

William Breck Tyler

CURRICULUM VITAE

EDUCATION B.A., Biology, UC Santa Cruz 1975
 M.S., Marine Science, UC Santa Cruz 1991

AFFILIATION Institute of Marine Sciences
 University of California, Santa Cruz

TITLE Specialist, Lecturer

ADDRESS Long Marine Laboratory
 100 Shaffer Road
 Santa Cruz, CA 95060
 Tel: 831-359-0790
 Email: ospr@ucsc.edu

TEACHING EXPERIENCE

William Breck Tyler

9/04 – 12/04

University of Washington

Instructor for Friday Harbor Laboratories apprenticeship course entitled Pelagic Ecosystem Function in the San Juan Archipelago. This is a research course for advanced undergraduates focusing on physical-biological coupling. Responsibilities include course design, selection of students, oversight and evaluation of student research projects, and classroom lectures.

7/04 - 8/04

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements. Responsibilities included course design, classroom lectures, laboratory and field instruction, and student evaluations.

6/04 – 7/04

University of California, Santa Cruz

Instructor for Summer Session course Natural History of Birds (ENVS 106a), an upper division course comprising classroom, field, and laboratory elements. Responsibilities included course design, classroom lectures, laboratory and field instruction, and student evaluations.

4/04 - 6/04

University of California, Santa Cruz

Instructor for Environmental Studies Department course series Natural History Field Quarter (ENVS107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy. Responsibilities included course design, classroom lectures, extensive field instruction, and student evaluations.

4/04

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Wrigley Science Center (Univ. of Southern California) for visiting seniors and first year graduate students. Course comprised classroom, field, and laboratory elements. Responsibilities included course design, classroom lectures, laboratory and field instruction, and student evaluations.

TEACHING EXPERIENCE (continued)

William Breck Tyler

7/03 - 8/03

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.

6/03 – 7/03

University of California, Santa Cruz

Instructor for Summer Session course Natural History of Birds (ENVS 106a), an upper division course comprising classroom, field, and laboratory elements.

4/03 - 6/03

University of California, Santa Cruz

Instructor for University of California Extension course Natural History Field Quarter (X107a-c, Environmental Studies Department approved equivalent of ENVS 107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

10/02 - 12/02

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.

8/02

National Science Foundation, Chautauqua Program

Instructor for the NSF Faculty Development Program short course on Ecology and Conservation of Marine Birds and Mammals taught at the Friday Harbor Labs (Univ. of Washington) for college and university teachers. Responsibilities included course design and logistics, classroom and field instruction, conservation seminars, and teaching workshops.

7/02 - 8/02

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.

TEACHING EXPERIENCE (continued)

William Breck Tyler

6/02 – 7/02

University of California, Santa Cruz

Instructor for Summer Session course Natural History of Birds (ENVS 106a), an upper division course comprising classroom, field, and laboratory elements.

4/02 - 6/02

University of California, Santa Cruz

Instructor for Environmental Studies Department course series Natural History Field Quarter (ENVS107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy. Responsibilities included course design, classroom lectures, extensive field instruction, and student evaluations.

10/01 - 12/01

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.

7/01 - 8/01

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.

6/01 – 7/01

University of California, Santa Cruz

Instructor for Summer Session course Natural History of Birds (ENVS 106a), an upper division course comprising classroom, field, and laboratory elements.

6/01

National Science Foundation, Chautauqua Program

Instructor for the NSF Faculty Development Program short course on Ecology and Conservation of Marine Birds and Mammals taught at the Friday Harbor Labs (Univ. of Washington) for college and university teachers.

TEACHING EXPERIENCE (continued)

William Breck Tyler

4/01 - 6/01

University of California, Santa Cruz

Instructor for University of California Extension course Natural History Field Quarter (X107a-c, Environmental Studies Department approved equivalent of ENVS 107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

10/00 - 12/00

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.

7/00 - 8/00

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.

6/00 – 7/00

University of California, Santa Cruz

Instructor for Summer Session course Natural History of Birds (ENVS 106a), an upper division course comprising classroom, field, and laboratory elements.

6/00

National Science Foundation, Chautauqua Program

Instructor for the NSF Faculty Development Program short course on Ecology and Conservation of Marine Birds and Mammals taught at the Friday Harbor Labs (Univ. of Washington) for college and university teachers.

4/00 - 6/00

University of California, Santa Cruz

Instructor for University of California Extension course Natural History Field Quarter (X107a-c, Environmental Studies Department approved equivalent of ENVS 107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

TEACHING EXPERIENCE (continued)

William Breck Tyler

10/99 - 12/99

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.

