Coastal Wetlands
Tidal Salt Marshes
Tidal freshwater marshes
Mangroves

A. Tidal Salt Marshes
   a. Globally - temperate coastlines (mid-lattitudes)
      i. Found in - N Europe - Korea - tip of S. America - SW Australia
   b. Typical species
      i. NW US - Salicornia
      ii. W US - Spartina foliosa
      iii. E US - Spartina alterniflora (cordgrass)
      iv. Arctic - Puccinellia (grass); Salicornia, Suaeda (succulents)
      v. N Europe - Puccinellia, S. tawseudii, S. anglica
      vi. Mediterranean - succulents, Salicornia; shrubs, Atriplex; Limonium, Juncus
      vii. Case study: S. alterniflora from England/France in 1860-1870, crossed with S. maritima, produced S. townsendii (sterile, found throughout Europe, China and New Zealand) DNA doubled (ampliploid) and formed S. anglica
   c. Types
      i. Marine - points, bogs, barrier islands, bars
         1. e.g. Chesapeake - Georgia-Carolina - S. alterniflora, Salicornia, Distichilis, Juncus
      ii. Deltaic - at river mouth, Gulf of California
   d. Hydrology - Tide vs. freshwater (See Figure 9-4)
   e. Geomorphology
      i. Marsh stability - most are young (climax), increasing sediment, submergence
         1. N Atlantic - more or less stable
         2. Gulf - sinking 0.5 cm/yr
         3. Subarctic - rising 1 cm/yr
      ii. For diagrams of plant communities and geomorphology, see Fig 9-11 and 9-12