

MARK F. BAUMGARTNER

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A. PROFESSIONAL PREPARATION

University of Notre Dame, South Bend, Indiana. B.S. with honors in Mathematics and Computer Science. May, 1990.

University of Southern Mississippi, Hattiesburg, Mississippi. M.S. in Oceanography. May, 1995.

Oregon State University, Corvallis, Oregon. Ph.D. in Biological Oceanography with Statistics minor. October, 2002.

B. APPOINTMENTS

Woods Hole Oceanographic Institution, Biology Department, Woods Hole, Massachusetts. Assistant Scientist (2005-Present), Postdoctoral Investigator (2004-2005), Ocean Life Institute Postdoctoral Scholar (2002-2004).

Oregon State University, College of Oceanic and Atmospheric Sciences, Corvallis, Oregon. NASA Earth System Science Fellow (1999-2002), NASA Space Grant Fellow (1998-1999).

Woods Hole Oceanographic Institution, Physical Oceanography Department, Woods Hole, Massachusetts. Research Associate (1996-1998); Research Assistant (1995-1996).

National Marine Fisheries Service, Stennis Space Center, Bay St. Louis, Mississippi. Computer Specialist (1992-1995).

C. PUBLICATIONS RELATED TO PROPOSED PROJECT

Five Relevant Publications

Baumgartner, M.F. and D.M. Fratantoni. 2008. Diel periodicity in both sei whale vocalization rates and the vertical migration of their copepod prey observed from ocean gliders. *Limnology and Oceanography* 53: 2197-2209.

Baumgartner, M.F., S.M. Van Parijs, F.W. Wenzel, C.J. Tremblay, H.C. Esch, and A.M. Warde. 2008. Low frequency vocalizations attributed to sei whales (*Balaenoptera borealis*). *Journal of the Acoustical Society of America* 124:1339-1349.

Baumgartner, M.F., L. Freitag, J. Partan, K. Ball and K. Prada. Tracking large marine predators in three dimensions: the Real-time Acoustic Tracking System. *IEEE Journal of Oceanic Engineering*. in press.

Baumgartner, M.F. and B.R. Mate. 2005. Summer and fall habitat of North Atlantic right whales (*Eubalaena glacialis*) inferred from satellite telemetry. *Canadian Journal of Fisheries and Aquatic Sciences* 62:527-543.

Baumgartner, M.F. and B.R. Mate. 2003. Summertime foraging ecology of North Atlantic right whales. *Marine Ecology Progress Series* 264:123-135.

Five Selected Additional Publications

Baumgartner, M.F., T.V.N. Cole, P.J. Clapham and B.R. Mate. 2003. North Atlantic right whale habitat in the lower Bay of Fundy and on the southwestern Scotian Shelf during 1999–2001. *Marine Ecology Progress Series* 264:137-154.

Baumgartner, M.F., T.V.N. Cole, R.G. Campbell, G.J. Teegarden and E.G. Durbin. 2003. Associations between North Atlantic right whales and their prey, *Calanus finmarchicus*, over diel and tidal time scales. *Marine Ecology Progress Series* 264:155-166.

- Baumgartner, M.F. 2003. Comparisons of *Calanus finmarchicus* fifth copepodite abundance estimates from nets and an optical plankton counter. *Journal of Plankton Research* 25:855-868.
- Baumgartner, M.F., K.D. Mullin, L.N. May and T.D. Leming. 2001. Cetacean habitats in the northern Gulf of Mexico. *Fishery Bulletin* 99:219-239.
- Baumgartner, M.F. 1997. The distribution of Risso's dolphin (*Grampus griseus*) with respect to the physiography of the northern Gulf of Mexico. *Marine Mammal Science* 13:614-638.

D. SYNERGISTIC ACTIVITIES

1. Development and use of novel instrumentation for studying the ecology of top predators, including (1) a system to track the movements of tagged animals in real time and (2) acoustic recorders for long-term passive monitoring of whale distribution from autonomous underwater vehicles.
2. Participant in numerous public and government-sponsored forums aimed at reducing mortality in endangered whale populations from ship strikes and fishing gear entanglements.
3. Co-organizer of technical workshop on modeling marine mammal distribution and habitat using advanced statistical methodology held every two years in conjunction with the Society of Marine Mammalogy's Biennial Conference on the Biology of Marine Mammals.

E. COLLABORATORS AND OTHER AFFILIATIONS

1. Collaborators

Carin Ashjian (Woods Hole Oceanographic Institution), Robert Campbell (University of Rhode Island), Dezhang Chu (Woods Hole Oceanographic Institution), Phil Clapham (National Marine Mammal Laboratory), Christopher Clark (Cornell University), Edward Durbin (University of Rhode Island), David Fratantoni (Woods Hole Oceanographic Institution), Alex Herman (Bedford Institute of Oceanography), Catherine Johnson (University of New Hampshire), Bruce Mate (Oregon State University), David Mountain (Northeast Fisheries Science Center), Jessica Redfern (National Marine Fisheries Service), Ann Tarrant (Woods Hole Oceanographic Institution), Greg Teegarden (St. Josephs College), Peter Tyack (Woods Hole Oceanographic Institution), Tim Verslycke (Woods Hole Oceanographic Institution), Peter Wiebe (Woods Hole Oceanographic Institution), David Wiley (NOAA Stellwagen Bank National Marine Sanctuary).

2. Graduate and Postdoctoral Advisors

Keith Mullin (NOAA Fisheries), Masters thesis advisor
Bruce Mate (Oregon State University), Doctoral advisor
Peter Wiebe and Carin Ashjian (Woods Hole Oceanographic Institution), Postdoctoral advisors

3. Thesis Advisor and Postgraduate-Scholar Sponsor

Major Thesis Advisor (1): Carter Esch (WHOI-MIT Joint Program in Oceanography)
Thesis Committee Service (3): Carrie Schuman (University of Massachusetts Boston), Nadine Lysiak (Boston University Marine Program), Kara Dodge (University of New Hampshire)
Postdoctoral Scholar Sponsor (1): Mónica Almeida e Silva