

**State of California
Natural Resources Agency
Department of Fish and Wildlife
Wildlife Branch**

California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List

Revised January 2, 2024

Wildlife Diversity Program, 2024-07

California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List (*TVPICP List*)

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List Purpose

This California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List (TVPICP List; Table 1) was developed to identify California terrestrial and vernal pool invertebrates of conservation priority. This TVPICP List does not give any species included on the TVPICP List any formal legal status. This TVPICP List uses the definition of "terrestrial and vernal pool invertebrates" set out in California Code of Regulations, title 14, section 650, subdivision (b)(26)(E)(1): "invertebrates that occur on land above mean high tide of marine waters, including aquatic insects in the aerial life stage and those aquatic invertebrates that occur only in vernal pools or other ephemeral waters that support vernal pool invertebrates, but do not normally support finfish."

Criteria for Inclusion on TVPICP List

The species on the TVPICP List are terrestrial or vernal pool invertebrates that satisfy at least one of the following criteria: (1) is designated as threatened, endangered, or candidate species under the federal Endangered Species Act (ESA); (2) is designated as threatened, endangered, or candidate species under the California Endangered Species Act (CESA); or (3) has a state NatureServe rank of S1, S1S2, SH, or SX. Global NatureServe ranks were not included as a factor in list development because the TVPICP List only includes California species. This TVPICP List was developed by querying the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) on January 2, 2024. The CNDDDB is an inventory of the status and locations of rare plants and animals in California.

NatureServe Element Rankings

The CNDDDB is a member of the NatureServe Network of natural heritage programs and uses the same conservation status ranking methodology as other network programs. The ranking system was originally developed by The Nature Conservancy and is now maintained by NatureServe. It includes a Global rank (G-rank) which describes the status for a given taxon over its entire distribution, and a state rank (S-rank) which describes the status for the taxon over its distribution within a given state. Procedurally, state programs such as the CNDDDB develop the state ranks. Because the units of conservation may include non-taxonomic biological entities such as populations or ecological communities, NatureServe and CNDDDB refer to the targets of biological conservation as "elements" rather than taxa. The criteria used to assign state element ranks are described below. CNDDDB does not track all invertebrate species that occur in California, but instead focuses on a subset of species which can be found on CDFW's [Special Animals List](https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals) (<https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>).

An element rank is assigned using standard criteria and rank definitions. This standardization makes the ranks comparable between organisms and across political boundaries. NatureServe has developed a "rank calculator" to help increase repeatability and transparency of the ranking process. The three main

categories that are taken into consideration when assigning an element rank are rarity, threats, and trends. Within these three categories, various factors are considered, including:

- Range extent, area of occupancy, population size, total number of occurrences, and number of good occurrences (ranked A or B). Environmental specificity can also be used if other information is lacking.
- Overall threat impact as well as intrinsic vulnerability (if threats are unknown).
- Long-term and short-term trends.

An element's ranking status may be adjusted up or down depending upon the considerations above.

[NatureServe detailed information on element ranking methodology](https://www.natureserve.org/conservation-status-assessment)

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State Ranking

S-ranks refers to a species' imperilment status within a given state's boundaries, in this case, California:

- **SX: Presumed Extirpated*** – Species believed to be extirpated from the state. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
- **SH: Possibly Extirpated*** – Known from only historical records but still some hope of rediscovery. There is evidence that the species may no longer be present in the state, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction.
- **S1: Critically Imperiled*** – At very high risk of extirpation in the state due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
- **S2: Imperiled** – At high risk of extirpation in the state due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- **S3: Vulnerable** – At moderate risk of extirpation in the state due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- **S4: Apparently Secure** – At a fairly low risk of extirpation in the state 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.
- **S5: Secure** – At very low or no risk of extirpation in the state due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
- **SNR: Unranked** – State rank not yet assessed.

** Species with this ranking are included on the TVPICP List.*

Uncertainty about the status of an element is expressed as a range of values. For example, S1S2 indicates the rank is somewhere between S1 and S2. While no species on the TVPICP List have a “?” in their S-rank, NatureServe adds question marks to S-ranks to represent uncertainty. For example, S2? Indicates the ranking fits closer to S2 than S2S3 but is still uncertain.

Other considerations used when ranking a species include the pattern of distribution of the element on the landscape, fragmentation of the population, and historical extent as compared to its modern range.

S-ranks for each species on the TVPICP List can be found in the “S-rank” column.

California Endangered Species Act Listing Status

The CESA listing status of each species can be found in the “CalList” column of the TVPICP List. If the cell has a dash “—”, the species has not been listed as threatened or endangered under CESA nor is it a candidate under CESA. The CESA listing status of each species on this TVPICP List is current as of the date of this TVPICP List. A 2081(a) Memorandum of Understanding is required for CESA candidate species or species listed as threatened or endangered. A “r” after the state status denotes whether an MOU is required at the time of list publication.

