

Marine Life Protection Act Initiative



Marine Birds and Mammals of the MLPA South Coast Study Region

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Marine Birds and Marine Mammals

- Long-lived, often >20 years
- Produce few offspring, but provide high amount of parental care
- Feed at the top of marine food webs





Marine Mammals and Sea Turtles

- 5 species of pinniped
- > 30 species of cetacean
- 1 species of fissiped
- 2 species of sea turtle



Marine Mammals to Benefit

- Pinnipeds
 - Harbor Seal
 - California Sea Lion
- Cetaceans
 - Coastal Bottlenose Dolphin
 - Long-beaked Common Dolphin





Marine Birds

- Seabirds -- >40 species
- Shorebirds -- >25 species
- Waterfowl -- >25 species
- Marsh Birds – 6 species



Terrestrial Birds in Marine Food Webs

Fish Predators

Bald Eagle

Osprey



Seabird/Shorebird Predators

Peregrine Falcon

Northern Harrier

White-tailed Kite





Threats

- Human disturbance: short-term loss of young and long-term loss of breeding and resting sites
 - Boats
 - Shoreline recreation
- Fisheries bycatch:
 - Gillnet, longline, recreational fisheries
- Prey availability:
 - Change due to anthropogenic or ecological activities
 - Disturbance at foraging sites



Protection of Breeding Sites

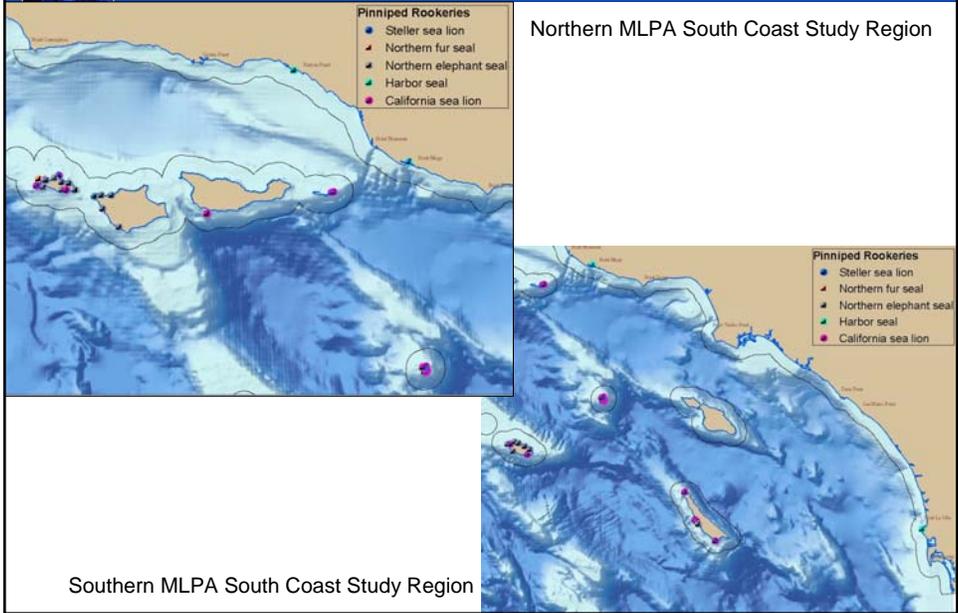
Disturbance at breeding sites...

- Exposes young to predation
- Exposes young to solar radiation
- Can lead to short-term and long-term abandonment of breeding site