7/99 - 8/99

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.

6/99 – 7/99

University of California, Santa Cruz

Instructor for Summer Session course Natural History of Birds (ENVS 106a), an upper division course comprising classroom, field, and laboratory elements.

4/99 - 6/99

University of California, Santa Cruz

Instructor for Environmental Studies Department course series Natural History Field Quarter (ENVS107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

10/98 - 12/98

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.

8/98 - 9/98

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.

TEACHING EXPERIENCE (continued)

William Breck Tyler

- 7/98 Oregon Institute of Marine Biology, University of Oregon
Instructor for undergraduate/graduate elective course Field Studies: Ecology and Conservation of Marine Birds and Mammals. Responsibilities included course design, classroom lectures, field instruction, and student evaluations.
- 6/98 National Science Foundation, Chautauqua Program
Instructor for the NSF Faculty Development Program short course on Ecology and Conservation of Marine Birds and Mammals taught at the Friday Harbor Labs (Univ. of Washington) for college and university teachers.
- 4/98 - 6/98 University of California, Santa Cruz
Instructor for University of California Extension course Natural History Field Quarter (X107a-c, Environmental Studies Department approved equivalent of ENV5 107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.
- 10/97 - 12/97 Northeastern University
Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.
- 6/97 - 7/97 University of California, Santa Cruz
Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.
- 4/97 - 6/97 University of California, Santa Cruz
Instructor for Environmental Studies Department course Natural History of Birds (ENV5 106a), an upper division course comprising classroom, field, and laboratory elements.

TEACHING EXPERIENCE (continued)

William Breck Tyler

4/97 - 6/97

University of California, Santa Cruz

Instructor for Environmental Studies Department course series Natural History Field Quarter (ENVS107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

10/96 - 12/96

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.

6/96 - 7/96

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.

4/96 - 6/96

University of California, Santa Cruz

Instructor for University of California Extension course Natural History Field Quarter (X107a-c, Environmental Studies Department approved equivalent of ENVS 107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

10/95 - 12/95

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.

6/95 - 7/95

University of California, Santa Cruz

Instructor for Summer Session course Biology and Ecology of Marine Birds and Mammals (OCEA 158), an upper division course comprising classroom, field, and laboratory elements.

TEACHING EXPERIENCE (continued)

William Breck Tyler

4/95 - 6/95

University of California, Santa Cruz

Instructor for Environmental Studies Department course series Natural History Field Quarter (ENVS107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

10/94 - 12/94

Northeastern University

Instructor for East/West Program course Biology of Marine Birds and Mammals taught at Friday Harbor Labs (Univ. of Washington) for visiting seniors and first year graduate students. Course included classroom, field, and laboratory elements.

4/94 - 6/94

University of California, Santa Cruz

Instructor for University of California Extension course Natural History Field Quarter (X107a-c, Environmental Studies Department approved equivalent of ENVS 107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

7/93

Oregon Institute of Marine Biology, University of Oregon

Instructor for undergraduate/graduate elective course Field Studies: Ecology and Conservation of Marine Birds and Mammals. Responsibilities included course design, classroom lectures, field instruction, and student evaluations.

4/93 - 6/93

University of California, Santa Cruz

Instructor for Environmental Studies Department course series Natural History Field Quarter (ENVS107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

4/92 - 6/92

University of California, Santa Cruz

Instructor for Environmental Studies Department course series Natural History Field Quarter (ENVS107a-c), an upper division course series focused on field ecology, management strategies, and conservation policy.

OTHER PROFESSIONAL EXPERIENCE

William Breck Tyler

- 5/99 – present Institute of Marine Sciences, University of California, Santa Cruz.
- Principal Investigator for the UCSC Seabird Population Survey Program. Under contracts with the California Department of Fish and Game's Office of Spill Prevention and Response, this program conducts aerial surveys of marine birds and mammals in state waters, assesses damage to marine bird and mammal populations from oil spills, and conducts aerial photographic surveys of seabird colonies. PI responsibilities include program administration and oversight, aerial survey design, training of observers, and data analysis.
- 12/03-1/04 Field team leader for USFWS census of albatross nesting populations on Midway Atoll. Helped design, coordinate, and conduct nest by nest count of approximately one million breeding birds.
- 3/03 Consultant for Oceanic Society Expeditions. Directed a coral reef research trip for ecotourists at Blackbird Caye (Belize). Responsibilities included training volunteer researchers, directing research activities, and coordinating with on-site biologists and managers.
- 1/98 – 10/02 Editor for the Elkhorn Slough National Estuarine Reserve. Responsibilities included writing, revising and coordinating the site profile for the Elkhorn Slough Watershed. This volume, entitled *Changes in a California Estuary: A Profile of Elkhorn Slough*, summarizes past scientific research and identifies future research needs.
- 5/94 – 9/02 Co-coordinator of program at Wilder Ranch State Park, monitoring local bird populations in relation to restoration of Wilder Creek riparian corridor.
- 7/94 – 4/99 Institute of Marine Sciences, University of California, Santa Cruz.
- Team leader for the UCSC Aerial Survey Program. Responsibilities include conducting aerial surveys of marine birds and mammals in state waters, training observers in aerial survey techniques, and assessing damage to marine bird and mammal populations from oil spills.
- 2/99 – 3/99 Consultant for Oceanic Society Expeditions. Directed a seabird research program for ecotourists at Midway

