



## California Natural Diversity Database

<https://www.wildlife.ca.gov/Data/CNDDDB>

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## General Information for Submitting Avian Detections to the CNDDB

The California Natural Diversity Database (CNDDDB) provides location and natural history information on special status plants, animals, and natural communities to the public, other agencies, and conservation organizations.<sup>i</sup> These data help drive conservation decisions, aid in the environmental review of projects and land use changes, and provide baseline data helpful in recovering endangered species and conducting research. The CNDDDB currently tracks 148 species, subspecies, or sensitive populations of birds in California.<sup>ii</sup>

Birds present unique challenges to the CNDDDB. Generally, birds are highly mobile (fly great distances during migration, as well as during foraging forays or to roost sites), are easily observed (perch and fly in the open, active during the day), and are easily detected (regularly sing and call). However, not all avian detections are equivalent or require the same level of resource management. For example, different management may be warranted for a locally nesting species compared to a species that only occurs locally during migration. Most avian occurrences added to the CNDDDB as Element Occurrences relate to a biologically significant life history event at a discrete location.

It is important for CNDDDB biologists to differentiate between birds that are breeding, migrating, transient, or overwintering. To help CNDDDB biologists interpret avian detections and determine whether they will be added to the Database as Element Occurrences or represented in supplemental spatial layers, it is best to include as many details as possible about the detection and the bird's behavior. It is also beneficial to state the survey protocol or methodology, or if the detection was incidental.

**It is highly recommended that avian detections be submitted through our [Online Field Survey Form web application](#).** This application captures the records in a spatial database and allows us to better critique and manage avian records, as well as distribute detections that may not meet our Element Occurrence definition for the CNDDDB database.

For migratory birds, the CNDDDB primarily adds breeding occurrences, but also includes occurrences of select migratory birds that come to California to overwinter (see table below). For resident birds, the CNDDDB will add nearly any detection as the birds generally stay in close proximity to their breeding territories. Any detection of a special status bird can and should be entered into the Online Field Survey Form application mentioned above.

**Note:** Breeding is interpreted loosely; a better term may be **evidence of reproduction**. The following behaviors and detections are some examples that may be interpreted by the CNDDDB as evidence of reproduction:

- Carrying nest material, food, or fecal sacs
- Copulation
- Courtship displays
- Singing, territorial males
- Recently fledged young that are dependent on their parents
- Recently fledged juveniles too young to have dispersed or migrate

Birds in transit (fly-overs) are not added to the CNDDDB. We generally do not add detections of foraging or perched birds unless they are resident (see below). Also, the CNDDDB only includes detections of pelagic birds on land or near-shore rocks. Though these detections may not be mapped as Element Occurrences, if they are entered into our [Online Field Survey Form web application](#), we can distribute these detections as a supplemental spatial layer.

The Special Animals List<sup>ii</sup> details which avian species the CNDDDB tracks, along with their rank and status. In addition, the Special Animals List contains a “Comment” column where the CNDDDB designates what types of avian detections are added to the database. If the Comment field is blank, then the CNDDDB will likely add any detection where it appears the bird was using the local habitat (fly-overs excluded). The following table outlines and describes the different avian occurrences that are currently added to the Database.

Avian occurrences added to the California Natural Diversity Database.

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***Breeding*** (see note above)

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Nesting	To build or occupy a nest.
Nesting colony	A large congregation of individuals of one or more species that nest in close proximity at a particular location, such as seabird colonies or heron rookeries.
Burrow site	Burrowing owl nest site (including artificial burrows) and some wintering sites (see Special Animals List).
Lek	A traditional courtship area where multiple males of the same species gather to attract females for mating.

***Nonbreeding***

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Wintering	Migratory individuals using a particular area to forage and pass, spend, or survive the winter; also known as overwintering. Not necessarily identified by the season (e.g. bald eagles begin nesting as early as January).
Staging	Staging area or stopover where birds temporarily spend time en route to rest and replenish fuel reserves during migration.
Communal roost	A group of birds gathered together regularly at a location to spend the night resting or sleeping.

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If you are uncertain whether to submit your special status bird detection, be conservative and please submit the detection through our [Online Field Survey Form web application](#).

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<sup>i</sup> Access to the CNDDDB data is available through [subscription and license agreement](#).

<sup>ii</sup> See the Special Animals List from the [CNDDDB Plant & Animal Information web page](#).