

Benjamin H. Becker, Ph.D.

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1. CURRENT POSITION

- Director and Marine Ecologist 2001 – Present
Pacific Coast Science and Learning Center
Point Reyes National Seashore
U. S. National Park Service

2. EDUCATION

- Ph.D. **University of California, Berkeley** 1997 - 2001
Department of Environmental Science, Policy and Management
Dissertation Title: *Effects of Oceanographic Variation on Marbled Murrelet Diet and Habitat Selection*
Major Professor: Steven R. Beissinger
- M.F.S. **Yale University** 1994 - 1996
School of Forestry and Environmental Studies
- B.A. (2) **University of California at Los Angeles** 1990 - 1994
Biogeography and Geography/Environmental Studies

3. CURRENT PROJECTS

- § Effects of fishing pressure and oceanographic variation on seabird diets and reproductive success in the California Current: (Co-PI: Steve Beissinger, UC Berkeley)
- § Tomales Bay Biodiversity Inventory (www.tomalesbaylife.org)
- § Pacific Coast Science and Learning Center Grants Program Lead
- § Resource Stakeholder Group member: Marine Life Protection Act: 2007 - 2008
- § Other projects: White Shark distribution, invasive species control, pinniped population dynamics, algal biodiversity.
- § NPS Ocean Education and Outreach Program for the MLPA.
- § Harbor Seal Population Dynamics

4A. PEER REVIEWED ARTICLES

Peery, M.Z., L.A. Henkel, S.H. Newman, B.H. **Becker**, J.T. Harvey, C.W. Thompson, and S.R. Beissinger. **2008**. Post-breeding ecology of Marbled Murrelets in California: lack of a molt-migration strategy. **Auk** 125:000-000.

Anderson, S.D., B.H. **Becker**, and S.G. Allen. **2008**. Observations and Prey of White Sharks (*Carcharodon carcharias*) in and around the Point Reyes National Seashore: 1982 – 2004. **California Fish and Game** 93:000-000.

Becker, B.H., S.H. Newman, S. Inglis, and S.R. Beissinger. **2007**. Diet-feather stable isotope ($\delta^{15}\text{N}$ and $\delta^{13}\text{C}$) fractionation in Common Murres and other seabirds. **Condor** 109:451-456.

Peery, M.Z., B.H. **Becker**, and S.R. Beissinger. **2007**. Age ratios as estimators of productivity: testing

- assumptions on an endangered seabird, the Marbled Murrelet. **Auk** 124:224-240.
- Becker**, B.H., M.Z. Peery, and S.R. Beissinger. **2007**. Ocean climate and prey availability affect the trophic level and reproductive success of the Marbled Murrelet, an endangered seabird. **Marine Ecology Progress Series** 329:267-279.
- Peery, M.Z., B.H. **Becker**, and S.R. Beissinger. **2006**. Combining demographic and count-based approaches to identify source-sink dynamics: An example using an endangered seabird. **Ecological Applications** 16:1516-1528.
- Becker**, B.H., and S.R. Beissinger. **2006**. Centennial Decline in the Trophic Level of an Endangered Seabird after Fisheries Decline. **Conservation Biology** 20: 470-479. (*Article featured in Science – “Random Samples” (01/27/06) and Nature - “Conservation at a Distance: Atomic Detectives” (08/03/06).*)
- Peery, M.Z., S.R. Beissinger, S.H. Newman, B.H. **Becker**, E. Burkett, and T. Williams. **2004**. Inland flight behavior of Marbled Murrelets: implications for population monitoring. **Condor** 106:344-353.
- Becker**, B.H., and S.R. Beissinger. **2003**. Scale-dependent habitat selection by a nearshore seabird, the Marbled Murrelet, in a highly dynamic upwelling system. **Marine Ecology Progress Series** 256:243-255.
- Becker**, B.H., S.R. Beissinger, and H.R. Carter. **1997**. At-sea density monitoring of Marbled Murrelets in central California: methodological considerations. **Condor** 99:743-755.