Federal Endangered Species Act Listing Status

The federal ESA listing status of each species can be found in the “FedList” column of the TVPICP List. If the cell dash “—”, the species has not been listed as threatened or endangered under the federal ESA nor is it a candidate for listing under the federal ESA. The federal ESA listing status of each species on this TVPICP List is current as of the date of this TVPICP List.

Taxonomic Standards

This TVPICP List, consistent with CNDDDB, follows [current published taxonomy for invertebrates as recognized by NatureServe](#)

(https://help.natureserve.org/biotics/content/record_management/Element_Files/Element_Tracking/ET_RACK_Invertebrate_References.htm).

The “Author, Date” column contains information from the [Integrated Taxonomic Information System](#) (ITIS; <https://www.itis.gov/>). If a scientific name changes after the publication date of this TVPICP List but before CDFW has issued an updated version of the list, searching the author and year in ITIS can assist in finding previously accepted names.

Table 1. California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List

Scientific Name	Common Name	Author, Date	FedList	CallList	S-Rank
ARACHNIDA (spiders and their relatives)					
<i>Aphrastochthonius grubbsi</i>	Grubbs' Cave pseudoscorpion	Muchmore, 1984	—	—	S1
<i>Aphrastochthonius similis</i>	Carlow's Cave pseudoscorpion	Muchmore, 1984	—	—	S1
<i>Banksula californica</i>	Alabaster Cave harvestman	Banks, 1900	—	—	SH
<i>Banksula galilei</i>	Galile's cave harvestman	Briggs, 1974	—	—	S1
<i>Banksula grubbsi</i>	Grubbs' cave harvestman	Briggs and Ubick, 1981	—	—	S1
<i>Banksula incredula</i>	incredible harvestman	Ubick and Briggs, 2002	—	—	S1
<i>Banksula martinorum</i>	Martins' cave harvestman	Briggs and Ubick, 1981	—	—	S1
<i>Banksula melones</i>	Melones Cave harvestman	Briggs, 1974	—	—	S1
<i>Banksula rudolphi</i>	Rudolph's cave harvestman	Briggs and Ubick, 1981	—	—	S1
<i>Banksula tuolumne</i>	Tuolumne cave harvestman	Briggs, 1974	—	—	S1
<i>Banksula tutankhamen</i>	King Tut Cave harvestman	Ubick and Briggs, 2002	—	—	S1
<i>Calicina arida</i>	San Benito harvestman	Ubick and Briggs, 1989	—	—	S1
<i>Calicina breva</i>	Stanislaus harvestman	Briggs, 1968	—	—	S1
<i>Calicina cloughensis</i>	Clough Cave harvestman	Briggs and Hom, 1967	—	—	S1
<i>Calicina conifera</i>	Crane Flat harvestman	Ubick and Briggs, 1989	—	—	S1
<i>Calicina diminua</i>	Marin blind harvestman	Ubick and Briggs, 1989	—	—	S1
<i>Calicina dimorphica</i>	Watts Valley harvestman	Ubick and Briggs, 1989	—	—	S1
<i>Calicina macula</i>	marbled harvestman	Briggs, 1968	—	—	S1
<i>Calicina mesaensis</i>	Table Mountain harvestman	Ubick and Briggs, 1989	—	—	S1
<i>Calicina minor</i>	Edgewood blind harvestman	Briggs and Hom, 1966	—	—	S1
<i>Calicina piedra</i>	Piedra harvestman	Briggs, 1968	—	—	S1
<i>Calileptoneta briggsi</i>	Briggs' leptonetid spider	Ledford, 2004	—	—	S1
<i>Calileptoneta oasa</i>	Andreas Canyon leptonetid spider	Gertsch, 1974	—	—	S1
<i>Calileptoneta ubicki</i>	Ubick's leptonetid spider	Ledford, 2004	—	—	S1
<i>Calileptoneta wapiti</i>	Mendocino leptonetid spider	Gertsch, 1974	—	—	S1