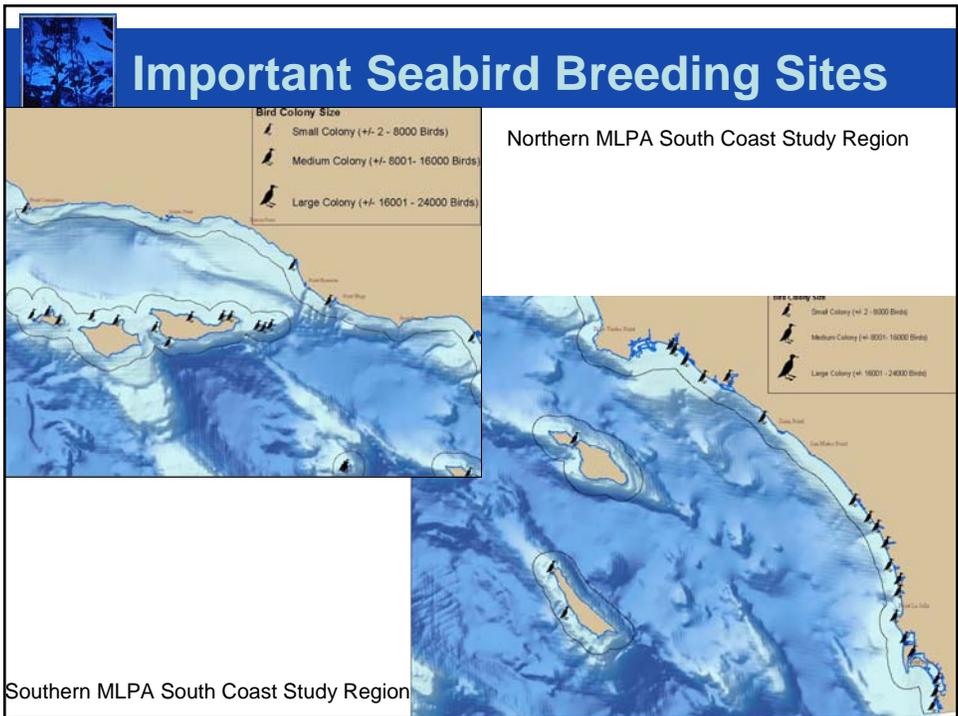
Examples of Breeders: California Least Tern, Pelagic Cormorant, Harbor Seal, California Sea Lion



Important Pinniped Rookeries



Important Seabird Breeding Sites

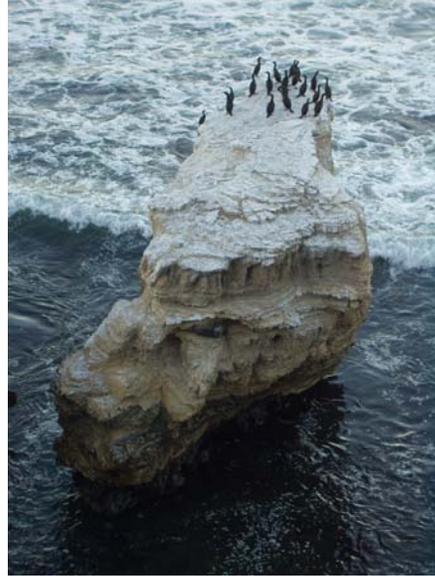




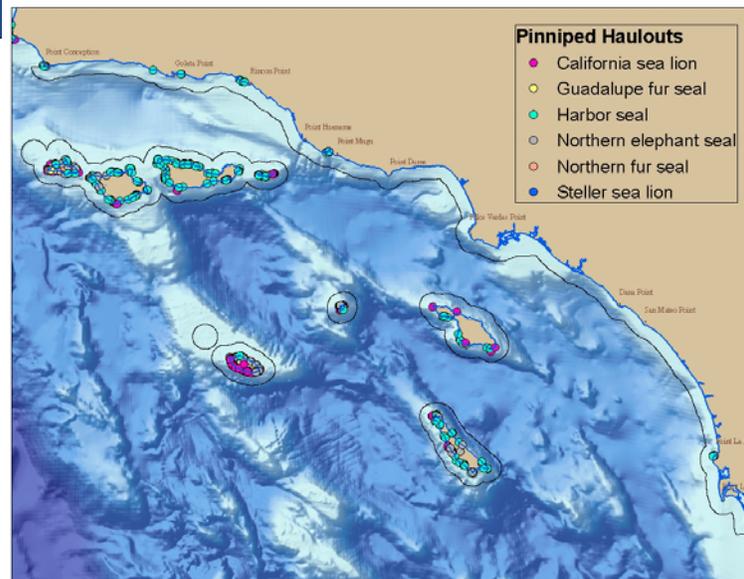
Protection at Roost/Haul-out Sites

Many seabirds and marine mammals require areas to rest for energetic and thermoregulatory purposes.

