizations, and the public.

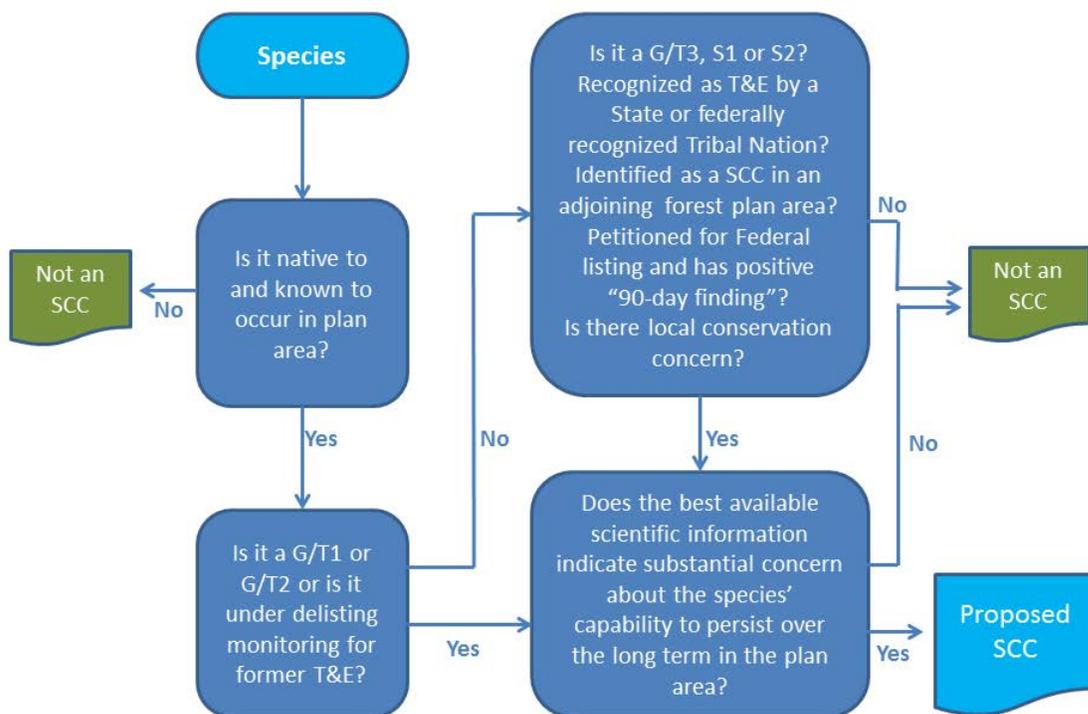


Figure 1. The directive-based process used by the Forest Service for determining species of conservation concern. (Note: The NatureServe rankings that are included here by letters and numbers are explained above).

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Inyo National Forest Species of Conservation Concern, June 9, 2016

List of species of conservation concern for the Inyo National Forest by species type, common name and scientific name, June 9, 2016

