

Recreational fishing effort and catch in the northern Channel Islands region

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The California Department of Fish and Game collects data on the number of fishing trips that recreational anglers make in marine waters off California, and the number of fish that they catch on those trips. We examined the data from commercial passenger fishing vessels (CPFVs, also known as “party boats”) to determine if we could detect changes in the effort (number of trips) and catch (number of fish caught and kept) since marine protected areas (MPAs) were established at the northern Channel Islands in April 2003. While the surveys to collect these data were designed to meet specific data needs for managing California’s fisheries and not to evaluate the impacts of MPAs, the data provide insights into changes in the recreational fisheries around the northern Channel Islands.

Has recreational fishing effort changed in the northern Channel Islands since MPAs were established?

- The annual number of CPFV trips to the northern Channel Islands and southern California decreased between 1998 and 2003, when MPAs were established around the Channel Islands (Figure 1). Since 2003, the annual number of CPFV trips has increased slightly in the Channel Islands and southern California.
- Restrictions on fishing for groundfish and nearshore species, including rockfish, lingcod, California sheephead, and ocean whitefish, began increasing in 2000 and have affected recreational fishing effort in southern California. The fishing restrictions included season and depth closures, reduced bag limits, increased size limits, and a limit on the overall recreational take of certain species.

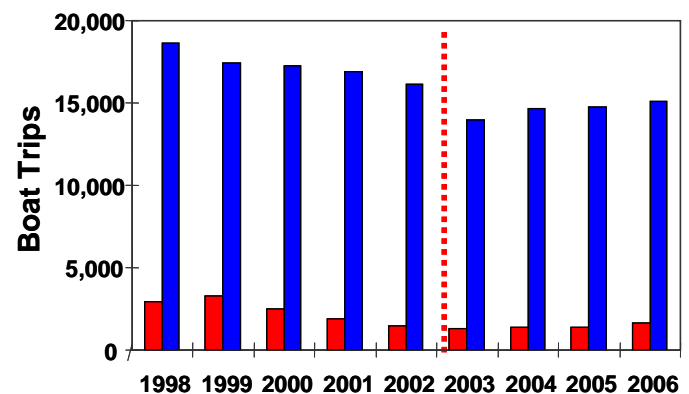


Figure 1. Annual number of CPFV trips to the northern Channel Islands (red bars) and southern California (blue bars). State MPAs were established in the Channel Islands in April 2003 (dashed red line).

Has the location of recreational fishing changed in the northern Channel Islands since MPAs were established?

- Some shifts in the distribution of recreational fishing effort from commercial passenger fishing vessels have occurred. In the four years prior to the establishment of state MPAs, about 30 percent of the stops on CPFV trips to the northern Channel Islands were inside areas that would become MPAs.
- Recreational fishing effort was concentrated near Anacapa Island and the east end of Santa Cruz Island before the MPAs were implemented. Effort continued to be concentrated in that area after implementation. However, effort decreased north of Anacapa and Santa Cruz islands, and increased south of the islands and in the area between the two islands.

Has the number of fish caught by commercial passenger fishing vessels (CPFV) in the northern Channel Islands changed since MPAs were established?

- There are no consistent trends in recreational catch since the implementation of MPAs. There is no evidence that MPAs were directly responsible for losses or gains in catch. Changes in fishing regulations and environmental conditions likely played roles in changes in recreational catch.