























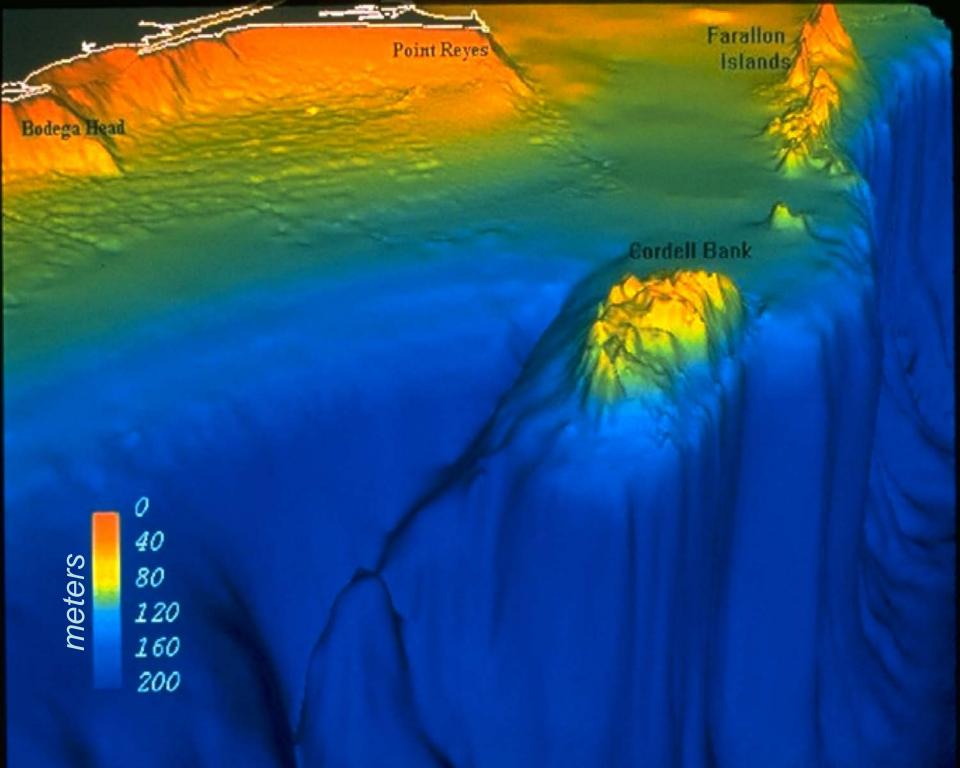


Our National Marine Sanctuaries



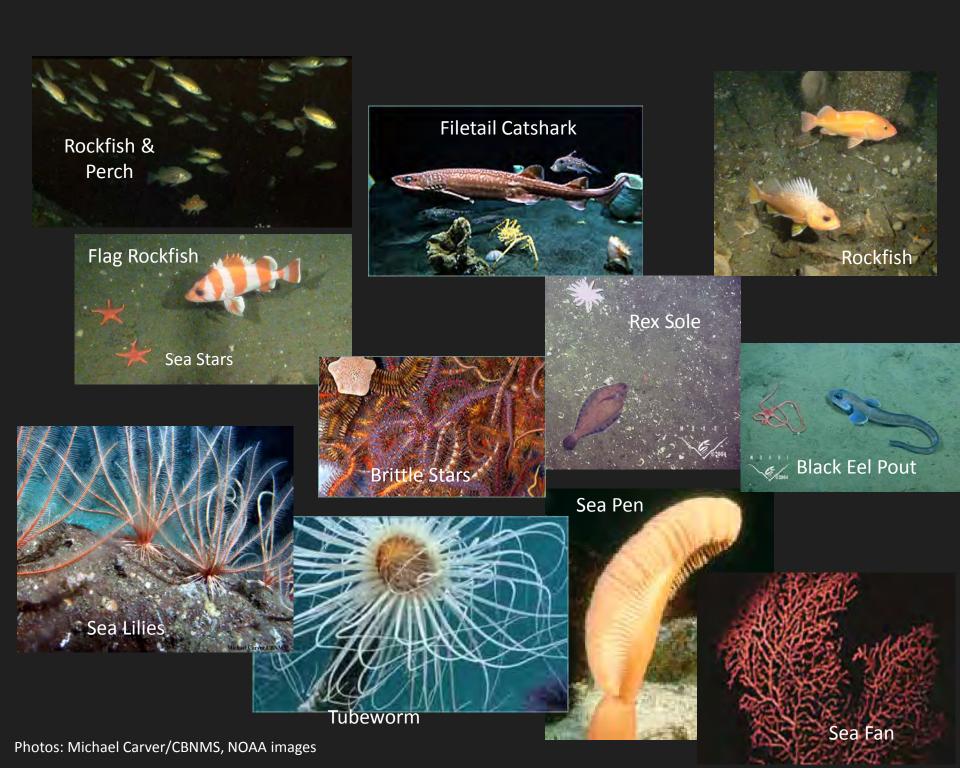


Lots of nutrients Olympic Coast Cordell Bank California Current Gulf of the Farallones Monterey Bay = Lots of food for wildlife Channel Islands Credit: Michelle Hester-Oikonos Ecosystem Knowledge













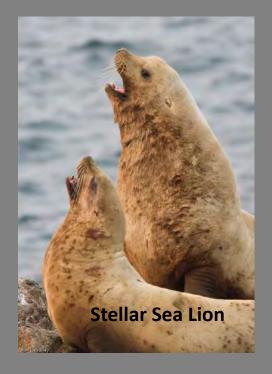








