

California Wildlife and Pesticides
A Booklet by the California Department of Fish and Game

Joel Trumbo
Pesticide Investigations Unit
California Department of Fish and Game
1701 Nimbus Road, Suite F
Rancho Cordova, California 95670

California is blessed with a tremendous diversity of fish and wildlife. More than 1,000 species of birds, mammals, and fish and more than 5,000 species of plants can be found within the state. Mountain lions, red-tailed hawks, and black bears make their homes from the Oregon border to Mexico. California also has many rare species like the salt marsh harvest mouse and the wolverine. All together there are over 380 distinct natural communities, many of which are found only in California.

Since statehood in 1850, California's natural world has seen many changes. During the last 150 years, a myriad of industrial and commercial enterprises have created an economy that surpasses those of most nations. Pesticides have played an important role in the development and maintenance of California's economic investment. According to the California Department of Pesticide Regulation, over 190 million pounds of pesticides are used annually in California in a wide variety of situations such as crop production, landscape maintenance, and mosquito abatement. Over the years, pesticides have proven to be valuable tools for maintaining the quality of human life in California. These benefits, however, have not come without some risk to fish and wildlife resources.

From 1984 to 1993 more than 100 pesticide-related fish and wildlife losses were documented by the California Department of Fish and Game. Approximately 30% of the losses involved 50 or more animals, and approximately 10% involved more than 1,000. The larger losses typically involved fish, however birds such as ducks, sparrows, and doves have also been involved. Other animals killed by pesticides in recent years include red-tailed hawks, black bears, and Canada geese. When compared to other factors such as habitat loss, pesticide-related fish and wildlife losses have been relatively few in number. However, some of the losses have been significant, and many of them were preventable.

The booklet being presented today is to be used as a resource to help farmers, ranchers and commercial pesticide applicators make informed decisions about the ways they use pesticides. It includes information about potential impacts on fish and wildlife and ways to reduce those impacts. More importantly, this booklet is intended to encourage those who use pesticides to consider fish and wildlife resources when they make pest management decisions. With few

exceptions, pesticides can be used without harming fish and wildlife resources. The key to this, however, is having the knowledge necessary to make good decisions.

As California's population continues to grow, agricultural lands will play an increasingly important role in sustaining California's fish and wildlife populations. Additionally, many non-agricultural lands like parks, flood control channels and road right-of-ways have wildlife habitat value. Applicators need to be aware of how the pesticides they use may affect the nontarget environment. Using the information in this booklet will help pesticide users make informed decisions about using pesticides near fish and wildlife habitats and help ensure the conservation of fish and wildlife resources for generations to come.