Type	Common Name (Scientific name)
Mammals	Nelson Desert Bighorn Sheep (<i>Ovis canadensis nelsoni</i>) Pacific fringe-tailed bat (<i>Myotis thysanodes vespertinus</i>) Sierra Marten (<i>Martes caurina sierra</i>) Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)
Birds	American peregrine falcon (<i>Falco peregrinus anatum</i>) Bald eagle (<i>Haliaeetus leucocephalus</i>) Greater sage-grouse (<i>Centrocercus urophasianus</i>) Willow flycatcher (<i>Empidonax traillii</i>)
Amphibians	Black toad (<i>Anaxyrus exsul</i>) Inyo Mountains salamander (<i>Batrachoseps campī</i>) Kern Plateau salamander (<i>Batrachoseps robustus</i>)
Fish	California golden trout (<i>Oncorhynchus mykiss aguabonita</i>)
Terrestrial Invertebrates	A cave obligate pseudoscorpion (<i>Tuberochernes aalbuī</i>) Apache fritillary (<i>Speyeria nokomis apacheana</i>) Atronis fritillary (<i>Speyeria mormonia obsidiana</i>) Boisduval's blue (<i>Plebejus icarioides inyo</i>) Mono Lake checkerspot (<i>Euphydryas editha monoensis</i>) San Emigdio blue (<i>Plebulina emigdionis</i>) Sierra skipper (<i>Hesperia miriamae</i>) Sierra sulphur (<i>Colias behrii</i>) Square dotted blue (<i>Euphilotes battoides mazourka</i>) White Mountains skipper (<i>Hesperia miriamae longaevicola</i>)
Aquatic Invertebrates	California stonefly (<i>Sweltsa resima</i>) Denning's cryptic caddisfly (<i>Cryptochia denningi</i>) Owens Valley springsnail (<i>Pyrgulopsis owensensis</i>) Western pearlshell (<i>Margaritifera falcata</i>) Wong's springsnail (<i>Pyrgulopsis wongi</i>)
Plants	Alkali ivesia (<i>Ivesia kingii</i> var. <i>kingii</i>) Alpine bentgrass (<i>Agrostis humilis</i>) Alpine jewelflower (<i>Streptanthus gracilis</i>) Alpineslender buckwheat (<i>Eriogonum microthecum</i> var. <i>alpinum</i>) Beautiful cholla (<i>Grusonia pulchella</i>) Beautiful cinquefoil (<i>Potentilla pulcherrima</i>) Blandow's bog moss (<i>Helodium blandowii</i>) Blue pendant-pod oxytrope (<i>Oxytropis deflexa</i> var. <i>sericea</i>) Bodie Hills rockcress (<i>Boechera bodiensis</i> (<i>Arabis</i> b.))

Type	Common Name (Scientific name)
Plants	Bolander's bruchia (<i>Bruchia bolanderi</i>)
	Bristlecone cryptantha (<i>Cryptantha roosiorum</i>)
	California draba (<i>Draba californica</i>)
	Charlotte's phacelia (<i>Phacelia nashiana</i>)
	Common moonwort (<i>Botrychium lineare</i>)
	Compact daisy (<i>Erigeron compactus</i>)
	Coyote gilia (<i>Aliciella triodon</i>)
	Davy's sedge (<i>Carex davyi</i>)
	Dedecker's clover (<i>Trifolium kingii</i> ssp. <i>dedeckerae</i> (<i>T. dedeckerae</i>))
	Father Crowley's lupine (<i>Lupinus padre-crowleyi</i>)
	Fell-fields claytonia (<i>Claytonia megarhiza</i>)
	Field ivesia (<i>Ivesia campestris</i>)
	Fivefinger chickensage (<i>Sphaeromeria potentilloides</i> var. <i>nitrophila</i>)
	Fivepetal cliffbush (<i>Jamesia americana</i> var. <i>rosea</i>)
	Foxtail thelypodium (<i>Thelypodium integrifolium</i> ssp. <i>complanatum</i>)
	Fringed chocolate chip lichen (<i>Solarina spongiosa</i>)
	Frog's-bit buttercup (<i>Ranunculus hydrocharoides</i>)
	Gilman's goldenbush (<i>Ericameria gilmanii</i>)
	Globose cymopterus (<i>Cymopterus globosus</i>)
	Golden violet (<i>Viola purpurea</i> ssp. <i>aurea</i>)
	Great Basin onion (<i>Allium atrorubens</i> var. <i>atorubens</i>)
	Hall's meadow hawksbeard (<i>Crepis runcinata</i> ssp. <i>hallii</i>)
	Hidden rockcress (<i>Boechera evadens</i>)
	Horned dandelion (<i>Taraxacum ceratophorum</i>)
	Idaho sedge (<i>Carex idahoensis</i>)
	Inflated Cima milk-vetch (<i>Astragalus cimae</i> var. <i>sufflatus</i>)
	Inyo biscuitroot (<i>Lomatium foeniculaceum</i> ssp. <i>inyoense</i>)
	Inyo blazing star (<i>Mentzelia inyoensis</i>)
	Inyo County star-tulip (<i>Calochortus excavatus</i>)
	Inyo hulsea (<i>Hulsea vestita</i> ssp. <i>inyoensis</i>)
	Inyo milk-vetch (<i>Astragalus inyoensis</i>)
	Inyo phacelia (<i>Phacelia inyoensis</i>)
	Jaeger's hesperidanthus (<i>Hesperidanthus jaegeri</i>)
	July gold (<i>Dedeckera eurekaensis</i>)
	Kern County milk-vetch (<i>Astragalus subvestitus</i>)
	Kern Plateau bird's-beak (<i>Cordylanthus eremicus</i> ssp. <i>kernensis</i>)
	Kern Plateau milk-vetch (<i>Astragalus lentiginosus</i> var. <i>kernensis</i>)
	Lake Tahoe serpentweed (<i>Tonestus eximius</i>)
	Lance-leaved scurf-pea (<i>Ladeania lanceolata</i> (<i>Psoralidium lanceolatum</i>))
	Lemmon's milk-vetch (<i>Astragalus lemmonii</i>)
Liddon's sedge (<i>Carex petasata</i>)	
Limestone beardtongue (<i>Penstemon calcareus</i>)	
Limestone daisy (<i>Erigeron uncialis</i> var. <i>uncialis</i>)	
Little bulrush (<i>Trichophorum pumilum</i>)	
Long Valley milk-vetch (<i>Astragalus johannis-howellii</i>)	

