

## The California Natural Diversity Database: Using Banding Data to Inform Research and Conservation

The California Natural Diversity Database (CNDDDB) is an inventory of California's rare plants and animals and their locations. It is an excellent repository for a banding station's detections of rare birds or other taxa. The program is managed by the California Department of Fish and Wildlife (CDFW) and is overseen by NatureServe (<https://www.natureserve.org/>). Spatial data is GIS-based, and species locations can be queried through the CDFW's subscription-based Internet application, RareFind (<https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data#43018407-rarefind-5>). Submitting data requires activating a free account and is most easily done using the CNDDDB Online Field Survey Form (<https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>). Information including observer names, taxon observed, GPS location, habitat, site info, and potential threats can be submitted, and the portal allows for the upload of photos.

The CNDDDB includes federally listed taxa, those listed by the California Endangered Species Act and the CDFW Species of Special Concern (Shuford and Gardali 2008), those identified by CDFW as highly vulnerable to climate change (Gardali et al. 2012), and those identified by other agencies as taxa of concern (CNDDDB 2020). Individual detections are compiled into a tool that land managers, researchers, and conservationists can use for planning purposes, and are shared across all NatureServe programs.

If your California banding station or monitoring program captures or detects birds falling into the above categories, it is important to submit your data to the CNDDDB through CDFW's web portal. In California, new development projects, such as the construction of roads, housing or other buildings, wind turbines, or drilling and mining facilities, may be subject to the California Environmental Quality Act (CEQA), which may ultimately require an Environmental Impact Review (EIR). As part of this process, the developer or project owner will be required to hire biological consultants to

perform a biological assessment of the proposed development site. Typically, this process requires that biologists consult the CNDDDB to determine if rare plants or animals have been identified at the proposed site or within a predetermined buffer. Specifics will depend upon the nature of the project, habitat potentially impacted, and species expected to be in the region. Identification of rare species in the vicinity of a proposed development may spur project alterations such as relocation, redesign, or mitigation measures. Thus, it is important to submit detections or captures of rare bird species to CNDDDB, be they recent or historical, so that their presence can be adequately incorporated into project planning and addressed by conservation efforts.

There has been a concern that collectors of rare and endangered species would use this tool to go out and take specimens. To prevent this sort of activity, the CNDDDB can designate species sought by collectors in a category such that the species can only be presented at a coarse grain level and not pin-pointed to the exact locations of the observations. This also protects private land owners who do not want to be inundated by, for example, avid bird watchers, or highly sensitive species that would detrimentally affected by close human contact.

### Literature Cited

- CNDDDB. 2020. *California Natural Diversity Database (CNDDDB) Management Framework*. California Department of Fish and Wildlife. Sacramento, CA.
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- Shuford, W.D., and T. Gardali, editors. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds* 1. Western Field Ornithologists, Camarillo, CA and California Department of Fish and Game, Sacramento, CA.