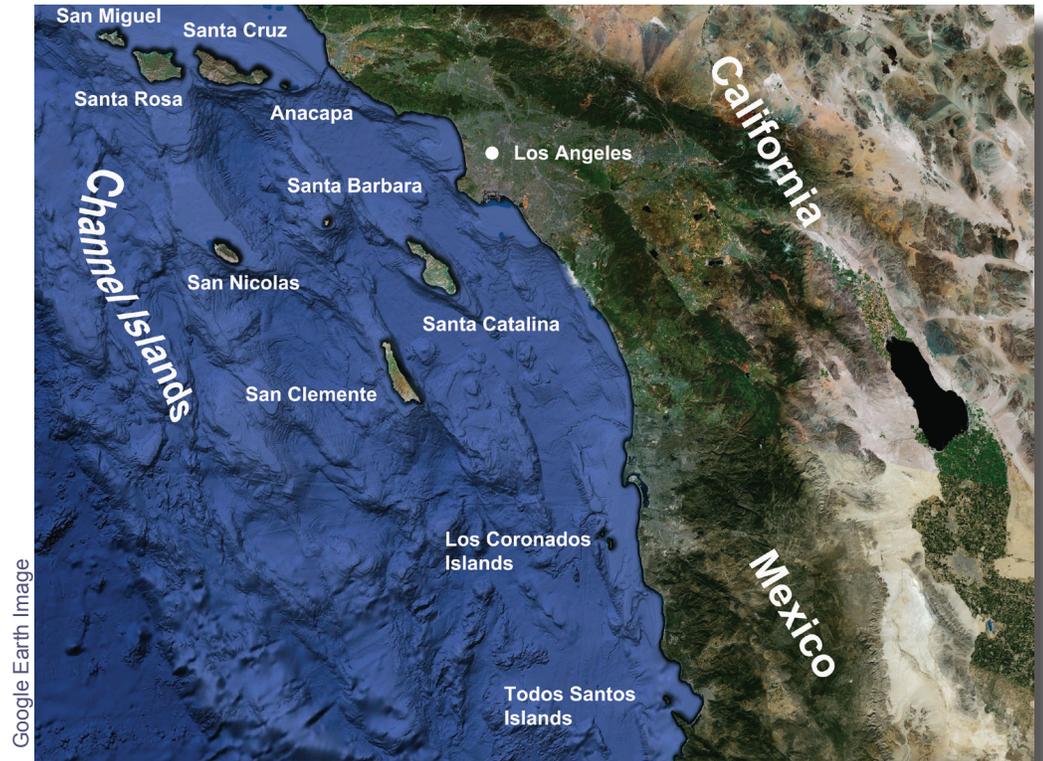


RESTORING SEABIRDS TO THE CHANNEL ISLANDS



Photo Credits: California Brown Pelican (Scott Screit); Ashy Storm-Petrel nest (Darrell Whitworth, CIES); Brandt's Cormorant (Roy Lowe, USFWS); Scripps's Murrelets in nest (Darrell Whitworth, CIES)



Google Earth Image

MSRP seabird restoration projects are being conducted on the California Channel Islands, including Santa Cruz, Santa Barbara, Anacapa, and San Nicolas Islands. Restoration work is also occurring on Coronado and Todos Santos Islands off of the Baja California peninsula in Mexico.

DDT Impacts to Seabirds Prompts Restoration

In 1992, the Natural Resource Trustees funded a study of eggshell thinning and organochlorine contamination levels in seabirds of the Channel Islands. These studies demonstrated that several seabird species showed evidence of eggshell thinning of greater than 15 percent compared to pre-DDT era eggs. The **Montrose Settlements Restoration Program (MSRP)** prioritized the following seabirds for restoration efforts based on evidence of eggshell thinning: *Cassin's Auklet*, *Western Gull*, *California Brown Pelican*, *Double-crested Cormorant*, *Brandt's Cormorant*, *Pelagic Cormorant*, and *Ashy Storm-petrel*. The Scripps's Murrelet is also a priority species for restoration based on its conservation status.

