

DANIEL P. COSTA

Department of Ecology and Evolutionary Biology
University of California
Santa Cruz, CA

Project: *Population Dynamics and Biology of the California Sea Otter at the Southern End of its Range*

Education: B.A. Zoology, University of California, Los Angeles 1974
Ph.D. Biology, University of California, Santa Cruz 1977

Positions: 1996 Elected Fellow of the California Academy of Sciences
1995-Present Associate Director of the Institute of Marine Sciences, University of California, Santa Cruz, CA
1995-Present Editorial Board of *Physiological Zoology*
1993-Present Professor of Biology, University of California, Santa Cruz, CA
1991-1993 Associate Professor of Biology, University of California, Santa Cruz, CA
1991-1993 Scientific Officer, Physiology and Marine Mammal Biology, Office of Naval Research
1987 & 1989 ASEE Senior Faculty Fellow, NOSC, US Navy, Hawaii
1985 & 1987 Visiting Scientist, British Antarctic Survey, Cambridge, England
1979-1982 National Institutes of Health Postdoctoral Fellowship, Scripps Institution of Oceanography, San Diego, CA

Selected Publications:

- Burns, J.M., D.P. Costa, M.A. Fedak, C.J.A. Bradshaw, M.A. Hindell, N. Gales, G. McDonald, S.J. Trumble, and D.E. Crocker. Winter habitat use and foraging behavior of crabeater seals along the Western Antarctic Peninsula. *Deep Sea Research* (in press).
- Crocker, D.E., D.P. Costa, B.J. Le Boeuf, P.M. Webb, and D.S. Houser. Impact of El Niño on the foraging behavior of female northern elephant seals. *Marine Ecology Progress Series* (in press).
- Gales, N.J., W.R. Fraser, D.P. Costa, and C. Southwell. Do Crabeater Seals Forage Cooperatively? *Deep Sea Research* (in press).
- Shaffer, S. A., D.P. Costa, and H. Weimerskirch. Field metabolic rates of black browed albatrosses (*Thalassarche melanophrys*) during the incubation stage. *Journal of Avian Biology* (accepted).
- Costa, D.P. and B. Sinervo. 2004. Field physiology: Physiological insights from animals in nature. *Annual Review of Physiology* **66**:23.1-23.30.
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- Miller, N.J., C.B. Daniels, D.P. Costa, and S. Orgeig. 2004. Control of pulmonary surfactant in adult California sea lions. *Biochemical and Biophysical Research Communications* **313**:737-742.
- Robson, B. W., M.E. Goebel, J.D. Baker, R.R. Ream, T.R. Loughlin, T.C. Francis, G.A. Antonelis, and D.P. Costa. 2004. Separation of foraging habitat among breeding sites of a colonial marine predator, the northern fur seal (*Callorhinus ursinus*). *Canadian Journal of Zoology* **82**:20-29.
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- on the diving behavior of juvenile northern elephant seals, *Mirounga angustirostris*. *Journal of the Acoustical Society of America* **113**:1155-1165.
- Costa, D.P. and N.J. Gales. 2003. Energetics of a benthic diver: Seasonal foraging ecology of the Australian sea lion, *Neophoca cinerea*. *Ecological Monographs* **73**:27-43.
- Fish, F.E., J. Hurley, and D.P. Costa. 2003. Maneuverability by the sea lion *Zalophus californianus* : turning performance of an unstable body design. *Journal of Experimental Biology* **206**:667-674.
- Houser, D.S. and D.P. Costa. 2003. Entrance into stage III fasting by starveling northern elephant seal pups. *Marine Mammal Science* **19**:186-197.
- Miller, N.J., C.B. Daniels, D.P. Costa, and S. Orgeig. 2003. Coping with pressure: Surfactant secretion from pinniped alveolar type II cells at depth. *Comparative Biochemistry & Physiology. Part A, Molecular and Integrative Physiology* **134A**:S117.
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