

JAMES ESTES
Department of Biological Sciences
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 Minnesota	1967
	M.S.	Zoology, Washington State University	1969
	Ph.D.	Biological Sciences/Statistics, University of Arizona	1974

Positions:	1984-present	Supervisory Zoologist, GM-486/15, California Science Center, National Biological Service, Santa Cruz, California
	1978-present	Adjunct Professor, Biological Sciences, University of California, Santa Cruz
	1979-present	Research Biologist, Institute for Marine Sciences, University of California, Santa Cruz
	1978-1981	Wildlife Biologist (Research), GS-486/12, Marine Mammal Section, National Fish and Wildlife Laboratory, FWS, Santa Cruz, California
	1977-1978	Wildlife Biologist (Research), GS-486/12, Marine Mammal Section, National Fish and Wildlife Laboratory, FWS, Anchorage, Alaska
	1974-1977	Wildlife Biologist (Research), GS-486/11, Marine Mammal Section, National Fish and Wildlife Laboratory, FWS, Anchorage, Alaska

Selected Publications:

- Estes, J.A., M.T. Tinker, A.M. Doroff and D. Burn. 2005. Continuing decline of sea otter populations in the Aleutian archipelago. *Marine Mammal Science* **21**:169-172.
- Croll, D.A., J.L. Maron, J.A. Estes, E.M. Danner and G.V. Byrd. 2005. Introduced predators transform subarctic islands from grassland to tundra. *Science* **307**:1959-1961.
- Estes, J.A. 2005. Carnivory and trophic connectivity in kelp forests. Pp. 61-81 in, J.C. Ray, K.H. Redford, R.S. Steneck, and J. Berger (eds.). Large carnivores and the conservation of biodiversity. Island Press, Washington, D.C.
- Estes, J.A., E.M. Danner, D.F. Doak, B. Konar, A.M. Springer, P.D. Steinberg, M.T. Tinker and T.M. Williams. 2004. Complex trophic interactions in kelp forest ecosystems. *Bulletin of Marine Sciences* **74**:621-638.
- Gerber, L.R., M.T. Tinker, D. F. Doak, J.A. Estes and D.A. Jessup. 2004. Mortality sensitivity in life-stage population analysis: a case study of southern sea otters. *Ecological Applications* **14**:1554-1565.
- Golet, G.H., J.A. Schmutz, D.B. Irons and J.A. Estes. 2004. Mechanistic determinants of reproductive costs in a long-lived seabird: a multiyear experimental study of the blacklegged kittiwake. *Ecological Monographs* **74**:353-372.
- Estes, J.A. 2004. A fitting tribute. Book Review. The importance of species. P. Kareiva and S.A. Levin (eds.), Princeton University Press, *Conservation Biology* **18**:279-280.
- Gerber, L.R., M.T. Tinker, D.F. Doak, J.A. Estes and D.A. Jessup. 2004. Mortality sensitivity in life-stage population analysis: a case study of southern sea otters. *Ecological Applications* **14**:1554-1565.
- Williams, T.M., J.A. Estes, D.F. Doak and A.M. Springer. 2004. Killer appetites: assessing the role of predators in ecological communities. *Ecology* **85**:3373-3384.
- Estes, J.A. 2004. Preface. Pp. xi-xiii in N. Fascione, A. Delach, and M.S. Smith (eds). People and predators: from conflict to coexistence. Island Press, Washington, D.C.

- Soulé, M.E., J.A. Estes, B. Miller and D.A. Honnold. 2004. Strongly interacting species: conservation policy, management, and ethics. *BioScience* **55**:168-176.
- Estes, J.A., M.L. Riedman, M.M. Staedler, M.T. Tinker and B.E. Lyon. 2003. Individual variation in prey selection by sea otters: patterns, causes, and implications. *Journal of Animal Ecology* **72**:144-155.
- Carr, M., J. Neigel, S. Andelman, J. Estes, R. Warner, J. Largier and J. Lubchenco. 2003. Comparing marine and terrestrial ecosystems: implications for principles of reserve design in marine systems. *Ecological Applications* **13**:S90-S106.
- Steneck, R. S., M.H. Graham, B.J. Bourque, D. Corbett, J.M. Erlandson, J.A. Estes and M.J. Tegner. 2003. Kelp forest ecosystem: biodiversity, stability, resilience and future. *Environmental Conservation* **29**:436-459.
- Estes, J.A., Brian B. Hatfield, K. Ralls and J. Ames. 2003. Causes of mortality in California sea otters during periods of population growth and decline. *Marine Mammal Science* **19**:198-216.
- Doroff, A.M., J. A. Estes, M. T. Tinker, D. M. Burn and T. J. Evans. 2003. Sea otter population declines in the Aleutian archipelago. *Journal of Mammalogy* **84**:55-64.
- Soulé, M.E., J.A. Estes, J. Berger and C. Martinez del Rio. 2003. Recovery goals for ecologically effective numbers of endangered keystone species. *Conservation Biology* **17**:1238-1250.
- Hanni, K.D., J.A.K. Mazet, F.M.D. Gulland, J.A. Estes, M. Staedler, M.J. Murray and D.A. Jessup. 2003. Clinical pathological values and assessment of pathogen exposure in southern and Alaskan sea otters. *Journal of Wildlife Disease* **39**:837-850.
- Konar, B., and J.A. Estes. 2003. The stability of boundary regions between kelp beds and deforested areas. *Ecology* **84**:174-185.
- Estes, J.A. 2003. From killer whales to kelp: food web complexity in kelp forest ecosystems. *Wild Earth* **4**:24-28.
- Springer, A.M., J.A. Estes, G.B. van Vliet, T.M. Williams, D.F. Doak, E.M. Danner, K.A. Forney, and B. Pfister. 2003. Sequential megafaunal collapse in the North Pacific Ocean: an ongoing legacy of industrial whaling? *Proceedings of the National Academy of Sciences* **100**:12223-12228.
- Estes, J.A., B.B. Hatfield, K. Ralls, et al. 2003. Causes of mortality in California sea otters during periods of population growth and decline. *Marine Mammal Science* **19**(1):198-216.
- Gelatt, T.S., D.B. Siniff, and J.A. Estes. 2002. Activity patterns and time budgets of the declining sea otter population at Amchitka Island, Alaska. *Journal of Wildlife Management* **66**(1):29-39.
- Schroeter, S.C., D.C. Reed, D.J. Kushner, et al. 2001. The use of marine reserves in evaluating the dive fishery for the warty sea cucumber (*Parastichopus parvimensis*) in California, USA. *Canadian Journal of Fisheries and Aquatic Sciences* **58**(9):1773-1781.
- Jackson, J.B.C., M.X. Kirby, W.H. Berger, et al. 2001. Historical overfishing and the recent collapse of coastal ecosystems. *Science* **293**(5530):629-638.
- Monson, D.H., J.A. Estes, J.L. Bodkin, et al. 2000. Life history plasticity and population regulation in sea otters. *Oikos* **90**(3):457-468.
- Watt, J., D.B. Siniff, and J.A. Estes. 2000. Inter-decadal patterns of population and dietary change in sea otters at Amchitka Island, Alaska. *Oecologia* **124**(2):289-298.
- Paddack, M., and J.A. Estes. 2000. Comparison of kelp forest fish populations inside and outside of marine reserves in central California. *Ecological Applications* **10**(3):855-870.
- Estes, J.A. and C.H. Peterson. 2000. Marine ecological research in seashore and seafloor systems: accomplishments and future directions. *Marine Ecology Progress Series* **195**:281-289.