Images from NOAA Library

















Photos: Sophie Webb, CBNMS, Steve Howell, GFNMS, Dan Shapiro



Seabird Colonies





Common Murre





Pigeon Guillemot

Tufted Puffin





Brandt's Cormorant

Common Murre



Range:

Alaska to California

Breeding:

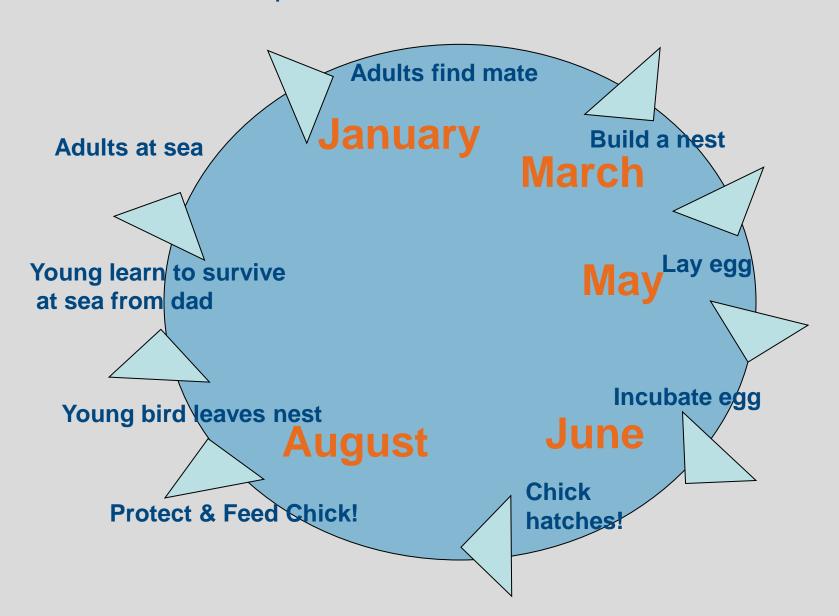
- Colonial
- Returns to same place every year
- One egg per year

