

Abstract

Population Dynamics and Invasion: *Spartina Alterniflora* and Willapa Bay, WA

Track: Ocean, Coastal, and Marine Resources

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Spartina alterniflora (smooth cordgrass) is the mainstay of Atlantic and Gulf coastal salt marshes, but its introduction to Pacific estuaries has displaced native species, removed migratory shorebird habitat from use, and is rapidly filling in the shallow basin of Willapa Bay. A fifty year time series of aerial photography is being used to study growth dynamics of the invasion, lateral spread of individual plants, and elevation changes in the bay. New bathymetry data, recently acquired by LIDAR technology, is being incorporated into the research, allowing detailed elevational change descriptions at levels previously unknown at a landscape level.

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