

STEVEN D. GAINES

Department of Ecology, Evolution and Marine Biology
University of California
Santa Barbara, CA

Projects: *Application of Coastal Ocean Dynamics Radars for Observation of Near-Surface Currents off the South-Central California Coast*
Observing the Surface Circulation Along the South-Central California Coast Using High Frequency Radar: Consequences for Larval and Pollutant Dispersal
Advancing Marine Biotechnology: Use of OCS Oil Platforms as Sustainable Sources of Marine Natural Products

Education: B.S. Biology, University of California, Irvine 1977
Ph.D. Ecology, Oregon State University 1982

Positions: 1997-present Director, Marine Science Institute, University of California, Santa Barbara
1994-present Associate Professor, Department of Ecology, Evolution and Marine Biology, University of California, Santa Barbara, CA
1993-1994 Associate Professor, Brown University, Providence, RI
1987-1993 Assistant Professor, Brown University, Providence, RI
1986-1987 Research Associate, Brown University, Providence, RI
1982-1986 Postdoctoral Fellow, Stanford University, Stanford, CA

Selected Publications:

- Kinlan, B. and S.D. Gaines. 2003. A comparative analysis of dispersal scales in marine and terrestrial systems. *Ecology*. In press.
- Sax, D., J. Brown, and S.D. Gaines. 2003. Species invasions exceed extinctions on islands world-wide: a comparative study of plants and birds. *American Naturalist*, (In press).
- Gaines, S.D., B. Gaylord, and J. Largier. 2003. Avoiding current oversights in marine reserve design. *Ecological Applications*, (In press).
- Allison, G., S. Gaines, J. Lubchenco, and H. Possingham. 2003. Ensuring persistence of marine reserves: Catastrophes require adopting an insurance factor. *Ecological Applications*, (In press).
- Gerber, L.R., S.J. Andelman, L.W. Botsford, S.D. Gaines, A. Hastings, S.R. Palumbi, and H.P. Possingham. 2003. Population models for marine reserve design: A retrospective and prospective synthesis. *Ecological Applications*, (In press).
- Lubchenco, J., S. Palumbi, S.D. Gaines, and S. Andelman. 2003. Plugging a hole in the ocean: an introduction to the special feature on marine reserves. *Ecological Applications*, (In press).
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- Phillips, N.E. and S.D. Gaines. 2002. Spatial and temporal variability in size at settlement of intertidal mytilid mussels from around Pt. Conception, California. *Invertebrate Reproduction Development* **41**(1-3):171-177.
- Sagarin, R.D. and S.D. Gaines. 2002. Geographical abundance distributions of coastal invertebrates: using one-dimensional ranges to test biogeographic hypotheses. *Journal of Biogeography* **29**(8):985-997.
- Sagarin, R.D. and S.D. Gaines. 2002. The 'abundant centre' distribution: to what extent is it a biogeographical rule? *Ecology Letters* **5**(1):137-147.
- Sax, D.F., S.D. Gaines, and J.H. Brown. 2002. Species invasions exceed extinctions on islands worldwide: A comparative study of plants and birds. *American Naturalist* **160**(6):766-783.

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- Broitman, B.R., S.A. Navarrete, F. Smith, et al. 2001. Geographic variation of southeastern Pacific intertidal communities. *Marine Ecology Progress Series* **224**:21-34.
- Wares, J.P., S.D. Gaines, and C.W. Cunningham. 2001. A comparative study of asymmetric migration events across a marine biogeographic boundary. *Evolution* **55**(2):295-306.
- Gaylord, B. and S.D. Gaines. 2000. Temperature or transport? Range limits in marine species mediated solely by flow. *American Naturalist* **155**(6):769-789.
- Taylor, P.H. and S.D. Gaines. 1999. Can Rapoport's rule be rescued? Modeling causes of the latitudinal gradient in species richness. *Ecology* **80**(8):2474-2482.
- Bertness, M.D., S.D. Gaines, and S.M. Yeh. 1998. Making mountains out of barnacles: the dynamics of hummock formation. *Ecology* **79**:1382-1394.
- Hacker, S. and S.D. Gaines. 1997. Some implications of direct positive interactions for community species diversity. *Ecology* **78**:1990-2003.
- Worcester, S. and S.D. Gaines. 1997. Quantifying hermit crab recruitment rates and larval shell selection on wave swept shores. *Marine Ecology Progress Series* **157**:307-310.
- Bertness, M., S.D. Gaines, and R. Wahle. 1996. Wind-driven settlement patterns in the acorn barnacle, *Semibalanus balanoides*. *Marine Ecology Progress Series* **137**:103-110.
- Gaines, S.D. 1995. Modeling the dynamics of marine species: the importance of incorporating larval dispersal. Pp. 389-423 in: *Ecology of Marine Invertebrate Larvae*, Larry McEdward, ed. CRC Press.
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- Rice, W.R. and S.D. Gaines. 1994. Extending nondirectional heterogeneity tests to evaluate simply ordered alternative hypotheses. *Proceedings of the National Academy of Sciences* **91**:225:226.
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- Bertness, M. and S.D. Gaines. 1993. Larval dispersal and local adaptation in acorn barnacles. *Evolution* **47**:316-320.
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