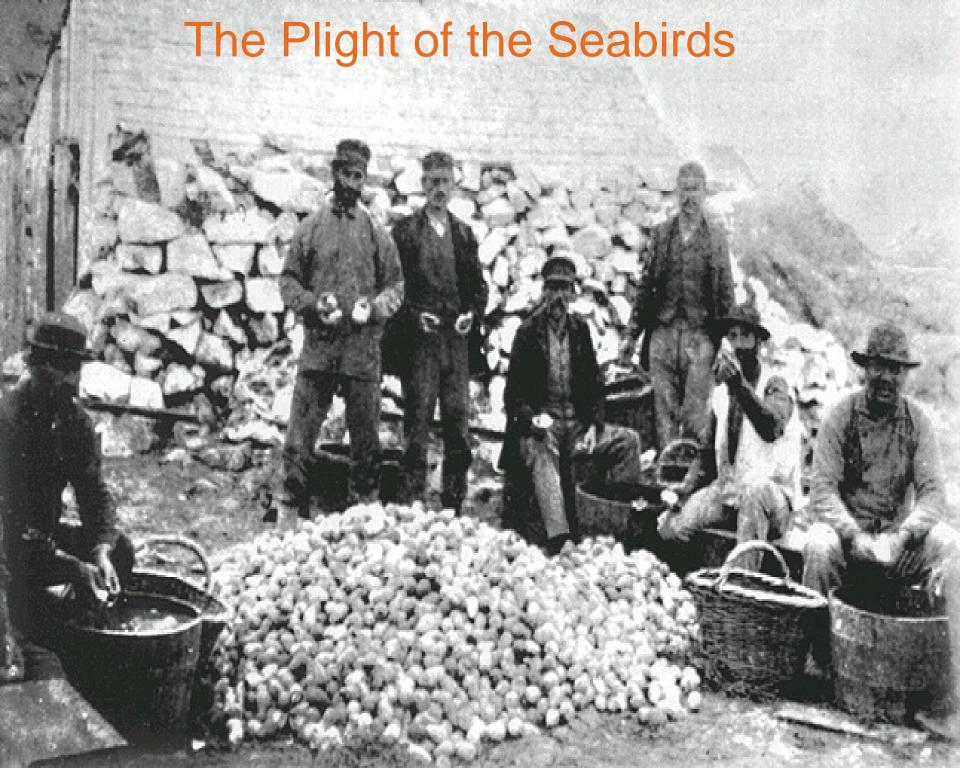


Life Cycle of Seabirds

(Common Murre example)

Seabirds need safe places to breed and rest.





The Plight of the Seabirds



Seabird
populations
have declined
greatly
from historic
population
levels





Oil Spills & Seabird Mortality

~1,500 dead

Cosco Busan 2007

Luckenbach 1953-2003 ~51,800 dead Command 1998

Apex Houston
1989
OIL SPILL
AREA CLOSED
NO WATER CONTACT
OF THE PROPORTION FIRST CONTACT
OF TH







Devil's Slide Rock 2007, no decoys!

People affect seabirds Especially when we get too close



1. Low Flying Aircraft *birdstrike



2. Close approaching boats, Kayaks, personal watercraft



3. Humans on Foot

Seabirds can harm pilots too!

- Low over flights can be hazardous to pilots!
- Bird strikes cause more than \$600 million in damages each year, and have taken the lives of over 350 people worldwide!
 - www.birdstrike.org
 - The National Wildlife Strike Database





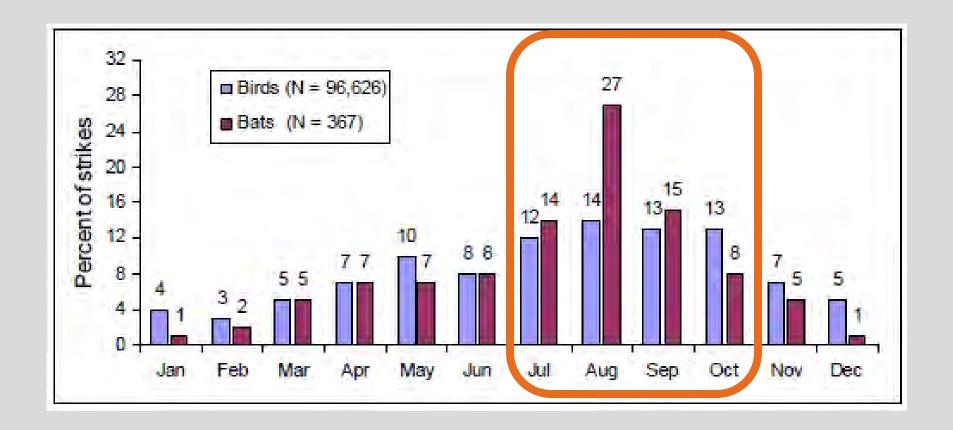
Bird Strike Facts

- 76 % GA strikes occur at or below 500' AGL
- Above 500' AGL, the number of strikes declines by 44% with each 1,000' gain in height

Avoid low altitudes to minimize risk!

