Native And Exotic Species Interactions In Southern California Salt Marshes: Salicornia Virginica and Polypogon Monspeliensis

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Exotic weeds often invade the upper margins of salt marshes, especially where soil salinity has been lowered. *Polypogon monspeliensis* (rabbit-foot grass; exotic annual) was more negatively affected by experimentally increased soil salinity than was *Salicornia virginica* (pickleweed; native perennial). Low soil salinities consistently favored *P. monspeliensis*, increasing its cover (field experiment), competitive advantage (greenhouse experiment), and seed germination (in growth chamber). Seasonally low soil salinities caused by winter runoff and anthropogenic freshwater inputs are the likely factors controlling interannual and spatial variations in the distribution of *P. monspeliensis* in southern California salt marshes.