The Nature Conservancy

SAVING THE LAST GREAT PLACES ON EARTH

Mexico: Baja and the Gulf of California

Gulf of California/ Loreto Bay Marine Park

Overfishing Threatening Marine Area Known as "The World's Aquarium"

ecoregion Gulf of California

targets rocky reef fishes; blue, fin, sperm, pilot and humpback whales; mangroves; sea grass beds; loggerhead, black and green sea turtles; nesting sea birds; black coral; yellowtail; dorado; groupers and snappers

stresses overfishing and unsustainable fishing practices; illegal harvest; costal development; unregulated tourism and sportfishing

strategies expand the marine protected area; strengthen park management and local partner organizations; train fishermen to establish and monitor no-take zones; certify fisheries to promote sustainable fishing practices; regulate sports fisheries

results established two no-take zones in the park; created fund to support fishermen interested in promoting no-take zones and marine reserves; mapped spawning aggregations in the park; completed a diagnostics study of sportfishing activity in the park

partners Comunidad y Biodiversidad; Grupo Ecologista Antares; Niparajá; National Commission for Protected Areas

funding need $234,000 for conservation programs

leveraging opportunity TNC Wilson Challenge Grant Program

A view from Loreto Bay Marine Park reveals the sheltered waters of the Gulf. © W. Heyman

Millions of years ago, the Baja California peninsula broke off from the mainland of present-day Mexico. The Pacific Ocean rushed in, creating the Gulf of California, or as it is known in the United States, the Sea of Cortez. Today, few marine areas in the world are as biodiverse as the Gulf of California, a body of water Jacques Cousteau once labeled "the world's aquarium."

The Gulf of California owes its remarkable biological diversity to a combination of habitats, including salt marsh and mangrove wetlands, island archipelagos, eelgrass, algae beds and rocky reefs. Complex underwater ecosystems also favor the Gulf of California's high productivity. An abundance of plankton allows for the existence of large schools of small fish such as sardines and anchovies that live close to the ocean's surface. They, in turn, are sustenance for larger fish, marine mammals and huge populations of waterfowl.

The warm, sheltered waters of the Gulf of California are a natural nursery for a variety of breeding and spawning marine species. Majestic blue whales, displaced from all but a handful of their breeding grounds worldwide, calve in the Gulf, along with fin, sperm, pilot and humpback

Manta rays are among the unique creatures found in the Gulf of California. © M. Kazmers

whales. Loggerhead, black and green sea turtles nest along the Gulf of California's coastlines. The islands of the Gulf are also important breeding grounds for sea lions and seals, as well as nesting and stopover sites for hundreds of species of resident and migratory birds.

Unique sea creatures such as giant manta rays, Mexican rockfish, Cortez angelfish and roughjaw frogfish also inhabit the Gulf of California. Endemic species include the totoaba fish and vaquita porpoise, both of which are classified as endangered. Deep open trenches and nutrient-rich shallow seabeds are home to fish like yellowtail, dorado, groupers, snappers and shrimp that are essential resources for fisheries. In total, 35% of the world's marine mammal species, 60% of the world's species of cetaceans and approximately 800 species of fish are represented in the Gulf of California.

Loreto Bay Marine Park

Situated within the Gulf of California just off the coast of the city of Loreto is the 510,253-acre Loreto Bay Marine Park. The area was decreed a national protected area in 1996 by the Mexican government to help protect the fish, sea life and waters offshore, north and south of Loreto. The park contains islands, wetlands, lagoons, mangroves, seagrass beds and marine areas that provide breeding habitat and feeding grounds for most of the portfolio of marine species that dwell in the Gulf.

Destruction of Sea Life

Industrial fishing is the most significant threat to the Gulf of California. Domestic and foreign industrial fishing vessels heavily utilize the region's marine areas. Industrial vessels use drag nets to harvest tons of pounds of shrimp and commercially valuable fish, which also destroy the sea floor and scoop up dolphins, manta rays, turtles, spawning fish and other sea life in their nets, dooming most to death. By some estimates, nearly 10 pounds of other marine life dies for every pound of shrimp caught. Sustenance fishing and sport fishing are also largely unregulated, causing damage to commercial fish stocks.

Trawling has been banned from the reserve since it was decreed a national park in 1996. However, other threats affecting Loreto Bay National Park and the Gulf of California include illegal harvesting of marine species, use of inappropriate fishing gear, unregulated tourism and coastal development.

What the Conservancy is Doing

Since the reserve was first decreed a protected area, The Nature Conservancy has assisted in training park staff and NGO partners to patrol the area and halt illegal fishing. The Conservancy and its partners have also been successful in creating a conservation plan for the site, establishing no-take zones within the park, mapping new spawning aggregations, completing a diagnostic study on sportfishing activities in the Gulf and promoting sustainable fishing practices.

The Conservancy is currently working with local partner Niparajá in designing an expansion of Loreto Bay National Park that would increase the marine protected area by one-third its current size. With partner Comunidad y Biodiversidad (COBI), the Conservancy is also working to establish a network of fishermen from seven sites in the Gulf of California and the near shore Pacific who are interested in establishing marine reserves and no-take zones in their communities. COBI established and is currently monitoring the first two no-take zones inside the park.

In addition, the Conservancy and Niparajá recently established the Fund for the Protected Areas of Baja California Sur (FOSANP) which is financed by voluntary contributions from tourists visiting the region. Income from the fund goes towards strengthening the management of the Gulf of California's natural protected areas and reducing tourism-related threats to the parks.

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