

Species of Special Concern:

A Brief Description of an Important California Department of Fish and Game Designation

What is a "Species of Special Concern"?

A Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal* native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

*for the purposes of this discussion, "animal" means fish, amphibian, reptile, bird and mammal

What important factors contribute to a species being designated as an SSC?

SSCs tend to have a number of factors in common, as follows:

- occur in small, isolated populations or in fragmented habitat, and are threatened by further isolation and population reduction;
- show marked population declines. Taxa that show a marked population decline, yet are still abundant, may not meet the SSC definition, whereas marked population decline in uncommon or rare species may meet the SSC definition. Note that population estimates are unavailable for the vast majority of California taxa;
- depend on a habitat that has shown substantial historical or recent declines in size and/or quality or integrity. This criterion infers the population viability of a species based on trends in the habitats in which it specializes. Coastal wetlands, particularly in the urbanized San Francisco Bay and south-coastal areas, alluvial fan sage scrub and coastal sage scrub in the southern coastal basins, vernal pools in the Central Valley, arid scrub in the San Joaquin Valley, and riparian habitat statewide, are examples of California habitats that have seen dramatic reductions in size in recent history;
- occur only or primarily in or adjacent to an area where habitat is being converted to uses incompatible with the animal's survival;

- have few California records, or which historically occurred in the State but for which there are no recent records; and
- occur largely in areas where current management practices are inconsistent with the animal's persistence.

How does the Department use the SSC designation?

“Species of Special Concern” is an administrative designation and carries no formal legal status. The intent of designating SSCs is to:

- focus attention on animals at conservation risk by the Department, other State, local and Federal governmental entities, regulators, land managers, planners, consulting biologists, and others;
- stimulate research on poorly known species;
- achieve conservation and recovery of these animals before they meet California Endangered Species Act criteria for listing as threatened or endangered.

How are SSCs addressed under the California Environmental Quality Act?

SSCs should be considered during the environmental review process. The California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000-21177) requires State agencies, local governments, and special districts to evaluate and disclose impacts from “projects” in the State. Section 15380 of the CEQA Guidelines clearly indicates that species of special concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

Sections 15063 and 15065 of the CEQA Guidelines, which address how an impact is identified as significant, are particularly relevant to SSCs. Project-level impacts to listed (rare, threatened, or endangered species) species are generally considered significant thus requiring lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In assigning “impact significance” to populations of non-listed species, analysts usually consider factors such as population-level effects, proportion of the taxon’s range affected by a project, regional effects, and impacts to habitat features.

Who is responsible for developing and maintaining SSC documents and lists?

The Wildlife Branch’s Nongame Wildlife Program is responsible for producing and updating SSC publications for mammals, birds, reptiles and amphibians. The Fisheries Branch is responsible for updates to the Fish Species of Special Concern document and list and should be contacted for further information regarding process and project details. The Biogeographic Data Branch is responsible for maintaining the most current list of SSCs via inclusion on its “Special Animals List” (http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp). These publications are updated periodically as staff and funding allow. Publications are typically produced by a contractor knowledgeable about the taxonomic group.

The contractor's draft publication is reviewed by the Department, as well as by the contractor's peers, other agencies, and other biologists, as appropriate. Final publication of an SSC document requires approval of the Director.

What procedures are used to designate SSCs?

California Bird Species of Special Concern (Shuford and Gardali 2008; <http://www.dfg.ca.gov/wildlife/species/ssc/birds.html>) articulates the State's desired methodology, when achievable. Criteria used to develop this document were vetted Department-wide, by DFG leadership, and by the scientific community.

The process to designate SSCs will include the following:

- maintaining a consistent definition of SSC, per page 1 of this document, across taxonomic lines;
- establishing a Technical Advisory Committee (TAC), consisting of authorities on the biology and status of pertinent taxonomic group (amphibians and reptiles, bird, mammals);
- using metrics, developed in concert with the TAC, to assess the status of each taxon. Where sufficient data allow it, metrics should include population size and trend, range size and trend, population concentration, percentage of entire range or population within California (endemism), and assessment of threats;
- developing a nominee list of taxa to be considered for SSC status in concert with the TAC, using an open process, i.e., not basing consideration solely on a previous SSC list or a or other special designation that may have already been assigned;
- automatically including Federally-listed taxa as designated SSCs but not establishing rankings or preparing range maps for them. Metrics shall be applied to any Federally-listed taxon subsequently delisted to determine its new status as either a SSC or placement on a Watch List;
- automatically excluding State-listed taxa from the nominee list. Metrics shall be applied to any State-listed taxon that is subsequently delisted to determine its new status as either SSC or Watch List;
- developing priorities for conservation action using a ranking scheme;
- providing an explanation for each taxon that was designated as an SSC but that is omitted from a revised list.

What elements are found in an SSC document?

- overview, including a description of methods, results and discussion;
- recommendations and priorities for research, management and monitoring;
- species accounts for each SSC, including data on population and range trend, population size and trend, threats, ecological considerations, management recommendations, taxonomic remarks, and life history information relevant to status;
- range and/or distribution maps for each ranked SSC;

- California Responsibility List (*sensu* Shuford and Gardali 2008) indicating endemic or nearly endemic taxa, and which of those are SSCs;
- Watch List, consisting of taxa that were previously SSCs but no longer merit SSC status or which do not meet SSC criteria but for which there is concern and a need for additional information to clarify status.

How does the Department add or remove animals from the SSC lists?

A list of nominee taxa considered for SSC status is developed during the course of a major revision of an SSC document. Metrics (see above) are applied to each taxon; SSC threshold criteria are determined and a ranking scheme developed which discriminates between SSCs and taxa that do not qualify for that designation. Thus, a Nominee Species Database (NSD) is developed as part of the project. Keeping the NSD up-to-date is an important part of the SSC process.

Scores in the NSD will be updated at least annually by the Department with the assistance of the appropriate Technical Advisory Committee; results will be included on the Special Animals List, and posted to the Department website, as appropriate. Scores may change as a result of new information gained from scientific, peer-reviewed literature, expert opinion, or other reliable sources. Members of the public may present new information to the Department as part of this process. A score change may move a taxon on or off the list. In all cases, any change must be evaluated by the general SSC criteria on page 1, as well as those developed by the Department and TAC for each taxonomic group, and documented by a written record of findings.

What is the relationship between SSCs and the California Wildlife Action Plan?

A major component of the California Wildlife Action Plan (WAP) (<http://www.dfg.ca.gov/wildlife/wap/report.html>) is the identification of species of greatest conservation need in the State. The Department uses the Special Animal List (http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp), which includes SSCs, as the primary source list of these species. Species of greatest conservation need are eligible for and considered as priorities for conservation funding via State Wildlife Grant funds (these funds are linked to State WAPs). Revisions to the WAP will include threat assessments for current SSCs and their habitats, and will change conservation actions and priorities accordingly.

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