

Chapter 3

WHAT LIMITS GEOGRAPHIC DISTRIBUTIONS?

IN THE NEWS

San Francisco Bay supports the largest and most ecologically important expanses of tidal mudflats and salt marshes in the western United States. Many non-native species of plants and animals have been introduced to the bay, and some now threaten to cause fundamental changes in the bay's tidal areas. One such species is the Atlantic salt marsh cordgrass (*Spartina alterniflora*), which was introduced in the 1970s from the east coast. By 2003, cordgrass had colonized 1500 ha (3,700 acres) of the nearly 16,000 ha (40,000 acres) of tidal marsh and 12,000 ha (29,000 acres) of tidal flats in San Francisco Bay. This cordgrass is likely to dominate tidal marshes, cause the extinction of native tidal marsh plants, choke tidal creeks by its extensive growth and eliminate thousands of hectares of shorebird habitat. Cordgrass colonization could endanger threatened species that use existing tidal marsh habitats, including the rare California clapper rail and the salt-marsh harvest mouse.



California clapper rail



Harvest mouse