Type	Common Name (Scientific name)
Plants	Male fern (<i>Dryopteris filix-mas</i>) Marble rockmat (<i>Petrophyton acuminatum</i>) Masonic mountain jewelflower (<i>Streptanthus oliganthus</i>) Mason's sky pilot (<i>Polemonium chartaceum</i>) Mingan moonwort (<i>Botrychium minganense</i>) Mono Lake lupine (<i>Lupinus duranii</i>) Mono milk-vetch (<i>Astragalus monoensis</i>) Mono phacelia (<i>Phacelia monoensis</i>) Morefield's cinquefoil (<i>Potentilla morefieldii</i>) Mt. Whitney draba (<i>Draba sharsmithii</i>) Narrow-leaved cottonwood (<i>Populus angustifolia</i>) Nevada ninebark (<i>Physocarpus alternans</i>) Northern meadow sedge (<i>Carex praticola</i>) Ochre-flowered buckwheat (<i>Eriogonum alexandrae</i> (<i>E. ochrocephalum</i> var. <i>ochrocephalum</i>)) Olancha Peak buckwheat (<i>Eriogonum wrightii</i> var. <i>olanchense</i>) Panamint rock-goldenrod (<i>Cuniculotinus gramineus</i> (<i>Chrysothamnus g.</i>)) Parish's popcornflower (<i>Plagiobothrys parishii</i>) Pinyon Mesa buckwheat (<i>Eriogonum mensicola</i>) Pinzl's rockcress (<i>Boechera pinzliae</i>) Poison Canyon stickseed (<i>Hackelia brevicula</i>) Prairie wedge grass (<i>Sphenopholis obtusata</i>) Pygmy pussypaws (<i>Calyptridium pygmaeum</i>) Ramshaw Meadows abronia (<i>Abronia alpina</i>) Raven's milk-vetch (<i>Astragalus ravenii</i>) Redspined fishhook cactus (<i>Sclerocactus polyancistrus</i>) Rosette cushion cryptantha (<i>Cryptantha circumscissa</i> var. <i>rosulata</i>) Scalloped moonwort (<i>Botrychium crenulatum</i>) Seep kobresia (<i>Kobresia myosuroides</i> (<i>K. bellardii</i>)) Sharsmith's stickseed (<i>Hackelia sharsmithii</i>) Shockley's milk-vetch (<i>Astragalus serenoii</i> var. <i>shockleyi</i>) Shockley's rockcress (<i>Boechera shockleyi</i> (<i>Arabis s.</i>)) Short-leaved hulsea (<i>Hulsea brevifolia</i>) Silver bladderpod (<i>Physaria ludoviciana</i>) Slender townsendia (<i>Townsendia leptotes</i>) Small-flowered rice grass (<i>Stipa divaricata</i>) Spikerush sedge (<i>Carex duriuscula</i>) Spiny-leaved milk-vetch (<i>Astragalus kentrophyta</i> var. <i>elatus</i>) Steven's sedge (<i>Carex stevenii</i>) Sweet-smelling monardella (<i>Monardella beneolens</i>) Tiehm's rockcress (<i>Boechera tiehmii</i> (<i>Arabis t.</i>)) Tioga Pass sedge (<i>Carex tiogana</i>) Torrey's blazing star (<i>Mentzelia torreyi</i>) Tulare rockcress (<i>Boechera tularensis</i>) Upswept moonwort (<i>Botrychium ascendens</i>)

