



Cabrillo Marine Aquarium

Virginia Reid Moore Marine Research Library

Library Pathfinder: Wetlands

Wetlands are among the most productive ecosystems in the world, comparable to rain forests and coral reefs. They include areas where water saturation is the main factor determining the nature of soil development and the types of animals and plants living in that particular habitat. Wetland components include water, soil, vegetation and wildlife. Examples include marshes, bogs and swamps.

Wetlands are home to a variety of plant and animal species, some endangered, that have evolved to live in the wetland's unique conditions. This habitat acts as a filter, removing pollutants, including metals from runoff. Wetlands also serve as reservoirs; they facilitate flood and erosion control by absorbing excess water.

Along the U. S. coasts, salt marshes are the most prevalent types of tidal marshes and are characterized by salt tolerant plants such as saltgrass, pickleweed and cordgrass. Salt marshes have one of the highest rates of primary productivity associated with wetland ecosystems because of the inflow of nutrients and organics from surface and tidal water.

In the mid to late 19th century, the U.S. Coastal Survey created highly detailed topographic maps of the U. S. east and west coastlines. These maps are known as 'T-sheets'. They indicate which types of wetlands exist, including along the California coastline. T-sheets are valuable tools for coastal zone planning.

The U. S. Coast Survey of California has a website which includes a "T-sheet Interactive Map of Southern California". The online interactive map contains Southern California T-sheets created between 1850 through 1889. Using the webpage's navigation guides after selecting "San Pedro Bay", we can discover that San Pedro Bay was identified as a wetland on T-sheet T892, created in 1859. Cabrillo Marine Aquarium, Point Fermin Park and the White Point Nature Education Center and Reserve are currently located in that specified wetland!

BOOKS

Books for Adults

California Naturalist Handbook/Greg DeNevers. Univ CA Press. QH105 .C2 D43 2013.

Southern California's Coastal Wetlands – Pamphlet. Robin Madrid and Michelle Clemente. Back Bay Science Center and Sea Grant. QH102 .C2 .M33 S4347 2011.

Tidal Wetlands Primer/Ralph W. Tiner. Univ. of Mass. Press. QH87.3 .T57 2013.

Triangulating Archaeological Landscapes: The US Coast Survey in California, 1850-1895/R. Scott Byram. Regents of the Univ. of California. CC21 .C32 v.65 2013

Wetland Ecology: Principles and Conservation, 2nd ed./Paul Keddy. Cambridge Univ. Press. QH541.5 .M33 K44 2010.

Wetland Ecosystems/William J. Mitsch. Wiley & Sons. QH541.5 .M3 W4645 2009.

Wetland Environments: A Global Perspective/James S. Aber. Wiley-Blackwell. QH87.3 A24 2012.

Wetland Habitats of North America: Ecology and Conservation Concerns/Darold P. Batzer and Andrew H. Baldwin. Univ. of California Press. QH102 .W48 2012.

Wetlands, 2nd. Ed./Mitsch, William J. QH104 .M57 1993

Featured Websites

Environmental Protection Agency – Wetlands
www.epa.gov/type/wetlands

National Geographic – Education – Geo-Literacy
http://education.nationalgeographic.com/education/geoliteracy/?ar_a=1

National Wetlands Research Center – The Fragile Fringe: A Guide for Teaching about Coastal Wetlands
www.nwrc.usgs.gov/fringe/ff_index.html

Southern California Wetlands Recovery Project
www.scwrp.org

Southern California Coastal Water Research Project
www.sccwrp.org

Southern California Wetlands Mapping Project
www.socalwetlands.com/website/main.htm

State of California Coastal Conservancy
www.scc.ca.gov

U.S. Coast Survey Maps of California (Topographic sheets of the California Coast)
www.caltsheets.org

U.S. Fish and Wildlife Service – National Wetland Inventory
www.fws.gov/wetlands