Examples: California Brown Pelican, Brandt's Cormorant, Pelagic Cormorant, Harbor Seal, California Sea Lion

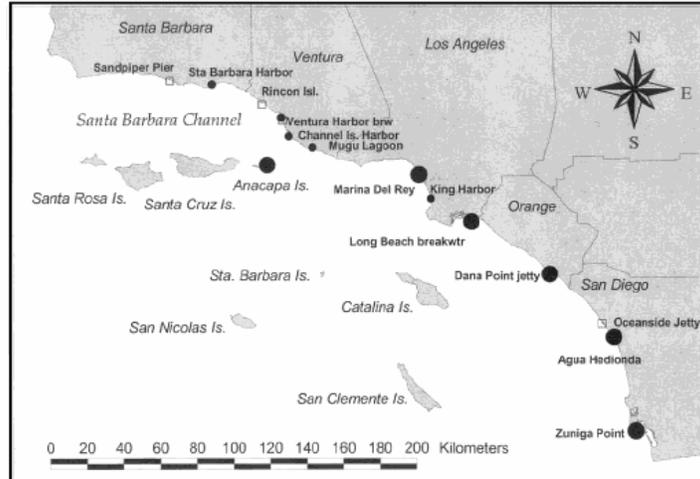


Important Pinniped Haul-outs





Important Seabird Roost Sites



Protection at Foraging Sites

Nearshore/Near-colony foraging

While breeding, birds and mammals are central place foragers.

Some species forage mostly within 3 mile of breeding sites

Examples: Pigeon Guillemot, Brandt's Cormorant, Pelagic Cormorant, California Least Tern, Harbor Seal





Protection at Foraging Sites

Aggregations at 'Hot Spots'

Many hydrographic features within the Southern California Bight can serve to concentrate prey.

Though the prey tend to be highly mobile (e.g., anchovies), they have a greater probability of being found at these 'hot spots'.

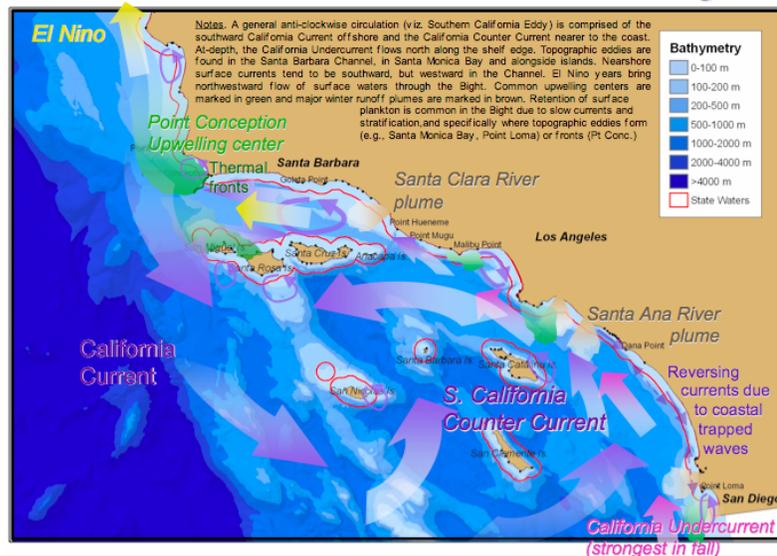
Examples of Hot Spot

Predators: California Brown Pelicans, Sooty Shearwaters, California Sea Lions, Common Bottlenose Dolphin



Potential Prey Aggregating Features

Circulation in the Southern California Bight





Coastal Bottlenose Dolphins

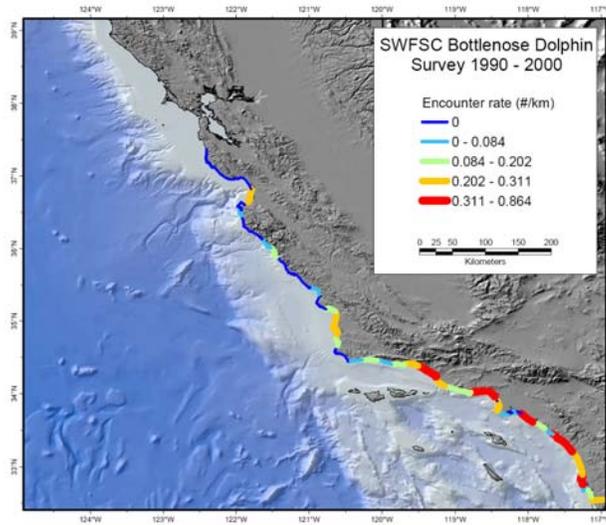


Figure: NCCOS A biogeographic assessment of the Channel Islands National Marine Sanctuary web site



Protection in Bays and Estuaries

Bays and estuaries provide critical resting and foraging habitat for many resident and migrant marine birds.

Threats at estuaries include loss of habitat, disturbance at foraging areas, and hunting of waterfowl.

Examples of Bay/Estuary Residents:
Western Snowy Plover, Great Blue Heron, Northern Shoveler





Thank you!



Any questions?