Type	Common Name (Scientific name)
Plants	Western single-spiked sedge (<i>Carex scirpoidea</i> ssp. <i>pseudoscirpoidea</i>) Western valley sedge (<i>Carex vallicola</i>) Wheeler's dune-broom (<i>Chaetadelpa wheeleri</i>) White Mountains draba (<i>Draba monoensis</i>) White Mountains horkelia (<i>Horkelia hispidula</i>) Williams' combleaf (<i>Polyctenium fremontii</i> (<i>williamsiae</i>)) Yellow spinecane (<i>Goodmania luteola</i>)

Sequoia National Forest Species of Conservation Concern, June 9, 2016

List of species of conservation concern for the Sequoia National Forest by species type, common name and scientific name, June 9, 2016*

Type	Common Name (Scientific name)
Mammals	Pacific fisher (<i>Martes pennanti</i>) Pacific fringe-tailed bat (<i>Myotis thysanodes vespertinus</i>) Sierra Marten (<i>Martes caurina sierra</i>) Townsend's big-eared bat (<i>Corynorhinus townsendii</i>) Yellow-eared pocket mouse (<i>Perognathus parvus xanthonotus</i>)
Birds	American peregrine falcon (<i>Falco peregrinus anatum</i>) Bald eagle (<i>Haliaeetus leucocephalus</i>) California spotted owl (<i>Strix occidentalis occidentalis</i>) Great gray owl (<i>Strix nebulosa</i>) Kern Red-winged blackbird (<i>Agelaius phoeniceus aciculatus</i>) Tricolored blackbird (<i>Agelaius tricolor</i>) Willow flycatcher (<i>Empidonax traillii</i>)
Amphibians	Fairview slender salamander (<i>Batrachoseps bramei</i>) Foothill yellow-legged frog (<i>Rana boylei</i>) Gregarious slender salamander (<i>Batrachoseps gregarius</i>) Kern Canyon slender salamander (<i>Batrachoseps simatus</i>) Kern Plateau salamander (<i>Batrachoseps robustus</i>) Kings River slender salamander (<i>Batrachoseps regius</i>) Relictual slender salamander (<i>Batrachoseps relictus</i>) Yellow-blotched salamander (<i>Ensatina eschscholtzii croceator</i>)
Fish	California golden trout (<i>Oncorhynchus mykiss aguabonita</i>) Central Valley hitch (<i>Lavinia exilicauda exilicauda</i>) Hardhead (<i>Mylopharodon conocephalus</i>) Kern River golden trout (<i>Oncorhynchus mykiss gilberti</i>)
Terrestrial Invertebrates	Behr's metalmark (<i>Apodemia virgulti davenporti</i>) Boisduval's blue (<i>Plebejus icarioides inyo</i>) San Emigdio blue (<i>Plebulina emigdionis</i>) Tehachapi fritillary (<i>Speyeria egleis tehachapina</i>) Tight coin (<i>Ammonitella yatesii</i>)
Aquatic Invertebrates	Western pearlshell (<i>Margaritifera falcata</i>)

