

# Endangered Species and Pesticides in California

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The Department of Pesticide Regulation (DPR) became involved in protecting federally listed species from potentially harmful exposures to pesticides as an extension of the U.S. Environmental Protection Agency's Endangered Species Protection Program (ESPP). The ESPP developed endangered species county bulletins (Bulletins) as extensions of federal labeling to specify additional use limitations specifically to protect listed species. The bulletins that the ESPP drafted originally for California and currently develops for other states, rely heavily on pesticide use prohibitions in habitat areas and buffer zones. For many states with few listed species, or species that occur in areas remote from agriculture, there is little or no conflict between existing pesticide uses and protection of listed species. Use prohibitions therefore create little or no hardship in other states. In California, however, the proximity of endangered species habitats to pesticide use sites leads inevitably to many conflicts, particularly when buffer zones extend onto agricultural lands.

DPR began to cooperatively develop Bulletins for U.S. EPA to resolve conflicts with pesticide users by providing alternative measured approaches to protecting listed species that allow most pesticide uses to continue.

California is second only to Hawaii in number of endangered species. The U.S. Fish & Wildlife Service currently lists a total of 251 species ranging from plants to mammals in California. The wide variety of habitats interspersed with its large agricultural valleys and urban areas, make protection of California's endangered species a challenging undertaking. Pesticide regulation for the protection of endangered species is a very dynamic and complex process. For over 10 years the Endangered Species Project of the Department of Pesticide Regulation, has been developing better alternatives for the regulation of Pesticides that allow their continued use while protecting endangered species.

A key element in DPR's approach has been the emphasis on accurate habitat information, and the implementation of voluntary pesticide use limitations through Bulletins developed by DPR. These Bulletins are categorized into Rodenticides, Insecticides, Herbicides, and Fungicides. They provide alternatives to use prohibitions by taking into consideration factors such as species biology, behavior, range, seasonality; pesticide active ingredients, relative toxicity, method of application, etc. By using these bulletins, applicators can quickly find out which pesticide product is more suitable for their needs while taking into consideration the endangered species that might be found in their County. Although these bulletins are not mandatory, they provide a better assessment of the pesticide and its potential risk to such species in their local setting. To date, the Rodenticide and Insecticide Bulletins have been completed. The Herbicide Bulletins are currently under development, to be followed by a similar series of Bulletins for fungicides.

Another important element in DPR's Endangered Species Program is public outreach. DPR emphasizes applicator training --awareness and avoidance of endangered species habitats--

as a key alternative to use prohibitions. Since 1995, a wide variety of training materials for the identification of Endangered Species and their habitats have been developed for pesticide applicators. These materials are in the form of slide presentations and field identification cards. They are provided free to the public, and distributed primarily through County Agricultural Commissioners' Offices, as well as the Pesticide Applicators Professional Association and the California Department of Fish & Game.

The development of Internet technology has allowed DPR to tap into the Internet as a major conduit for all the above mentioned materials and more. An on-line version of the Interim Measures Bulletin for Rodenticides is currently accessible through DPR's website. This allows for faster data access in easy-to-use menus. The output is in the form of custom printouts for user-selected sections and user-selected chemicals. If endangered species are found in any given section, a table of use limitations for the chemical(s) selected is also included. Additionally, Powerpoint computer presentations covering the basic Biology, behavior, and identification of endangered species can be downloaded from DPR's website at: [www.cdpr.ca.gov](http://www.cdpr.ca.gov).