

## CURRICULUM VITAE

**Laura Rogers-Bennett**

### ADDRESS

California Department of Fish and Game  
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### EDUCATION

Ph.D. in Ecology 1994  
University of California, Davis, CA  
Dissertation: Spatial Patterns in the Life History Characteristics of Red Sea Urchins, *Strongylocentrotus franciscanus*: Implications for Recruitment and the California Fishery.

M.S. Applied Marine Ecology 1989  
University of Massachusetts/Boston, Boston, MA  
Thesis: The Spatial Association of Juvenile Green Sea Urchins.

B.A. Zoology, University of New Hampshire, Durham, NH 1983

### CERTIFICATIONS

Dive Master, Assistant SCUBA Instructor, NITROX, N.A.U.I. 1992  
U.C. Research Diving Certified, 1987 SCUBA Certified, N.A.U.I. 1981

### POSITIONS

Senior Biologist Specialist (Marine/Fisheries), California Department of Fish and Game. 2006 - present  
Research Associate, University of California, Davis, John Muir Institute of the Environment. 2000 - present  
Research Associate, University of California Santa Cruz, Institute of Marine Sciences. 1999 - present  
Associate Biologist (Marine/Fisheries), California Department of Fish and Game. 1999 - 2006  
Post Graduate Researcher V, Bodega Marine Laboratory, Univ. of California, Davis. 1998-1999.  
Visiting Lecturer, Friday Harbor Labs, Univ. Washington. summer 1998  
Postdoctoral Fellow, Friday Harbor Laboratories, University of Washington. 1996 - 1998  
Postdoctoral Researcher, Institute of Marine Sciences, University of California, Santa Cruz. 1995 -1996.  
Post Graduate Researcher IV, Wildlife and Fish Conservation Biology, University of California, Davis. 1992-1994

Post Graduate Researcher IV, Vet. Med. Medicine, University of California, Davis. 1992  
Sea Grant Trainee, Bodega Marine Laboratory, University of California, Davis. 1989-1991  
Laboratory Assistant III, Bodega Marine Lab, University of California, Davis. 1987-1989  
Field Research Assistant, Wildlife and Fisheries Biology, University of California, Davis. 1987  
Research Assistant, Biology Department, University of Massachusetts/Boston. 1984-1985  
Undergraduate Research Assistant, Zoology Dept., University of New Hampshire. 1981-1983

## **PUBLICATIONS**

Rogers-Bennett, L. and D.W. Rogers 2008. Modeling dispersal of cloning echinoderm larvae with a Gaussian distribution: Forever young? *CalCOFI Reports* 49:232-240.

Leaf, R.T., Rogers-Bennett, L., Y. Jiao 2008. Exploring the use of a size-based Egg-per-Recruit Model for the Red Abalone Fishery in California. *North American Journal of Fisheries Management*. 28:1638-1647.

Bracken, M.E.S., B.E. Bracken and L. Rogers-Bennett 2007. Species diversity and foundation species: Potential indicators of fisheries yields and marine ecosystem functioning. *CalCOFI Reports* 48:82-89.

Rogers-Bennett, L. 2007. Is climate change contributing to range reductions and localized extinctions in northern, (*Haliotis kamtschatkana*), and flat, (*Haliotis walallensis*), abalones? *Bull. Mar. Sci.* 81:283-296.

Rogers-Bennett, L., Rogers, D.W. and S. Schultz. 2007. Modeling growth and mortality of red abalone (*Haliotis rufescens*) in northern California. *J. Shellfish Res.* 26:719-727.

Rogers-Bennett, L. 2007. The ecology of *Strongylocentrotus franciscanus* and *Strongylocentrotus purpuratus*. Book Chapter In: Lawrence, J. (ed) Edible Sea Urchins: Biology and Ecology. Elsevier Amsterdam Chapter 19:393-425.

Leaf, R.T., Rogers-Bennett, L. and P.L. Haaker. 2007. Spatial, temporal, and size-specific variation in mortality estimates of red abalone, *Haliotis rufescens*, from mark-recapture data in California. *Fisheries Research*: 83:341-350.