Type	Common Name (Scientific name)
Plants	<p>Alkali mariposa lily (<i>Calochortus striatus</i>)</p> <p>Baja navarretia (<i>Navarretia peninsularis</i>)</p> <p>Blandow's bog moss (<i>Helodium blandowii</i>)</p> <p>Bolander's woodreed (<i>Cinna bolanderi</i>)</p> <p>Bolander's bruchia (<i>Bruchia bolanderi</i>)</p> <p>Boyden Cave gilia (<i>Gilia yorkii</i>)</p> <p>Breedlove's buckwheat, Piute buckwheat (<i>Eriogonum breedlovei</i> var. <i>breedlovei</i>)</p> <p>Calico monkeyflower (<i>Mimulus pictus</i>)</p> <p>Charlotte's phacelia (<i>Phacelia nashiana</i>)</p> <p>Chimney Creek nemacladus (<i>Nemacladus calcaratus</i>)</p> <p>Congdon's lewisia (<i>Lewisia congdonii</i>)</p> <p>Dedecker's clover (<i>Trifolium kingii</i> ssp. <i>dedeckerae</i> (<i>T. dedeckerae</i>))</p> <p>Field ivesia (<i>Ivesia campestris</i>)</p> <p>Greenhorn fritillary (<i>Fritillaria brandegeei</i>)</p> <p>Hall's daisy, Hall's fleabane (<i>Erigeron aequifolius</i>)</p> <p>hidden rockcress (<i>Boechera evadens</i>)</p> <p>Hocket Lakes fawn lily, Kaweah Lakes fawnlily (<i>Erythronium pusaterii</i>)</p> <p>Kaweah brodiaea (<i>Brodiaea insignis</i>)</p> <p>Kaweah monkeyflower (<i>Mimulus norrisii</i>)</p> <p>Kelso Creek monkeyflower (<i>Mimulus shevockii</i>)</p> <p>Kern County milk-vetch (<i>Astragalus subvestitus</i>)</p> <p>Kern Plateau bird's-beak (<i>Cordylanthus eremicus</i> ssp. <i>kernensis</i>)</p> <p>Kern Plateau horkelia (<i>Horkelia tularensis</i>)</p> <p>Kern Plateau milk-vetch (<i>Astragalus lentiginosus</i> var. <i>kernensis</i>)</p> <p>Kern River daisy (<i>Erigeron multiceps</i>)</p> <p>Kern River evening primrose (<i>Camissonia integrifolia</i>)</p> <p>King's River buckwheat (<i>Eriogonum nudum</i> var. <i>regirivum</i>)</p> <p>Little Kern or Shevock's milk-vetch (<i>Astragalus shevockii</i>)</p> <p>Madera leptosiphon (<i>Leptosiphon serrulatus</i>)</p> <p>Marble rockmat (<i>Petrophyton acuminatum</i>)</p> <p>Meesia moss (<i>Meesia uliginosa</i>)</p> <p>Mineral King draba (<i>Draba cruciata</i>)</p> <p>Mingan moonwort (<i>Botrychium minganense</i>)</p> <p>Mojave tarplant (<i>Deinandra mohavensis</i>)</p> <p>Monarch buckwheat (<i>Eriogonum ovalifolium</i> var. <i>monarchense</i>)</p> <p>Monarch golden aster (<i>Heterotheca monarchensis</i>)</p> <p>Muir's tarplant (<i>Carlquistia muirii</i>)</p> <p>Munz's iris (<i>Iris munzii</i>)</p> <p>Nine Mile Canyon phacelia (<i>Phacelia novenmillensis</i>)</p> <p>Oval-leaved viburnum (<i>Viburnum ellipticum</i>)</p> <p>Pale-yellow layia (<i>Layia heterotricha</i>)</p> <p>Pierpoint Springs dudleya (<i>Dudleya cymosa</i> ssp. <i>costatifolia</i>)</p> <p>Piute cypress (<i>Hesperocyparis nevadensis</i>)</p> <p>Piute Mountains jewel-flower (<i>Streptanthus cordatus</i> var. <i>piutensis</i>)</p> <p>Piute Mountains navarretia (<i>Navarretia setiloba</i>)</p>

