

### Restoring the Farallon Island Ecosystem by Invasive Rodent Removal

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Removal of invasive species from islands has become an increasingly successful and important conservation tool. The Farallon Islands, which lie 28km west of San Francisco, are the site of a USFWS proposal to restore seabirds and endemic species by removing invasive House mice. The Farallon National Wildlife Refuge harbors over 300,000 breeding seabirds, and is the largest U.S. seabird colony outside of Alaska and Hawaii. Yet non-native mice are having serious negative impacts on native island resources, threatening species like the endangered Ashy storm-petrel, whose population has undergone a 40% decline. Recent mark-recapture studies indicate that mice infest the Farallones at plague-like densities of 1300 mice/hectare, one of the highest densities ever reported for the species. A rodent removal operation is proposed using eradication tools designed specifically for island conservation. Removal techniques will be uniquely tailored to the island, and will be based on island studies that have been conducted for over ten years to help fill important data gaps. Rodents have been successfully removed from over 338 other islands worldwide, including on Anacapa and on USFWS Refuges in Alaska, Palmyra Atoll and Desecheo (Puerto Rico). The Farallon Restoration Project intends to permanently restore the Farallon ecosystem by eradicating invasive mice while avoiding and minimizing non-target impacts by utilizing ten years of consultation, research and careful planning.

**TOPIC AREAS:** Environmental planning, Restoration Ecology, Marine ecosystems, Alien and invasive species, Climate change, Conservation in hotspots, Conservation GIS, Ecological restoration and recovery of endangered species, Ecosystem/conservation area management, Scientists and managers: bridging the gap.