Island NWR. Responsibilities included training volunteer researchers, directing research activities, and coordinating with USFWS biologists and managers.

OTHER PROFESSIONAL EXPERIENCE (continued)

William Breck Tyler

- 9/98 Consultant for ECI, Inc. Conducted aerial surveys of marine birds and mammals near the Hawaiian Islands for use in damage assessment following the Tesoro oil spill.
- 2/97-3/97 Consultant for Oceanic Society Expeditions. Developed and implemented a seabird research program for ecotourists at Midway Island NWR. Responsibilities included training volunteer researchers, directing research activities, and coordinating with USFWS biologists and managers
- 3/94 Project leader for wildlife hazard assessment at Naval Air Facility - Midway Island. Planned and coordinated survey of hazards to seabirds which included GPS mapping, threat assessment, and remediation recommendations.
- 3/93 Researcher on Peregrine Fund banding study of neotropical migrants and forest birds of Tikal National Park, Guatemala.
- 8/92 - 2/93 Consulting editor for BioSystems, Inc. Responsible for writing/revising "Life On the Edge", book on endangered species of California.
- 7/92 Researcher on U.S. Fish and Wildlife Service expedition to survey seabird distribution and abundance in Cook Inlet, Alaska.
- 6/92 Consultant to Oregon Department of Fish and Wildlife. Instructed and trained researchers in the use of aerial survey techniques, for use in studies of endangered Marbled Murrelets.

OTHER PROFESSIONAL EXPERIENCE (continued)

William Breck Tyler

- 1976 - 1992 Coordinator for bird-banding research projects at Long Marine Laboratory (UC Santa Cruz). Responsibilities included design and implementation of studies of migrant and nesting birds, consultation on impacts to bird populations resulting from facility development, and supervising undergraduate training programs and research projects.
- 4 - 9/88, 4 - 9/89 Wildlife biologist for U.S. Fish and Wildlife Service at Midway Atoll NWR. Responsibilities included development and implementation of seabird research and conservation programs; design and implementation of research to assess populations and distributions of introduced predators; and research, writing, and production of an integrated natural resources management plan for the atoll.
- 7/85 - 12/85 Biological consultant to Kinnetic Labs, Inc. Researched and wrote the seabird section of the EIR/EIS for proposed OCS oil and gas development in the Santa Maria basin.
- 11/84 - 5/85 Biological consultant to Point Reyes Bird Observatory. Conducted aerial surveys of seabirds and marine mammals in the Gulf of the Farallones in response to oil spills. Provided analysis of observed behavioral and distributional patterns in relation to long term trends.
- 10/84 - 3/85 Assistant Specialist in Marine Science at the Institute of Marine Sciences, UCSC. Researched and wrote a complete review of seabird foraging ecology at California nesting colonies.
- 9/84 Expedition ornithologist for a research venture to the Gulf of Mexico, sponsored jointly by UCSC and the Scripps Institution of Oceanography.
- 5/84 Researcher on an ornithological expedition to the Gulf of California, sponsored by UC Davis. Responsibilities included gathering of data on at-sea distribution of seabirds and prey, nesting biology, and nestling diet.
- 10/75 - 9/83 Assistant Specialist in Marine Science at the Institute of Marine Sciences, UCSC. Conducted ship and aerial surveys of seabirds and marine mammals in California waters. Collected and analyzed oceanographic and seabird/marine mammal field data, and wrote summary and final reports for the purpose of assessing the

distribution, abundance, and seasonality of the marine fauna of central and northern California.

OTHER PROFESSIONAL EXPERIENCE (continued)

William Breck Tyler

2/77 and 3/78

Expedition ornithologist for research trips to islands off the Pacific coast of Baja California, Mexico, sponsored jointly by UCSC and the Scripps Institution of Oceanography.