Type	Common Name (Scientific name)
Plants	Purple mountain-parsley (<i>Oreonana purpurascens</i>) Pygmy pussypaws (<i>Calyptridium pygmaeum</i>) Rose-flowered Larkspur (<i>Delphinium purpusii</i>) Rosette cushion cryptantha (<i>Cryptantha circumscissa</i> var. <i>rosulata</i>) Roundleaf stork's bill (<i>California macrophylla</i>) San Bernardino aster (<i>Symphyotrichum defoliatum</i>) Scalloped moonwort (<i>Botrychium crenulatum</i>) Sequoia gooseberry (<i>Ribes tulareense</i>) Shevock's copper moss (<i>Mielichhoferia shevockii</i>) Shevock's golden aster (<i>Heterotheca shevockii</i>) Shevock's rockcress (<i>Boechera shevockii</i>) Shirley Meadows star-tulip, mariposa lily (<i>Calochortus westonii</i>) Short-leaved hulsea (<i>Hulsea brevifolia</i>) Sierra bleeding heart, Tulare County bleeding heart (<i>Dicentra nevadensis</i>) Slender-stalked monkeyflower (<i>Mimulus gracilipes</i>) Spanish Needle onion (<i>Allium shevockii</i>) Spjut's bristle moss (<i>Orthotrichum spjutii</i>) Striped adobe-lily (<i>Fritillaria striata</i>) Sweet-smelling monardella (<i>Monardella beneolens</i>) Tehipite Valley jewel-flower (<i>Streptanthus fenestratus</i>) Tracy's eriastrum (<i>Eriastrum tracyi</i>) Tube flower bluecup (<i>Githopsis tenella</i>) Tulare rockcress (<i>Boechera tularensis</i>) Twisselmann's buckwheat (<i>Eriogonum twisselmannii</i>) Twisselmann's nemacladus (<i>Nemacladus twisselmannii</i>) Walker Pass milk-vetch (<i>Astragalus erterae</i>) Western goblin or mountain moonwort (<i>Botrychium montanum</i>) Western waterfan lichen (<i>Peltigera gowardii</i>) Woolly mountain-parsley (<i>Oreonana vestita</i>) Yosemite lewisia (<i>Lewisia disepala</i>)

*This list does not reflect the Sequoia National Monument area.

Sierra National Forest Species of Conservation Concern, June 9, 2016

List of species of conservation concern for the Sierra National Forest by species type, common name and scientific name, June 9, 2016