Scientific Name	Common Name	Author, Date	FedList	CallList	S-Rank
<i>Fissilicreagris imperialis</i>	Empire Cave pseudoscorpion	Muchmore, 1969	—	—	S1
<i>Hubbardia idria</i>	Idria short-tailed whipscorpion	Reddell and Cokendolpher, 1991	—	—	S1
<i>Hubbardia secoensis</i>	Arroyo Seco short-tailed whipscorpion	Briggs and Hom, 1988	—	—	S1
<i>Hubbardia shoshonensis</i>	Shoshone Cave whipscorpion	Briggs and Hom, 1972	—	—	S1
<i>Larca aalbui</i>	Aalbu's Cave pseudoscorpion	Muchmore, 1984	—	—	S1
<i>Larca laceyi</i>	Lacey's Cave pseudoscorpion	Muchmore, 1981	—	—	S1
<i>Microcina edgewoodensis</i>	Edgewood Park micro-blind harvestman	Briggs and Ubick, 1989	—	—	S1
<i>Microcina jungi</i>	Jung's micro-blind harvestman	Briggs and Ubick, 1989	—	—	S1
<i>Microcina leei</i>	Lee's micro-blind harvestman	Briggs and Ubick, 1989	—	—	S1
<i>Microcina lumi</i>	Lum's micro-blind harvestman	Briggs and Ubick, 1989	—	—	S1
<i>Neochthonius imperialis</i>	Empire Cave pseudoscorpion	Muchmore, 1996	—	—	S1
<i>Pseudogarypus orpheus</i>	Music Hall Cave pseudoscorpion	Muchmore, 1981	—	—	S1
<i>Socalchemmis gertschi</i>	Gertsch's socialchemmis spider	Platnick and Ubick, 2001	—	—	S1
<i>Socalchemmis icenoglei</i>	Icenogle's socialchemmis spider	Platnick and Ubick, 2001	—	—	S1
<i>Socalchemmis monterey</i>	Monterey socialchemmis spider	Platnick and Ubick, 2001	—	—	S1
<i>Talanites ubicki</i>	Ubick's gnaphosid spider	Platnick and Ovtsharenko, 1991	—	—	S1
<i>Texella deserticola</i>	Whitewater Canyon harvestman	Ubick and Briggs, 1992	—	—	S1
<i>Texella kokoweef</i>	Kokoweef Crystal Cave harvestman	Ubick and Briggs, 1992	—	—	S1
<i>Texella shoshone</i>	Shoshone Cave harvestman	Ubick and Briggs, 1992	—	—	S1
CRUSTACEANS, Order Anomopoda (water fleas)					
<i>Dumontia oregonensis</i>	hairy water flea	Santos-Flores and Dodson, 2003	—	—	S1
CRUSTACEANS, Order Anostraca (fairy shrimp)					
<i>Branchinecta campestris</i>	pocket pouch fairy shrimp	Lynch, 1960	—	—	S1
<i>Branchinecta conservatio</i>	Conservancy fairy shrimp	Eng, Belk and Eriksen, 1990	Endangered	—	S2
<i>Branchinecta longiantenna</i>	longhorn fairy shrimp	Eng, Belk and Eriksen, 1990	Endangered	—	S2
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	Eng, Belk and Eriksen, 1990	Threatened	—	S3
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	Fugate, 1993	Endangered	—	S1

Scientific Name	Common Name	Author, Date	FedList	CallList	S-Rank
<i>Linderiella santarosae</i>	Santa Rosa Plateau fairy shrimp	Thiéry and Fugate, 1994	—	—	S1
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	Eng, Belk and Eriksen, 1990	Endangered	—	S2
CRUSTACEANS, Order Notostraca (tadpole shrimp)					
<i>Lepidurus packardi</i>	vernal pool tadpole shrimp	Simon, 1886	Endangered	—	S3
INSECTA, Order Coleoptera (beetles)					
<i>Aegialia concinna</i>	Ciervo aegilian scarab beetle	Gordon & Cartwright, 1977	—	—	S1
<i>Agrilus harenus</i>	Harenus jewel beetle	Nelson, 1994	—	—	S1
<i>Anomala carlsoni</i>	Carlson's dune beetle	Hardy, 1976	—	—	S1
<i>Anomala hardyorum</i>	Hardy's dune beetle	Potts, 1976	—	—	S1
<i>Cicindela hirticollis abrupta</i>	Sacramento Valley tiger beetle	Casey, 1913	—	—	SH
<i>Cicindela latesignata</i>	western beach tiger beetle	LeConte, 1851	—	—	S1
<i>Cicindela ohlone</i>	Ohlone tiger beetle	Freitag & Kavanaugh, 1993	Endangered	—	S1
<i>Cicindela senilis frosti</i>	senile tiger beetle	Varas-Arangua, 1928	—	—	S1
<i>Cicindela tranquebarica joaquinensis</i>	San Joaquin tiger beetle	Knisley and Haines, 2007	—	—	S1
<i>Cicindela tranquebarica viridissima</i>	greenest tiger beetle	Fall, 1910	—	—	S1
<i>Coelus globosus</i>	globose dune beetle	LeConte, 1851	—	—	S1S2
<i>Coelus gracilis</i>	San Joaquin dune beetle	Blaisdell, 1939	—	—	S1
<i>Coenonycha clementina</i>	San Clemente Island coenonycha beetle	Casey, 1909	—	—	S1S2
<i>Cyclocephala wandae</i>	Wandae dune beetle	Hardy, 1974	—	—	S1
<i>Deltaspis ivae</i>	marsh-elder long-horned beetle	Beierl and Barchet-Beierl, 1999	—	—	S1
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	Fisher, 1921	Threatened	—	S3
<i>Dinacoma caseyi</i>	Casey's June beetle	Blaisdell, 1930	Endangered	—	S1
<i>Elaphrus viridis</i>	Delta green ground beetle	Horn, 1878	Threatened	—	S1
<i>Habroscelimorpha gabbii</i>	western tidal-flat tiger beetle	Horn, 1866	—	—	S1
<i>Juniperella mirabilis</i>	juniper metallic wood-boring beetle	Knull, 1947	—	—	S1
<i>Lepismadora algodones</i>	Algodones sand jewel beetle	Velten and Bellamy, 1987	—	—	S1S2
<i>Lichnanthe albipilosa</i>	white sand bear scarab beetle	Carlson, 1980	—	—	S1
<i>Lytta insperata</i>	Mojave Desert blister beetle	Horn, 1874	—	—	S1S2
<i>Microcylloepus formicoideus</i>	Furnace Creek riffle beetle	Shepard, 1990	—	—	S1
<i>Nebria darlingtoni</i>	South Forks ground beetle	Kavanaugh, 1979	—	—	S1

