Coastal Ecology and Management: An Introduction









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NOAA's National Ocean Service Making Waves

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Coastal zones are terrestrial areas dominated by oceanic influences and marine aerosols

marine area where light penetrates throughout.

Terrestrial/landward à marine/seaward

Definitions vary, this one is from the Millennium Ecosystem Assessment (2005)

Coastal Ecology and Management: Coastal Ecosystems

"Coastal wetlands such as mangroves, coral reefs, and seagrasses contain some of the most productive communities in the world."

"It is well established that coastal ecosystems such as mangroves, coral reefs, tidal flats, and estuaries are experiencing degradation and loss."

(MEA 2005)

Coastal Ecology and Management: Wetlands Definition





US F&WS
Transitional lands b/w terrestrial and aquatic systems where the water table is at or near the surface.

Must have one or more of the following:

- ____

Coastal Ecology and Management: Wetlands Definition

Box 1.1. The Convention on Wetlands

The Convention on Wetlands, also known as the Ramsar Convention, is one of the oldest global environmental intergovernmental agreements. It was established in 1971 in the City of Ramsar, I.R. of Iran. The Convention's Mission is "the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world."

The 146 Contracting Parties to the Ramsar Convention (as at July 2005) implement the Convention through three pillars of implementation:

- the "wise use" of all wetlands,
- special attention to internationally important wetlands, and
- international co-operation.

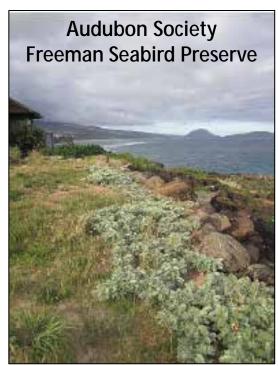
The Convention defines wetlands as "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres." This broad definition includes *inland* wetlands (such as marshes, lakes, rivers, peatlands, forests, karst, and caves), coastal and near-shore marine wetlands (such as mangroves, estuaries, and coral reefs), and human-made wetlands (such as rice fields (paddies), reservoirs, and fish ponds).

For more than 30 years the Convention has recognized the interdependence of people and their environment and the need to maintain the ecological character of wetlands, including the services they provide for people. It is the only global intergovernmental convention addressing the interactions between water and ecosystems (inland, coastal, and human-made wetlands).

Coastal Ecology and Management: Wetlands

Wetland dependent species

- Widespread decline in populations of wetland-dependent species of all types.
- Bird species that are ecologically dependent on coastal or inland wetlands, particularly migratory water birds, are declining more rapidly than other habitats.
- Threat is greater to bird species dependent on coastal habitats than inland.





Photos: David Hyrenbach

What happened on World Wetlands Day?



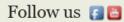
This year's focus on responsible wetland tourism

Wetlands and their wildlife are a key part of the global tourism experience: from visiting the underground karst wetlands in Slovenia's Skocjan caves, to experiencing the breath-taking sunsets at the Port Launay Ramsar Site in the Seychelles, the world's Ramsar Sites and other wetlands have much to offer the adventurous tourist.

With half of international tourists traveling to wetlands of all types, but particularly in coastal areas, the tourism expenditure linked to wetlands can be quite significant. Globally, the economic activity generated by travel and tourism represents around 5% of GDP and an estimated 6-7% of the world's jobs. But of course poorly managed tourism can have negative impacts on wetland resources and local livelihoods.

As Ramsar's Secretary General, Anada Tiéga, stresses that this year's theme is the "opportunity to focus on key stakeholders who can help to ensure that tourism in wetlands is sustainable and that any tourism development in and around wetlands in the future is carried out following Ramsar's principles of wise use."

» Read SG message.





Ramsar Sites Info



Wetlands connect us all



The Convention today

Number of » <u>Contracting</u> <u>Parties:</u>

160

Sites designated for the

» <u>List of Wetlands of</u>

<u>International</u>

Importance:

1,995

Total surface area of designated sites (hectares):

Coastal Ecology and Management: Estuary



Coastal Ecology and Management: Mangrove



Coastal Ecology and Management: Seagrass Bed



Coastal Ecology and Management: Kelp Forest



Coastal Ecology and Management: Coral Reef