1974 - present

Researcher in studies of seabirds and pinnipeds at Año Nuevo Island and in Monterey Bay, California. Activities have included monitoring of breeding populations, experiments with artificial nesting structures and habitat conservation, and radio-tracking of endangered brown pelicans.

Selected Publications

William Breck Tyler

Scientific Papers

Lewis, D.B. and W.B. Tyler. 1978. First record of the Blue-faced Booby from the Pacific Coast of the United States. *Western Birds* 9:175-176.

Tyler, W.B. and K.T. Briggs. 1981. Birds of Año Nuevo. Chapter 6, pp. 237-286 in B.J. LeBoeuf and S. Kaza (eds.), *The Natural History of Año Nuevo*. Boxwood Press. Pacific Grove, CA.

Briggs, K.T., D.B. Lewis, W.B. Tyler, and G.L. Hunt, Jr. 1981. Brown Pelicans in southern California: Habitat use and environmental fluctuations. *Condor* 83:1-15.

Briggs, K.T., W.B. Tyler, D.B. Lewis, P.R. Kelly, and D.A. Croll. 1983. Brown Pelican populations in central and northern California, 1980-1982. *J. Field Ornithology* 54(4).

Briggs, K.T., K.F. Dettman, D.B. Lewis, and W.B. Tyler. 1984. Phalarope feeding in relation to autumn upwelling off California. In D.N. Nettleship, G.A. Sanger, and P.F. Springer (eds.). *Marine Birds: Their Feeding Ecology and Commercial Fisheries Relationships*. Special Publication of the Canadian Wildlife Service. Ottawa, Canada.

Briggs, K.T., W.B. Tyler, and D.B. Lewis. 1985. Comparison of ship and aerial surveys of birds at sea. *J. Wildl. Manag.* 49:405-411.

Briggs, K.T., W.B. Tyler, and D.B. Lewis. 1985. Aerial surveys for seabirds: methodological experiments. *J. Wildl. Manag.* 49:412-417.

Croll, D. A., L.T. Ballance, B.G. Würsig, and W.B. Tyler. 1986. Movements and daily activity patterns of a Brown Pelican in central California. *Condor* 88:258-260.

Tyler, W.B. and K. Burton. 1986. A Cook's Petrel in coastal California. *Western Birds* 17:79-84.

Selected publications (continued)

William Breck Tyler

Briggs, K.T., W.B. Tyler, D.B. Lewis and D.R. Carlson. 1987. Bird communities at sea off California: 1975 to 1983. *Stud. Avian Biol.* 11:1-74.

Tyler, W.B., D.B. Lewis, K.T. Briggs, and G. Ford. 1993. Seabird distribution and abundance in relation to oceanographic processes in the California Current System. In K. Vermeer, K.T. Briggs, K.H. Morgan, and D. Siegel-Causey (eds.), *The status, ecology, and conservation of marine birds of the North Pacific*. Canadian Wildlife Service. Spec. Publ., Ottawa.

Caffrey, J., Brown, M., Tyler, B., and M Silberstein (eds). 2002. *Changes in a California Estuary: A Profile of Elkhorn Slough*. Elkhorn Slough Foundation.

Contributed Papers

Tyler, W.B. 1978. Seasonal status, population size, and habitat utilization of Red and Northern Phalaropes in the Southern California Bight. Contributed paper at the Fifth Annual meeting of the Pacific Seabird Group. Pacific Grove, California.

Tyler, W.B. 1984. Highs and lows of aerial surveys: A methodological approach. Contributed paper at the Tenth Annual Meeting of the Pacific Seabird Group. Pacific Grove, California.

Tyler, W.B., D.B. Lewis, K.T. Briggs and G. Ford. 1990. Seabird distribution and abundance in relation to oceanographic processes in the California Current. Invited symposium presentation at the Sixteenth Annual Meeting of the Pacific Seabird Group. Victoria, British Columbia, Canada.

Tyler, W.B., and M.T. Brown. 1991. Nesting success and failure of Red-tailed Tropicbirds (*Phaethon rubricauda*) on Midway Atoll. Contributed paper at the Seventeenth Annual Meeting of the Pacific Seabird Group. Monterey, California

Tyler, W.B., R.G. Ford, J.N. Davis, L. Henkel, B. Keitt, and P.R. Kelly. 2002. Use of aerial surveys in oil spill response. Invited paper in the Symposium on Oil Spills and California Seabirds at the 28th Annual Meeting of the Pacific Seabird Group. Santa Barbara, CA.

Professional organizations

Pacific Seabird Group – Life Member, Treasurer 1998-2002