Scientific Name	Common Name	Author, Date	FedList	CallList	S-Rank
<i>Nebria gebleri siskiyouensis</i>	Siskiyou ground beetle	Kavanaugh, 1979	—	—	S1S2
<i>Nebria sahlbergii triad</i>	Trinity Alps ground beetle	Kavanaugh, 1979	—	—	S1
<i>Onychobaris langei</i>	Lange's El Segundo Dune weevil	Van Dyke, 1951	—	—	S1
<i>Palaeoxenus dohrni</i>	Dohrn's elegant eucnemid beetle	Horn, 1878	—	—	S1S2
<i>Polyphylla barbata</i>	Mount Hermon (=barbate) June beetle	Cazier, 1938	Endangered	—	S2
<i>Polyphylla erratica</i>	Death Valley June beetle	Hardy and Andrews, 1978	—	—	S1S2
<i>Polyphylla morroensis</i>	Morro Bay June beetle	La Rue, 2016	—	—	S1
<i>Polyphylla nubila</i>	Atascadero June beetle	Van Dyke, 1947	—	—	S1
<i>Pseudocotalpa andrewsi</i>	Andrew's dune scarab beetle	Hardy, 1971	—	—	S1
<i>Trachykele hartmani</i>	serpentine cypress wood-boring beetle	Burke, 1920	—	—	S1
<i>Trichinorhipis knulli</i>	Knull's metallic wood-boring beetle	Barr, 1948	—	—	S1
<i>Trigonoscuta brunnotesselata</i>	brown tassel trigonoscuta weevil	Pierce, 1975	—	—	S1
<i>Trigonoscuta dorothea dorothea</i>	Dorothy's El Segundo Dune weevil	Pierce, 1975	—	—	S1
<i>Trigonoscuta rothi algodones</i>	Algodones dune weevil	Pierce, 1975	—	—	S1
<i>Trigonoscuta rothi imperialis</i>	Imperial dune weevil	Pierce, 1975	—	—	S1
<i>Trigonoscuta rothi punctata</i>	Punctate dune weevil	Pierce, 1975	—	—	S1
<i>Trigonoscuta rothi rothi</i>	Roth's dune weevil	Pierce, 1975	—	—	S1
<i>Trigonoscuta stantoni</i>	Santa Cruz Island shore weevil	Sleeper, 1975	—	—	S1
INSECTA, Order Diptera (flies)					
<i>Apiocera warneri</i>	Glamis sand fly	Cazier, 1985	—	—	S1
<i>Brennania belkini</i>	Belkin's dune tabanid fly	Philip, 1966	—	—	S1S2
<i>Cophura hurdi</i>	Antioch cophuran robberfly	Hull, 1960	—	—	SX
<i>Efferia antiochi</i>	Antioch efferian robberfly	Wilcox, 1966	—	—	S1S2
<i>Metapogon hurdi</i>	Hurd's metapogon robberfly	Wilcox, 1964	—	—	S1S2
<i>Paracoenia calida</i>	Wilbur Springs shore fly	Mathis, 1975	—	—	S1
<i>Rhaphiomidas terminatus abdominalis</i>	Delhi Sands flower-loving fly	Cazier, 1941	Endangered	—	S1
<i>Rhaphiomidas terminatus terminatus</i>	El Segundo flower-loving fly	Cazier, 1941	—	—	S1
<i>Rhaphiomidas trochilus</i>	San Joaquin Valley giant flower-loving fly	Coquillett, 1892	—	—	S1
INSECTA, Order Hemiptera (true bugs)					
<i>Oravelia pege</i>	Dry Creek cliff strider bug	Drake and Chapman, 1963	—	—	S1