Type	Common Name (Scientific name)
Mammals	Pacific fisher (<i>Martes pennanti</i>) Pacific fringe-tailed bat (<i>Myotis thysanodes vespertinus</i>) Sierra Marten (<i>Martes caurina sierra</i>) Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)
Birds	American peregrine falcon (<i>Falco peregrinus anatum</i>) Bald eagle (<i>Haliaeetus leucocephalus</i>) California spotted owl (<i>Strix occidentalis occidentalis</i>) Great gray owl (<i>Strix nebulosa</i>) Willow flycatcher (<i>Empidonax traillii</i>)
Amphibians	Foothill yellow-legged frog (<i>Rana boylei</i>) Gregarious slender salamander (<i>Batrachoseps gregarius</i>) Hell Hollow slender salamander (<i>Batrachoseps diabolicus</i>) Kings River slender salamander (<i>Batrachoseps regius</i>) Limestone salamander (<i>Hydromantes brunus</i>)
Fish	Central Valley hitch (<i>Lavinia exilicauda exilicauda</i>) Hardhead (<i>Mylopharodon conocephalus</i>) Kern Brook lamprey (<i>Lampetra hubbsi</i>)
Terrestrial Invertebrates	Indian Yosemite snail (<i>Monadenia yosemitensis</i>) Merced Canyon shoulderband (<i>Helminthoglypta allynsmithi</i>)
Aquatic Invertebrates	An isopod (<i>Calasellus longus</i>)
Plants	Bolander's woodreed (<i>Cinna bolanderi</i>) Bolander's bruchia (<i>Bruchia bolanderi</i>) Bolander's clover (<i>Trifolium bolanderi</i>) Boyden Cave gilia (<i>Gilia yorkii</i>) Canyon gooseberry (<i>Ribes menziesii</i> var. <i>ixoderme</i>) Common moonwort (<i>Botrychium lineare</i>) Congdon's eriophyllum, Congdon's woolly sunflower (<i>Eriophyllum congdonii</i>) Congdon's lewisia (<i>Lewisia congdonii</i>) Fissidens moss (<i>Fissidens aphelotaxifolius</i>) Flaming trumpet (<i>Collomia rawsoniana</i>) Howell's tauschia (<i>Tauschia howellii</i>) Kaweah monkeyflower (<i>Mimulus norrisii</i>) Kellogg's lewisia (<i>Lewisia kelloggii</i> ssp. <i>kelloggii</i>) King's River buckwheat (<i>Eriogonum nudum</i> var. <i>regirivum</i>) Madera leptosiphon (<i>Leptosiphon serrulatus</i>) Mariposa clarkia (<i>Clarkia biloba</i> ssp. <i>australis</i>) Meesia moss (<i>Meesia uliginosa</i>)

Type	Common Name (Scientific name)
Plants	<p>Merced clarkia (<i>Clarkia lingulata</i>)</p> <p>Mingan moonwort (<i>Botrychium minganense</i>)</p> <p>Monarch buckwheat (<i>Eriogonum ovalifolium</i> var. <i>monarchense</i>)</p> <p>Mono Hot Springs evening-primrose (<i>Camissonia sierrae</i> ssp. <i>alticola</i>)</p> <p>Mountain lady's slipper (<i>Cypripedium montanum</i>)</p> <p>Mt. Whitney draba (<i>Draba sharsmithii</i>)</p> <p>Muir's tarplant (<i>Carlquistia muirii</i>)</p> <p>Orange lupine (<i>Lupinus citrinus</i> var. <i>citrinus</i>)</p> <p>Oval-leaved viburnum (<i>Viburnum ellipticum</i>)</p> <p>Parry's horkelia (<i>Horkelia parryi</i>)</p> <p>Pygmy pussypaws (<i>Calyptridium pygmaeum</i>)</p> <p>Scalloped moonwort (<i>Botrychium crenulatum</i>)</p> <p>Shevock's copper moss (<i>Mielichhoferia shevockii</i>)</p> <p>Short-leaved hulsea (<i>Hulsea brevifolia</i>)</p> <p>Shuteye Peak fawn lily, manyflower fawnlily (<i>Erythronium pluriflorum</i>)</p> <p>Sierra bleeding heart, Tulare County bleeding heart (<i>Dicentra nevadensis</i>)</p> <p>Slender-stalked monkeyflower (<i>Mimulus gracilipes</i>)</p> <p>Tehipite Valley jewel-flower (<i>Streptanthus fenestratus</i>)</p> <p>Tracy's eriastrum (<i>Eriastrum tracyi</i>)</p> <p>tree-anemone (<i>Carpenteria californica</i>)</p> <p>Tulare rockcress (<i>Boechera tularensis</i>)</p> <p>Tundra pohlia moss (<i>Pohlia tundra</i>)</p> <p>Unexpected larkspur (<i>Delphinium inopinum</i>)</p> <p>Upswept moonwort (<i>Botrychium ascendens</i>)</p> <p>Western goblin or mountain moonwort (<i>Botrychium montanum</i>)</p> <p>Yosemite bog orchid (<i>Platanthera yosemitensis</i>)</p> <p>Yosemite lewisia (<i>Lewisia disepala</i>)</p> <p>Yosemite onion (<i>Allium yosemitense</i>)</p>