Historical records indicate that seabirds were much more prevalent on the Channel Islands and their offshore rocks. Seabirds were impacted by human activities on these islands, including the introduction of feral cats, grazing, establishment of non-native plants, and changes to the habitat. **The goal of the seabird habitat restoration projects is to restore seabird nesting habitat, attract seabirds to the restored sites, by re-establishing native vegetation.**



www.montrosere restoration.noaa.gov



www.facebook.com/msrp restoration

ASSP	Ashy Storm-petrel	DCCO	Double-crested Cormorant
BRCO	Brandt's Cormorant	PECO	Pelagic Cormorant
BRPE	California Brown Pelican	WEGU	Western Gull
CAAU	Cassin's Auklet	SCMU	Scripps's Murrelet

RESTORING SEABIRDS PROJECT DESCRIPTIONS



Restore Seabirds to Scorpion and Orizaba Rocks

ASSP BRPE CAAU
DCCO SCMU

Scorpion and Orizaba Rocks, located off of Santa Cruz Island, are important nesting islands for burrow-nesting seabirds in California. **The goal of these projects is to restore seabird habitat through habitat enhancement, social attraction and reductions in human disturbance.**

Restoration on Scorpion Rock has included:

- Removal of non-native plants and revegetation with over 8,000 native plants
- Installation of nest boxes
- Posting of closure signs to reduce impacts from public visitation

Restoration on Orizaba Rock has included:

- Installation of nest boxes
- Use of vocalization playback systems
- Posting of closure signs to reduce impacts from public visitation

Restore Seabirds to the Baja California Pacific Islands

ASSP BRCO BRPE SCMU
CAAU DCCO PECO WEGU

Historically, both Coronado and Todos Santos Islands supported important seabird colonies. In addition to negative effects from DDT, seabird populations on these islands also declined due to the presence of introduced animals (goats, burros, cats, rabbits) and human disturbance. With the recent successful removals of introduced species from these islands, opportunities exist to enhance the recovery of these seabird colonies.

Restoration on the Coronado and Todos Santos Islands includes:

- Improving nesting habitat
- Use of social attraction techniques
- Installing nest boxes
- Reducing human disturbance

Restore Seabirds to Santa Barbara Island

CAAU XAMU

Santa Barbara Island supports California's largest colony of Scripps's Murrelets (a state threatened species). Recent studies indicated a decline in Murrelet numbers on the island. Santa Barbara Island at one time also supported a sizable population of Cassin's Auklets before the colony was decimated by feral cats that are no longer on the island. **The goal of this project is to facilitate the recovery of Cassin's Auklets and Scripps's Murrelets on Santa Barbara Island through nesting habitat improvements.**

Restoration on Santa Barbara Island has included:

- Removal of non-native plants and planting over 20,000 native plants in five restoration sites
- Construction of a permanent nursery
- Installation of nest boxes

Reduce Seabird Disturbance on the Channel Islands

The Channel Islands provide essential nesting and roosting habitat for many species of seabirds in southern California. Seabirds that nest on cliffs, within seacaves, and on offshore rocks are highly susceptible to human disturbances. Activities such as recreational boating, planes and helicopters flying near nesting sites, commercial or recreational fisheries operations, walking among colonies, and kayaking can all disturb nesting and roosting seabirds. Repeated or severe disturbance can also lead to nest failure. **MSRP initiated a new chapter of the Seabird Protection Network to focus on reducing seabird disturbance on the Channel Islands.** MSRP is currently working on a strategic plan for the new chapter that will outline specific disturbances, target groups, and protective actions for seabirds of the Channel Islands.

Restore Seabirds to San Nicolas Island

ASSP BRCO CAAU
WEGU SCMU

Feral cats were reported to be roaming San Nicolas Island by the late 1950's. Scientists documented the negative impacts of feral cats on the island's fauna, including seabirds such as Brandt's cormorants and western gulls. **The goal of this project was to eradicate the feral cat population and to increase seabird colonies on San Nicolas Island.**

In partnership with the United States Navy, Island Conservation, Institute for Wildlife Studies, and The Humane Society of the United States (HSUS), MSRP removed 66 adult cats and 10 kittens from San Nicolas Island. Of these, 59 adult cats and the kittens were transferred to HSUS who built an enclosure for them at the Fund for Animals Wildlife Care Center in Ramona, California. Intensive monitoring with cameras occurred on the island starting in December 2009. The last cats were removed in June of 2010. Over 27,000 camera sensing nights have been logged since June of 2010 without cat detection.

On February 15, 2012, the island was declared cat-free and a ceremony was held on San Nicolas Island to mark the successful completion of this project.



Volunteers planting on Santa Barbara Island (Gabrielle Dorr, MSRP)