Bird Strike Facts

- **109,107** wildlife strikes were reported from 1990-2009
- 97.2% of strikes involved birds





Birds most frequently involved in strikes:

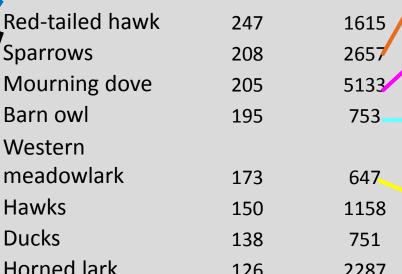


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	California	United States
Unknown bird	5766	68858
Gulls	653	6033
Pigeon	510	2236
American kestrel	326	3037
Red-tailed hawk	247	1615
Sparrows	200	2657

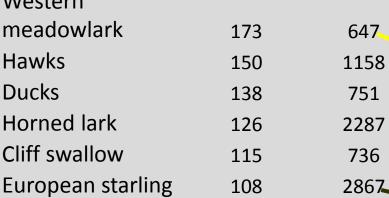














Total Strikes of all species

10,946 125,857





Avoid a Birdstrike

- Avoid marsh lands, seabird nesting areas, landfills, and migration routes.
- Avoid flying at low altitudes during the seabird nesting season (February-August)
- Check wildlife strike resources for recent incidents and tips to avoid strikes

Seabird Reactions to Low Flying Aircraft





A disturbance at Devil's Slide Rock seabird colony

To see this video online please visit our YouTube channel:

www.youtube.com/user/SeabirdProtection/videos

Wildlife are protected by federal regulations

- National Marine Sanctuaries Act
- Airborne Hunting Act
- Marine Mammal Act
- Migratory Bird Treaty Act
- Endangered Species Act

National Marine Sanctuaries Act



California
Sanctuaries have regulations prohibiting flights below 1000' in certain geographic areas.

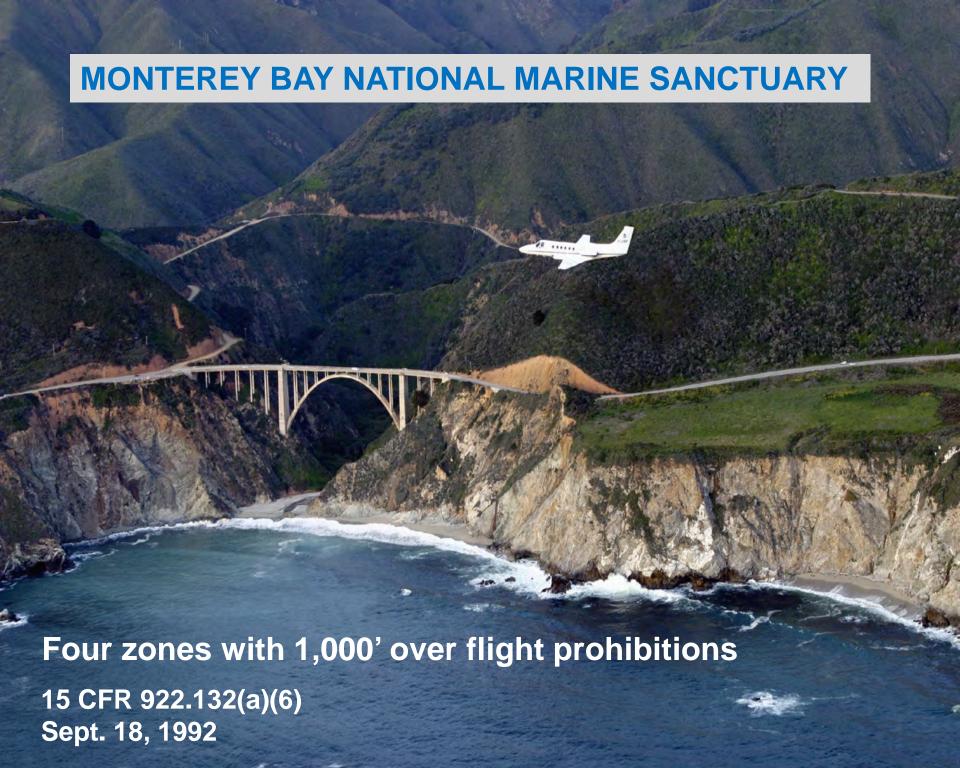


Dan Dawson

Harassment (interrupting natural behavior) of wildlife is unlawful in all sanctuaries