Scientific Name	Common Name	Author, Date	FedList	CallList	S-Rank
INSECTA, Order Hymenoptera (ants, bees, and wasps)					
<i>Andrena blennospermatis</i>	Blennosperma vernal pool andrenid bee	Thorp, 1969	—	—	S1
<i>Andrena subapasta</i>	An andrenid bee	Thorp, 1969	—	—	S1S2
<i>Bombus caliginosus</i>	obscure bumble bee	Frison, 1927	—	—	S1S2
<i>Bombus crotchii</i>	Crotch's bumble bee	Cresson, 1878	—	Candidate ^T	S2
<i>Bombus franklini</i>	Franklin's bumble bee	Frison, 1921	Endangered	Candidate ^T	SH
<i>Bombus morrisoni</i>	Morrison's bumble bee	Cresson, 1878	—	—	S1S2
<i>Bombus occidentalis</i>	western bumble bee	Greene, 1858	—	Candidate ^T	S1
<i>Bombus suckleyi</i>	Suckley's cuckoo bumble bee	Greene, 1860	—	Candidate ^T	S1
<i>Ceratochrysis bradleyi</i>	Bradley's cuckoo wasp	Bohart, 1982	—	—	S1
<i>Ceratochrysis gracilis</i>	Piute Mountains cuckoo wasp	Bohart, 1982	—	—	S1
<i>Ceratochrysis longimala</i>	Desert cuckoo wasp	Bohart, 1982	—	—	S1
<i>Cleptes humboldti</i>	Humboldt cuckoo wasp	Moczar, 1996	—	—	S1S2
<i>Dufourea stagei</i>	Stage's dufourine bee	Bohart, 1980	—	—	S1
<i>Euparagia unidentata</i>	Algodones euparagia	Carpenter and Kimsey, 2009	—	—	S1S2
<i>Hedychridium argenteum</i>	Riverside cuckoo wasp	Kimsey, 1978	—	—	S1S2
<i>Hedychridium milleri</i>	Borax Lake cuckoo wasp	Kimsey, 1978	—	—	S1
<i>Microbembex elegans</i>	Algodones elegant sand wasp	Griswold, 1996	—	—	S1
<i>Myrmosula pacifica</i>	Antioch multilid wasp	Mickel, 1940	—	—	SH
<i>Neolarra alba</i>	white cuckoo bee	Cockerell, 1916	—	—	SH
<i>Paranomada californica</i>	California cuckoo bee	Linsley, 1945	—	—	S1
<i>Parnopes borregoensis</i>	Borrego parnopes cuckoo wasp	Telford, 1964	—	—	S1S2
<i>Perdita algodones</i>	Algodones perdita	Timberlake, 1980	—	—	S1
<i>Perdita frontalis</i>	Imperial Perdita	Timberlake, 1968	—	—	S1S2
<i>Perdita hirticeps luteocincta</i>	yellow-banded andrenid bee	Tiberlake, 1960	—	—	SX
<i>Perdita stephanomeriae</i>	a fairy bee	Timberlake, 1954	—	—	S1S2
<i>Protodufourea wasbaueri</i>	Wasbauer's protodufourea bee	Timberlake, 1955	—	—	S1
<i>Protodufourea zavortinki</i>	Zavortink's protodufourea bee	Griswold and Bohart, 1996	—	—	S1
<i>Rhopalolemma robertsi</i>	Roberts' rhopalolemma bee	Roid-Alsina, 1991	—	—	S1
<i>Sedomaya glamisensis</i>	Glamis night tphiid	Kimsey and Wasbauer, 1999	—	—	S1
<i>Sphaerophthalma ecarinata</i>	Glamis night mutillid	Schuster, 1958	—	—	S1
<i>Sphecodogastra antiochensis</i>	Antioch Dunes halictid bee	McGinley, 2003	—	—	S1
<i>Stictiella villegasi</i>	Algodones sand wasp	Bohart, 1982	—	—	S1
<i>Trachusa gummifera</i>	San Francisco Bay Area leaf-cutter bee	Thorp, 1963	—	—	S1