4B. MANUSCRIPTS IN PREPARATION AND REVIEW

- Pettigrew, J., B.H. **Becker**, and E. Hines. Can a local fishery control the Invasive European Green Crab in Tomales Bay, California? (In Prep)
- Beissinger, S.R., A. Moody and B.H. **Becker**. Effects of fisheries versus climate change on seabird diets in the California Current: 1880 – 2007. (In prep.)
- A. Moody, B.H. **Becker**, and S.R. Beissinger. Geographic variation in stable isotope ratios of seabird prey in the California Current. (In prep.)
- Allen, SG, B.H. **Becker**, and D. Press. Modeling the impacts of El Niño, density-dependence, and mariculture on harbor seal occupancy near an oyster lease in Drakes Estero: 1997 – 2007. (In review.)
- Peery, M.Z., B.H. **Becker**, and S.R. Beissinger. Murrelet diet, oceanography and breeding ecology in central California. (In Prep.).

5. INVITED REVIEWS

- Becker**, B.H. **2008**. *Review of: Mason, J. W., G. J. McChesney, W. R. McIver, H. R. Carter, J. Y. Takekawa, R. T. Golightly, J. T. Ackerman, D. L. Orthmeyer, W. M. Perry, J. L. Yee, M. O. Pierson, and M. D. McCrary. 2007. At-sea distribution and abundance of seabirds off southern California: a 20-year comparison. Studies in Avian Biology No. 33. Marine Ornithology XX:XXX.*

6. FELLOWSHIPS AND AWARDS

<u>Name of Award</u>	<u>Duration</u>
US Dept. of Interior Environmental Achievement Award (1 of 12 Nationwide)	2002
Post-Doctoral Fellowship (<i>Declined</i>) - Institute of Marine Science, UC Santa Cruz	2001
Best Student Poster , 2001 Pacific Seabird Group Meeting	2001
Student Travel Award, Pacific Seabird Group	2001
University Block Fellowship , UC Berkeley (tuition and stipend)	1999 - 2000
University Travel Fellowships, UC Berkeley (3), Yale (1)	1995 - 2001
Ralph W. Schreiber Ornithological Research Award, L.A. Audubon Society	1994

7. RESEARCH FUNDING

<u>Name of Award, Granting Agency, Project (Amount)</u>	<u>Duration</u>
Resources Legacy Fund – Ocean Education Campaign (\$90,000)	2007 - 2009
National Park Service – Effects of MPAs on Nearshore Groundfish (\$159,000)	2009 - 2011
Pew Oceans Trust – California Current Foodweb response to PDO (\$165,000)	2005 - 2007
Mead Foundation - Tomales Bay Biodiversity Inventory (\$75,000)	2003 - 2008
Goldman Foundation - Tomales Bay Biodiversity Inventory (\$30,000)	2004 - 2005
Crocker Foundation - Tomales Bay Biodiversity Inventory (\$25,000)	2004 - 2005
Marin Community Foundation - Tomales Bay Biodiversity Inventory (\$170,000)	2003 - 2007
Marin Municipal Water District – Invertebrate Biodiversity (\$8,000)	2004 - 2005
Cox Family Fund - Tomales Bay Biodiversity Inventory (\$30,000)	2003 - 2005
Collection Study Grant, American Museum of Natural History (\$750)	2000
Vice-Chancellor's Research Fund Grant, UC Berkeley (\$2,000)	2000
David and Lucile Packard Foundation Grant (Steve Beissinger, P.I., \$75,000)	1999 - 2001
Frank M. Chapman Research Grant, American Museum of Natural History (\$1,200)	1999
Mewaldt-King Student Research Award, Cooper Ornithological Society (\$1,000)	1999
Starker Leopold Research Fellowship, UC Berkeley (\$5,000)	1999