CHANNEL ISLANDS NATIONAL MARINE SANCTUARY 1,000' over flight prohibition within one mile of any island 15 CFR 922.71(a)(5) Sept. 22, 1980



GULF OF THE FARALLONES NATIONAL MARINE SANCTUARY

1,000' over-flight prohibition within one mile of the Farallon Islands, Bolinas Lagoon, or any state designated area of Special Biological Significance





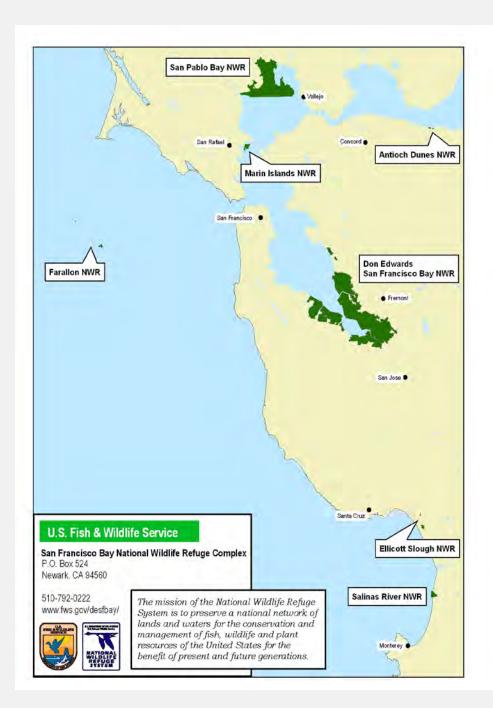
Airborne Hunting Act



Prohibits disturbance to wildlife by aircraft. (50 CFR 1911)



US WILDLIFE REFUGES

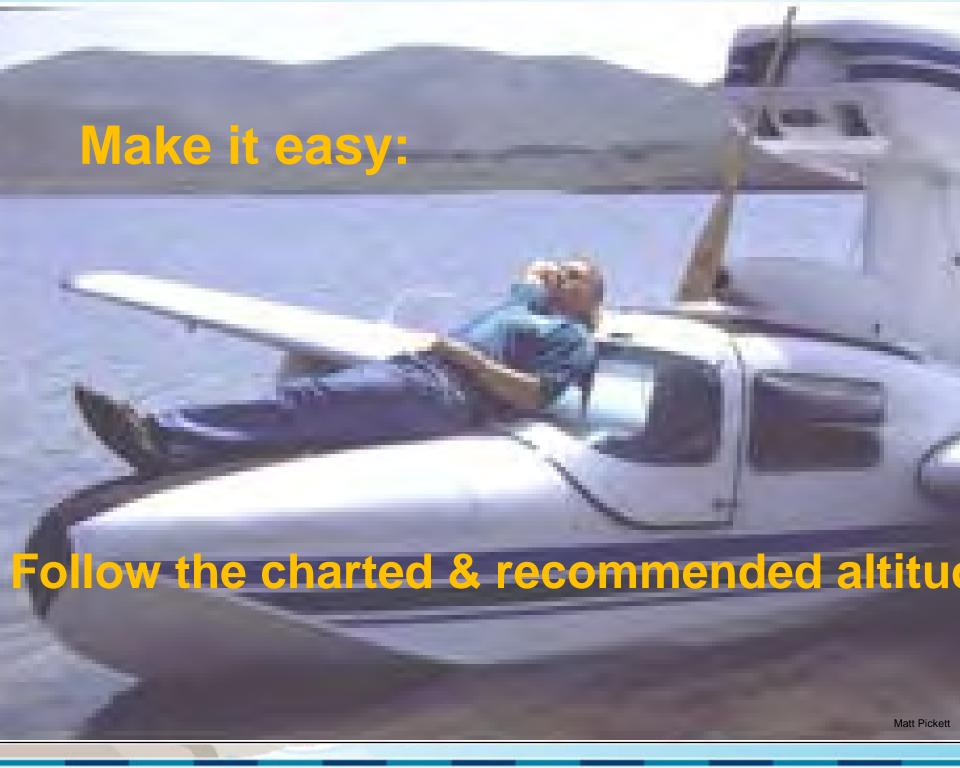


Request to pilots:

Maintain a minimum altitude of 2,000 feet above:

- National Parks
- Monuments
- Seashores
- Lakeshores
- Recreation Areas
- Scenic Riverways
- National Wildlife Refuges
- Big Game Refuges
- Game Ranges
- Wildlife Ranges
- Wilderness and Primitive areas







Avoid flying over seabird colonies and marine mammals on land

Avoid making multiple passes over wildlife.





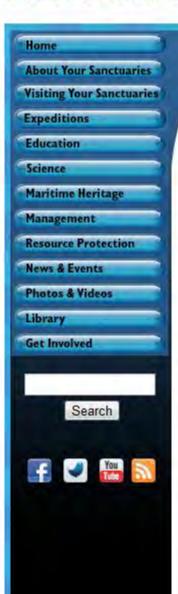
http://sanctuaries.noaa.gov/flight/

National Oceanic & Atmospheric Administration

NATIONAL MARINE SANCTUARIES







NEWS & EVENTS

Pilots: Know Before You Go!

Overflight regulations within Olympic Coast, Gulf of the Farallones, Monterey Bay and Channel Islands National Marine Sanctuaries require that motorized aircraft maintain minimum altitudes above specified locations. Failure to comply with these minimum altitude restrictions is presumed to disturb marine mammals and seabirds and is a violation of federal regulations for the sanctuaries.

Overflight restrictions have been in place for many years, and in February 2012 a Final Rule standardized NOAA regulations across the sanctuaries to reflect a consistent and clear regulatory approach. The regulatory modifications were required by the FAA in order to post a clear notice to pilots on aeronautical charts about low overflight restrictions in national marine sanctuaries along the west coast. Full text of the amendment to the Overflight Regulations for the Channel Islands, Monterey Bay, Gulf of the Farallones and Olympic Coast National Marine Sanctuaries is posted in the Federal Register (Vol 77, No.17; Jan. 26, 2012) as the Final Rule (PDF, 160KB) effective Feb. 27, 2012.

FAA to Release Updated Aeronautical Sectionals

Over the next three months, the Federal Aviation Administration (FAA) will release updated aeronautical sectionals that include West Coast sanctuary overflight regulations.

Date	Sectional	Displays Overflight Regulations of	
May 31, 2012	Seattle Sectional	Olympic Coast National Marine Sanctuary	
June 28, 2012	Los Angeles Sectional Chart & Los Angeles Terminal Area	Channel Islands & Monterey Bay National Marine Sanctuaries	
Aug. 23,	San Francisco Sectional Chart &	Monterey Bay & Gulf of the Farallones	

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EDUCATION

ECOSYSTEM PROTECTION



HELPING SEABIRDS THRIVE ...

By reducing human disturbance to sensitive seabird breeding colonies

NETWORK HOME

PILOTS

BOATERS

KAYAKERS

COASTAL VISITORS

ADVISORY GROUPS

NEWS, ARTICLES & LINKS







Welcome

California is home to an amazing and diverse population of seabirds. Join our network of ocean enthusiasts and discover ways to be "seabird safe" while flying, boating, paddling or hiking along the coast.

Seabirds gather in great colonies to nest and rest on offshore rocks, cliffs and islands all along the California Coast. Find a colony near you! (6.05 MB PDF). Seabirds are sensitive to our actions, which can interrupt their natural behavior, such as feeding or caring for their chicks, when we get too close to their colonies.

Did you know that disturbances to seabirds during breeding season can:

- Scare birds off their nests
- Dislodge eggs and chicks from nest sites
- · Allow predators access to eggs and chicks



"Try to stay in the middle of the air. Do not go near the edges of it. The edges of air can be recognized by the appearance of ground, buildings, sea, trees, and interstellar space. It is much more difficult to fly there."