Marko, P.B., Rogers-Bennett, L. and A.B. Dennis. 2007. MtDNA population structure and gene flow in lingcod (*Ophiodon elongatus*): limited

- connectivity despite long-lived pelagic larvae. *Marine Biology* 150:1301-1311.
- Rogers-Bennett, L. and A.S. Melvin. 2007. Size differences in wild and farmed red abalone: Developing enforcement tools to combat illegal commercialization. *California Fish and Game* 93:77-85.
- Rogers-Bennett, L. and D.W. Rogers. 2006. Estimating growth transitions for stage-based matrix models of endangered species with limited data. *Ecological Modelling* 195:237-246.
- Rogers-Bennett, L. and R.T. Leaf. 2006. Elasticity analyses of size-based red and white abalone matrix models: Management and conservation. *Ecological Applications* 16:213-224.
- Harley, C.D.G. and L. Rogers-Bennett. 2004. The potential synergistic effects of climate change and fishing pressure on exploited invertebrates on rocky intertidal shores. *CalCOFI Reports* 45:98-110.
- Rogers-Bennett, L., Allen, B.L. and G.E. Davis. 2004. Measuring abalone (*Haliotis* spp.) recruitment in California to examine recruitment overfishing and recovery criteria. *J. Shellfish Res.* 23:1201-1207.
- Bennett, W.A., K. Roinestad, L. Rogers-Bennett, L. Kaufman and B. Heneman 2004. Inverse regional responses to climate change and fishing intensity by the recreational rockfish fishery in California. *Can. J. Fish. Aquat. Sci.* 61:2499-2510.
- Rogers-Bennett, L., Dondanville, R.F. and J.V. Kashiwada. 2004. Size specific fecundity of red abalone (*Haliotis rufescens*): Evidence for reproductive senescence? *J. Shellfish Res.* 23:553-560.
- Rogers-Bennett, L., Rogers, D.W. Bennett, W.A. and T.A. Ebert 2003. Modeling red sea urchin growth using six growth models. *Fishery Bulletin* 101:614-626.
- Rogers-Bennett, L., Haaker, P.A., Huff, T.O., P.K. Dayton 2002. Estimating baseline abundances of abalone in California for restoration. *CalCOFI Reports* 43:97-111.
- Rogers-Bennett, L. (Ed.) 2002. Review of some California fisheries for 2001: Market squid, sea urchin, Dungeness crab, lobster, prawn, abalone, groundfishes, swordfish and sharks, Coastal Pelagic finfishes, ocean salmon, nearshore live-fishes, Pacific herring, white seabass, and kelp. *CalCOFI Reports* 43:13-30.

- Rogers-Bennett, L., P.L. Haaker, K.A. Karpov and D. J. Kushner. 2002. Using spatially explicit data to evaluate Marine Protected Areas for abalone in southern California. *Conservation Biology* 16:1308-1317.
- Rogers-Bennett, L. (Ed.). 2001. Review of some California fisheries for 2000: Market squid, sea urchin, prawn, white abalone, groundfishes, ocean salmon, Pacific sardine, Pacific herring, Pacific mackerel, nearshore live-fishes, halibut, yellowfin tuna, white seabass, and kelp. *CalCOFI Reports* 42:12-28.
- Karpov, K., Tegner, M.J., Rogers-Bennett, L., Kalvass, P., Taniguchi, I. 2001. Interactions among red abalones and sea urchins in fished and reserve sites in northern California: implications of competition to management. *J. Shellfish Res.* 20:743-753.
- Rogers-Bennett, L. 2001. Evaluating stocking as an enhancement strategy for red sea urchins, *Strongylocentrotus franciscanus*: depth-specific patterns in recoveries. *Echinoderms: 2000 Tenth International Echinoderm Conf.* (Ed.). M. Barker. A.A. Balkema, Rotterdam, Neth. 527-531.
- Rogers-Bennett, L. and J.S. Pearse. 2001. Indirect benefits of marine protected areas for juvenile abalone. *Conservation Biology* 15:642-647.
- Leet, W.S., C.M. Dewees, R. Klingbeil, and E.J. Larson (eds.). 2000. California living marine resources: a status report. Co-author on Chapters: Abalones, Red Sea Urchins, Sea Cucumbers, Wavy Turban Snails. CA Dept. of Fish and Game. UC Agriculture and Nat Res. Publ. SG01-11.
- Rogers-Bennett, L. (Ed.). 2000. Review of some California fisheries for 1999: Market squid, dungeness crab, sea urchin, prawn, abalone, groundfish, swordfish and shark, ocean salmon, nearshore finfish, pacific sardine, Pacific herring, Pacific mackerel, reduction, white seabass, and recreational. *CalCOFI Reports* 41:8-25.
- Karpov, K., Haaker, P., Taniguchi, I., L. Rogers-Bennett. 2000. Serial depletion and the collapse of the California abalone (*Haliotis* spp.) fishery. *Canadian Special Publication Fisheries and Aquatic Sciences* 130:11-24.
- Rogers-Bennett, L. and J.S. Pearse. 1998. Experimental seeding of hatchery-reared juvenile red abalone *Haliotis rufescens* in northern California. *J. Shellfish Res.* 17:877-880.
- Rogers-Bennett, L., Fastenau, H.C. and C.M. Dewees. 1998. Recovery of red sea urchins beds following experimental harvest. *Echinoderms: San Francisco. Proceeds. 9th Intern. Echinoderm Conf.* (Eds). R. Mooi and M. Telford. A.A. Balkema, Rotterdam, Neth. 805-809.