Scientific Name	Common Name	Author, Date	FedList	CallList	S-Rank
INSECTA, Order Lepidoptera (butterflies and moths)					
<i>Apodemia mormo langei</i>	Lange's metalmark butterfly	Comstock, 1938	Endangered	—	S1
<i>Callophrys mossii bayensis</i>	San Bruno elfin butterfly	Brown, 1942	Endangered	—	S2
<i>Callophrys mossii hidakupa</i>	San Gabriel Mountains elfin butterfly	Emmel, Emmel and Mattoon, 1998	—	—	S1S2
<i>Callophrys sheridanii comstocki</i>	desert green hairstreak	Henne, 1940	—	—	S1S2
<i>Cercyonis pegala carsonensis</i>	Carson Valley wood nymph	Austin, 1992	—	—	S1S2
<i>Chlosyne leanira elegans</i>	Oso Flaco patch butterfly	Priestaf and J. Emmel, 1998	—	—	S1S2
<i>Coenonympha tullia yontockett</i>	Yontockett satyr	Porter and Mattoon, 1989	—	—	S1S2
<i>Danaus plexippus plexippus pop. 1</i>	monarch - California overwintering population	Linnaeus, 1758	Candidate	—	S2
<i>Euphilotes allyni</i>	El Segundo blue butterfly	Shields, 1975	Endangered	—	S1
<i>Euphilotes baueri</i>	Bauer's dotted-blue	Pratt and Emmel, 1998	—	—	S1S2
<i>Euphilotes enoptes smithi</i>	Smith's blue butterfly	Mattoni, 1955	Endangered	—	S2
<i>Euphydryas editha bayensis</i>	Bay checkerspot butterfly	Sternitzky, 1937	Threatened	—	S3
<i>Euphydryas editha monoensis</i>	Mono checkerspot butterfly	Gunder, 1928	—	—	S1S2
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	Behr, 1863	Endangered	—	S1S2
<i>Euphyes vestris harbisoni</i>	Harbison's dun skipper	Brown and McGuire, 1983	—	—	S1S2
<i>Euproserpinus euterpe</i>	Kern primrose sphinx moth	Edwards, 1888	Threatened	—	S1
<i>Glaucoopsyche lygdamus palosverdesensis</i>	Palos Verdes blue butterfly	Perkins and Emmel, 1977	Endangered	—	S1
<i>Hesperia miriamae longaevicola</i>	White Mountains skipper	McGuire, 1998	—	—	S1
<i>Hesperopsis graciellae</i>	MacNeill's sootywing	MacNeill, 1970	—	—	S1S2
<i>Icaricia icarioides albihalos</i>	White Mountains icarioides blue butterfly	J. Emmel, T. Emmel & Mattoon, 1998	—	—	S1
<i>Icaricia icarioides missionensis</i>	Mission blue butterfly	Hovanitz, 1937	Endangered	—	S2
<i>Icaricia icarioides parapheres</i>	Point Reyes blue butterfly	Boisduval, 1852	—	—	S1
<i>Icaricia icarioides pheres</i>	Pheres blue butterfly	Boisduval, 1852	—	—	SX
<i>Icaricia saepiolus albomontanus</i>	White Mountains saepiolus blue butterfly	Austin and Emmel, 1998	—	—	S1
<i>Icaricia saepiolus aureolus</i>	San Gabriel Mountains blue butterfly	J. Emmel, T. Emmel, and Mattoon, 1998	—	—	S1
<i>Lycaena hermes</i>	Hermes copper butterfly	Edwards, 1870	Threatened	—	S1
<i>Lycaena rubidus incana</i>	White Mountains copper	Austin, 1998	—	—	S1

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<i>Pelochrista hennei</i>	Henne's eucosman moth	Clarke, 1947	—	—	S1
<i>Philotiella speciosa bohartorum</i>	Bohart's blue butterfly	Tilden, 1969	—	—	S1
<i>Plebejus anna lotis</i>	lotis blue butterfly	Lintner, 1879	Endangered	—	SH
<i>Plebulina emigdionis</i>	San Emigdio blue butterfly	Grinnell, 1905	—	—	S1S2
<i>Polites mardon</i>	mardon skipper	Edwards, 1881	—	—	S1
<i>Polites sabuleti albamontana</i>	White Mountains sandhill skipper	MacNeill, 1959	—	—	S1S2
<i>Pseudocopaeodes eunus obscurus</i>	Carson wandering skipper	Austin and J. Emmel, 1998	Endangered	—	S2
<i>Pyrgus ruralis lagunae</i>	Laguna Mountains skipper	Scott, 1981	Endangered	—	S1
<i>Speyeria adiaсте adiaсте</i>	unsilvered fritillary	Behr, 1862	—	—	S1S2
<i>Speyeria callippe callippe</i>	callippe silverspot butterfly	Boisduval, 1852	Endangered	—	S1
<i>Speyeria nokomis carsonensis</i>	Carson Valley silverspot	Austin, 1998	—	—	S1
<i>Speyeria zerene behrensii</i>	Behren's silverspot butterfly	Edwards, 1869	Endangered	—	S1
<i>Speyeria zerene hippolyta</i>	Oregon silverspot butterfly	Edwards, 1879	Threatened	—	S1
<i>Speyeria zerene myrtleae</i>	Myrtle's silverspot butterfly	dos Passos and Grey, 1945	Endangered	—	S1
<i>Speyeria zerene sonomensis</i>	Sonoma zerene fritillary	J. Emmel, T. Emmel, and Mattoon, 1998	—	—	S1
INSECTA, Order Mecoptera (scorpionflies)					
<i>Orobittacus obscurus</i>	gold rush hanging scorpionfly	Villegas and Byers, 1981	—	—	S1
INSECTA, Order Orthoptera (crickets, grasshoppers, and katydids)					
<i>Aglaothorax longipennis</i>	Santa Monica shieldback katydid	Rentz and Weissman, 1981	—	—	S1S2
<i>Ammopelmatus kelsoensis</i>	Kelso jerusalem cricket	Tinkham, 1965	—	—	S1S2
<i>Ammopelmatus muwu</i>	Point Conception jerusalem cricket	Rentz and Weissman, 1981	—	—	S1
<i>Idiostatus kathleenae</i>	Pinnacles shieldback katydid	Rentz, 1973	—	—	S1S2
<i>Idiostatus middlekauffi</i>	Middlekauff's shieldback katydid	Rentz, 1973	—	—	S1
<i>Psychomastax deserticola</i>	desert monkey grasshopper	Hebard, 1934	—	—	S1
<i>Tetrix sierrana</i>	Sierra pygmy grasshopper	Rehn and Grant, 1956	—	—	S1
<i>Trimerotropis infantilis</i>	Zayante band-winged grasshopper	Rentz and Weissman, 1981	Endangered	—	S1
<i>Trimerotropis occulens</i>	Lompoc grasshopper	Otte, 1984	—	—	S1S2
INSECTA, Order Plecoptera (stoneflies)					
<i>Capnia lacustra</i>	Lake Tahoe benthic stonefly	Jewett, 1965	—	—	S1