8. PRESENTATIONS AND MEETING ABSTRACTS (1996-2006)

- § George Wright Society (2007)
- § National Park Service Science Communication Workshop (2006)
- § Monterey Bay National Marine Sanctuary (2005)
- § Society for Conservation Biology Annual Meeting (2004)
- § American Ornithologists' Union Annual Meeting (2001). Univ. of Washington, Seattle.
- § Pacific Seabird Group Meeting, Kauai, HI. (**Best Student Poster Award**) (2001)
- § American Ornithologists Meeting, Seattle, WA. (2001)
- § KWMR 90.5 FM West Marin Radio (2003, 2005, 2007)
- § Pacific Seabird Group Meeting (1997 – 2001)
- § Bay Area Society for Conservation Biology Meeting, Stanford University (2000)
- § Marbled Murrelet Effectiveness Monitoring Workshop, Portland, OR. (1998)
- § California Dept. of Fish and Game, Santa Cruz, CA (1997)
- § US Fish and Wildlife Service Line transect methodology workshop, Olympia, WA. (1996)
- § US Forest Service at-sea survey workshop, Portland, OR. (1996)

9. INVITED SEMINARS

- § Dominican University – Natural Sciences Seminar (2006)
- § UC Berkeley – Wildlife and Conservation Biology Seminar (2006)
- § PRBO Conservation Science (2006)
- § UC Davis - Geography (2006)
- § UC Davis - Soil Science (2006)
- § Romberg-Tiburon Center for Environmental Studies (SFSU) (2006)
- § San Francisco State University - Geography Seminar (2004)
- § Dominican University - Natural Sciences Seminar (2003)
- § Sonoma State University – Biology Dept. (2003)
- § California State Parks (2001)
- § UC Berkeley (2001)
- § UC Santa Cruz Arboretum (1998)
- § UC Berkeley (1997)
- § Yale University (1995)

10. TEACHING EXPERIENCE

Guest Lectures:

- § California Current: Oceanography, food webs, fisheries and climate change: *Department of Biology, Dominican University of California (Spring 2007).*
- § The science of marine protected areas, *Department of Geography, San Francisco State University (Prof. E. Hines) (Spring and Fall 2004).*
- § Using stable isotopes in marine ecology. *Methods in Ecology Graduate Seminar, Dept. of Integrative Biology, UC Berkeley (Prof. S. Mambelli) (2002).*
- § Seabirds as ecological monitors. *Graduate Ecological Monitoring Seminar, Department of ESPM, UC Berkeley (Prof. A. Merenlender) (1999).*

Instructor:

- § Lecturer, “Principles of Conservation Biology”, UC Berkeley. (45 student enrollment of undergraduate and graduate students). Fall 2001.
- § Graduate Student Instructor, Department of Env. Science, Policy and Mgt. and Department of Integrative Biology, UC Berkeley. “Conservation Biology” (Profs. S. Beissinger and W. Lidicker) Spring 2000. Also presented one course lecture: “Design and Management of Nature Reserves.”
- § Graduate Student Instructor, Department of Env. Science, Policy and Mgt., UC Berkeley. “Wildlife Ecology” (Prof. D. McCullough) Fall 1998.
- § Middle School Science Faculty, Greenwich Academy, Greenwich, CT. 1996-1997.
- § GRE Test Preparation Instructor, Kaplan Test Preparation, Stamford, CT. 1995-1996.

11. PROFESSIONAL ACTIVITIES AND MEMBERSHIPS

Average 7 Manuscript / Proposal reviews/year for:

- § *Marine Ecology Progress Series* (2003 - present)
- § **National Science Foundation** - Office of Polar Programs (2006)
- § *The Condor* (1997 - present)
- § *The Auk* (2006 – present)
- § *Wildlife Research* (CSIRO Publication, Australia) (2006)
- § **Prentice-Hall** Textbook Publishers (2007)
- § *Marine Ornithology* (2007 – present)

Working Groups:

- § California Marine Life Protection Act – Member Regional Stakeholder Group
- § West Marin Marine Protected Area Working Group (2004 – Present)
- § Cordell Bank Ocean Monitoring Project (2003 – 2005)
- § National Marine Sanctuary Ecological Monitoring Working Group (2003, 2007)

Memberships:

- § Museum of Vertebrate Zoology, UC Berkeley. (2000-2001)
- § Pacific Seabird Group (1997-2001)
- § Society for Northwest Vertebrate Biology (2006 – Present)