Rogers-Bennett, L. 1997. Marine Protected Areas and the Red Urchin Fishery. California and the World Ocean '97, Proceeds of the Conf. Amer. Soc. Civil Engineers, California Sea Grant Publ. 412-423.

Rogers-Bennett, L., Bennett, W.A., Fastenau, H.C., and C.M. Dewees 1995. Spatial variation in red sea urchin reproduction and morphology: implications for harvest refugia. *Ecological Applications* 5:1171-1180.

### **MANUSCRIPTS IN PREP**

Rogers-Bennett, L., Dondanville, R.F., Moore, J.D. and L.I. Vilchis 2009. The reproductive condition of red abalone exposed to warm water, starvation and disease: Implications of ocean warming. In Review *J. Shellfish Res.*

Rogers-Bennett, L., Allen, B.L. and D. Rothaus 2009. Ecosystem Engineers and Northern Abalone in the San Juan Islands, Washington. In Review *Mar. Ecol. Prog. Ser.*

Jiao, Y., L., Rogers-Bennett, I. Taniguchi, J. Butler and P. Crone 2009. Incorporating temporal variation in the individual growth of red abalone (*Haliotis rufescens*) using hierarchical Bayesian growth models. In Review *Ecol. Apps.*

Button, C. A. and L. Rogers-Bennett 2009. The use of nearest-neighbor distance, aggregation size and population density estimation methods in developing biological reference points. In Prep

### **AWARDS, FELLOWSHIPS, TRAINEESHIPS AND TEAMS**

2009 Frances Clark Award for Scientific Excellence

2007 present: Trans-boundary Abalone Recovery Group

2002 present: White Abalone Recovery Team, NOAA Fisheries

2005 Science Advisory Team, MLPA Initiative, State of California

2003 and 2006 Coordinator CalCOFI Program, Scripps, NOAA Fisheries, CDFG

1996 Friday Harbor Postdoctoral Fellow, Friday Harbor Laboratories, Univ. Washington

1989 California Sea Grant Trainee

### **TEACHING**

1998 Instructor, Marine Conservation Biology, Friday Harbor Labs, Univ. WA.

1998 Guest Lecturer, Invertebrate Fisheries, School of Fisheries, Univ. WA.

1998 Girl's Science Coordinator, American Association of University Women

1997 Assistant, U.C. Research Dive Class, University of California, Davis, CA

1992 Assistant, Basic SCUBA, University of California, Davis, CA.

1991 Assistant, Biology of Fishes, New England Aquarium, University of Mass./Boston, MA. 1985

## **THESIS AND DISSERTATION COMMITTEES**

Cynthia Button – Ph.D. Dissertation in progress – Univ. of California, San Diego  
Heather Knoll – Masters Thesis in progress – Sonoma State University  
Robert Leaf – Masters Thesis 2005 - Moss Landing Marine Laboratories  
Clara Svedlund – Masters Thesis 2006 – University of California, Santa Barbara