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INSECTA, Order Trichoptera (caddisflies)					
<i>Cryptochia denningi</i>	Denning's cryptic caddisfly	Wiggins, 1975	—	—	S1S2
<i>Cryptochia shasta</i>	confusion caddisfly	Denning, 1975	—	—	S1
<i>Diplectronea californica</i>	California diplectronan caddisfly	Banks, 1914	—	—	S1
<i>Farula praelonga</i>	long-tailed caddisfly	Wiggins and Erman, 1987	—	—	S1S2
<i>Goeracea oregona</i>	Sagehen Creek goeracean caddisfly	Denning, 1968	—	—	S1S2
<i>Lepidostoma ermanae</i>	Cold Spring caddisfly	Weaver, 1988	—	—	S1
<i>Limnephilus atercus</i>	Fort Dick limnephilus caddisfly	Denning, 1965	—	—	S1S2
<i>Neothremma siskiyou</i>	Siskiyou caddisfly	Denning, 1975	—	—	S1
<i>Parapsyche extensa</i>	King's Creek parapsyche caddisfly	Denning, 1949	—	—	S1
<i>Rhyacophila lineata</i>	Castle Crag rhyacophilan caddisfly	Denning, 1956	—	—	S1
<i>Rhyacophila mosana</i>	bilobed rhyacophilan caddisfly	Denning, 1956	—	—	S1
GASTROPODA (snails and slugs)					
<i>Ammonitella yatesii</i>	tight coin (=Yates' snail)	Cooper, 1868	—	—	S1
<i>Ancotrema voyanum</i>	hooded lancetooth	Newcomb, 1865	—	—	S1S2
<i>Assimineia infima</i>	Badwater snail	Berry, 1947	—	—	S1
<i>Binneya notabilis</i>	Santa Barbara shelled slug	Cooper, 1863	—	—	S1
<i>Eremarionta immaculata</i>	white desertsnailed	Willett, 1937	—	—	S1
<i>Eremarionta millepalmarum</i>	Thousand Palms desertsnailed	Berry, 1930	—	—	S1
<i>Eremarionta morongoana</i>	Morongo (=Colorado) desertsnailed	Berry, 1929	—	—	S1
<i>Eremarionta rowelli bakerensis</i>	Baker's desertsnailed	Pilsbry and Lowe, 1934	—	—	S1
<i>Eremarionta rowelli mccoiana</i>	California Mcco snail	Willett, 1935	—	—	S1
<i>Haplotrema catalinense</i>	Santa Catalina lancetooth	Hemphill, 1890	—	—	S1
<i>Haplotrema durante</i>	ribbed lancetooth	Newcomb, 1864	—	—	S1S2
<i>Helminthoglypta allynsmithi</i>	Merced Canyon shoulderband	Pilsbry, 1939	—	—	S1
<i>Helminthoglypta arrosa monticola</i>	mountain shoulderband	Roth, 1982	—	—	S1
<i>Helminthoglypta arrosa pomoensis</i>	Pomo bronze shoulderband	Smith, 1938	—	—	S1
<i>Helminthoglypta ayresiana sanctaerucis</i>	Ayer's snail	Pilsbry, 1927	—	—	S1S2
<i>Helminthoglypta callistoderma</i>	Kern shoulderband	Pilsbry and Ferriss, 1919	—	—	S1
<i>Helminthoglypta coelata</i>	mesa shoulderband	Bartsch, 1916	—	—	S1

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<i>Helminthoglypta concolor</i>	whitefir shoulderband	Roth and Hochberg, 1988	—	—	S1S2
<i>Helminthoglypta fontiphila</i>	Soledad shoulderband	Gregg, 1931	—	—	S1
<i>Helminthoglypta hertleini</i>	Oregon shoulderband	Hanna and Smith, 1937	—	—	S1S2
<i>Helminthoglypta milleri</i>	peak shoulderband	Reeder, 1986	—	—	S1
<i>Helminthoglypta mohaveana</i>	Victorville shoulderband	Berry, 1927	—	—	S1
<i>Helminthoglypta nickliniana awania</i>	Peninsula coast range shoulderband	Bartsch, 1919	—	—	S1
<i>Helminthoglypta nickliniana bridgesi</i>	Bridges' coast range shoulderband	Newcomb, 1861	—	—	S1S2
<i>Helminthoglypta sequoicola consors</i>	redwood shoulderband	Berry, 1938	—	—	S1
<i>Helminthoglypta stiversiana williamsi</i>	Williams' bronze shoulderband	Smith, 1938	—	—	S1
<i>Helminthoglypta taylori</i>	westfork shoulderband	Reeder and Roth, 1988	—	—	S1
<i>Helminthoglypta traskii pacoimensis</i>	Pacoima shoulderband	Gregg, 1931	—	—	S1
<i>Helminthoglypta uvasana</i>	Grapevine shoulderband	Roth and Hochberg, 1992	—	—	S1
<i>Helminthoglypta vasquezi</i>	Vasquez shoulderband	Roth and Hochberg, 1992	—	—	S1
<i>Helminthoglypta walkeriana</i>	Morro shoulderband	Hemphill, 1911	Threatened	—	S2
<i>Herpeteros angelus</i>	Soledad desertsnailed	Gregg, 1949	—	—	S1
<i>Hesperarion plumbeus</i>	leaden slug	Roth, 2004	—	—	S1S2
<i>Micrarionta facta</i>	Santa Barbara islandsnailed	Newcomb, 1864	—	—	S1S2
<i>Micrarionta feralis</i>	San Nicolas islandsnailed	Hemphill, 1901	—	—	S1
<i>Micrarionta gabbii</i>	San Clemente islandsnailed	Newcomb, 1864	—	—	S1
<i>Micrarionta opuntia</i>	pricklypear islandsnailed	Roth, 1975	—	—	S1
<i>Monadenia callipeplus</i>	downy sideband	Berry, 1940	—	—	S1S2
<i>Monadenia cristulata</i>	crested sideband	Berry, 1940	—	—	S1S2
<i>Monadenia fidelis leonina</i>	A terrestrial snail	Berry, 1937	—	—	S1S2
<i>Monadenia fidelis pronotis</i>	rocky coast Pacific sideband	Berry, 1931	—	—	S1
<i>Monadenia infumata ochromphalus</i>	yellow-based sideband	Berry, 1937	—	—	S1S2
<i>Monadenia infumata setosa</i>	Trinity bristle snail	Talmadge, 1952	—	Threatened ^T	S2
<i>Monadenia marmorotis</i>	marble sideband	Berry, 1940	—	—	S1
<i>Monadenia mormonum buttoni</i>	Button's Sierra sideband	Pilsbry, 1900	—	—	S1S2
<i>Monadenia mormonum hirsuta</i>	hirsute Sierra sideband	Pilsbry, 1927	—	—	S1
<i>Monadenia tuolumneana</i>	Tuolumne sideband	Berry, 1955	—	—	S1
<i>Monadenia yosemitensis</i>	Yosemite sideband	Lowe, 1916	—	—	S1S2
<i>Noyo intersessa</i>	Ten Mile shoulderband	Roth, 1987	—	—	S1S2

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<i>Pristiloma shepardae</i>	Shepard's snail	Hemphill, 1892	—	—	S1
<i>Punctum hannai</i>	Trinity Spot	Roth, 1985	—	—	S1S2
<i>Radiocentrum avalonense</i>	Catalina mountainsnail	Hemphill, 1905	—	—	S1
<i>Rothelix warnerfontis</i>	Warner Springs shoulderband	Reeder and Miller, 1988	—	—	S1
<i>Sterkia clementina</i>	San Clemente Island blunt-top snail	Sterki, 1890	—	—	S1S2
<i>Trilobopsis roperi</i>	Shasta chaparral	Pilsbry, 1889	—	—	S1
<i>Trilobopsis tehamana</i>	Tehama chaparral	Pilsbry, 1928	—	—	S1
<i>Vespericola pressleyi</i>	Big Bar hesperian	Roth, 1985	—	—	S1
<i>Vespericola scotti</i>	Benson Gulch hesperian	Cordero and Miller, 1995	—	—	S1
<i>Vespericola sierranus</i>	Siskiyou hesperian	Berry, 1921	—	—	S1S2
<i>Xerarionta intercisa</i>	horseshoe snail	Binney, 1857	—	—	S1
<i>Xerarionta redimita</i>	wreathed cactusnail	Binney, 1858	—	—	S1
<i>Xerarionta tryoni</i>	Bicolor cactusnail	Newcomb, 1864	—	—	S1