## **GRANTS AND CONTRACTS**

- 2009 NOAA Fisheries – “Research and Culture of the White Abalone (*Haliotis sorenseni*) at the Bodega Marine Laboratory for Restoration” PIs Cherr, Rogers-Bennett and Moore \$320,000 – Pending
- 2009 California Dept. Fish and Game “Dive Surveys for Red Abalone and Sea Urchins Juveniles and Adults in Northern California” PI Rogers-Bennett – Pending \$45,945
- 2008 California Dept. Fish and Game “Dive Surveys for Red Abalone and Sea Urchins Juveniles and Adults in Northern California” PI Rogers-Bennett – \$48,945
- 2008 California. Department of Fish and Game “Marine Resources Program” PI Williams/Rogers-Bennett \$65,649
- 2008 SeaDoc “Evaluating Adult Aggregations of Northern Abalone (*Haliotis kamtschatkana*) For Restoration in the Puget Sound, Washington ” PI’s Rogers-Bennett and Bennett – \$ 43,900
- 2007 California Dept. Fish and Game “Assessing Stock Structure of Red Abalone In California Using Trace Elemental Fingerprints in Shells: Developing Larval Tracking Tools” PI Rogers-Bennett - \$148,990
- 2007 California Dept. Fish and Game “Dive Surveys for Red Abalone and Sea Urchins Juveniles and Adults in Northern California” PI Rogers-Bennett – \$46,945
- 2005 SeaDoc Society, Wildlife Health Center, UCD. “Assessing Red Sea Urchin Spine Canopy Microhabitat for Juvenile Abalone and other Gastroopods: Measuring Marine Ecosystem Health.” PI Rogers-Bennett \$38,157
- 2005 California Sea Grant “Using Matrix Models to Evaluate Abalone Conservation and Fishery Management Strategies: A Prospective Elasticity Analysis” PI Rogers-Bennett \$38,943
- 2005 California Dept. Fish and Game “Assessing Abalone and Sea Urchins Populations in Northern California” PI Rogers-Bennett \$40,800
- 2005 California. Department of Fish and Game “Marine Resources Program” PI

- Williams/Rogers-Bennett \$52,278
- 2004 UC Mexus “Effect of food limitation on abalone post-larval survival and growth” PIs Rogers-Bennett and Sánchez-Saavedra \$24,995
- 2002 California Dept. Fish and Game “Improving larval stocking methods for abalone restoration in southern California” PI Rogers-Bennett \$39,745
- 2002 California. Department of Fish and Game “Marine Resources Program” PI Rogers-Bennett \$40,125
- 2001 California Sea Grant Rapid Response “Assessing and evaluating Marine Protected Areas for abalone restoration in southern California” PI Rogers-Bennett
- 2001 Sonoma County Fish and Wildlife Advisory Board “Assessing red abalone populations in northern California” PI Rogers-Bennett
- 1996 California Department of Fish and Game. “Spatial patterns in the growth and survival of juvenile red abalone in northern California”. Co-PI Rogers-Bennett and J.S. Pearse
- 1995 California Department of Fish and Game “Growth and survival of juvenile red abalone outplanted in and away from red sea urchin beds in northern California” Co-PIs Rogers-Bennett and Pearse
- 1995 California Department of Fish and Game “Enhancing the survival of newly settled red sea urchins in culture”. Co-PIs Rogers-Bennett and Pearse
- 1993 California Department of Fish and Game “Small-scale culturing of larval red sea urchins for experimental stocking studies in nursery habitats in Bodega Bay, Ca.” PI Dewees
- 1993 U.C. Natural Reserve System “Spatial patterns in the distribution and abundance of newly settled urchins in Bodega Bay, northern California.” PI Rogers-Bennett
- 1992 PADI Foundation Grant “Distribution and abundance of juvenile red sea urchins in Bodega Bay, California”. PI Rogers-Bennett

### **PROFESSIONAL MEMBERSHIPS**

Ecological Society of America

Society for Conservation Biology

Western Society of Naturalists

National Shellfish Association: Editorial Board Member

American Association for the Advancement of Science  
American Academy of Underwater Sciences  
National Association of Underwater Instructors

**REFEREE SERVICE**

Acta Oecologica  
Aquaculture  
Aquatic Biology  
Biological Conservation  
Canadian Journal Fisheries and Aquatic Sciences  
Channel Islands Proceedings  
Coastal Management Journal  
Conservation Biology  
Environmental Conservation  
Fisheries Oceanography  
Fishery Bulletin  
Invertebrate Zoology  
Journal of Experimental Marine Biology and Ecology  
**Journal of Shellfish Research - Editorial Board**  
Marine Biology