

Eiren Kate Jacobson

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Education

Scripps Institution of Oceanography, University of California, San Diego

M.S. in Biological Oceanography

Ph.D. in Biological Oceanography

Dissertation Title: Developing a passive acoustic monitoring network for harbor porpoise in California

Advisors: Jay Barlow and Peter Franks

La Jolla, CA

22 March 2014

Anticipated 2017

Columbia College, Columbia University in the City of New York

B.A. in Environmental Biology

Thesis Title: Song sharing between humpback whales of Madagascar and Gabon: Directional demographic exchange between populations in the Southern Hemisphere

Advisor: Meredith Nettles

New York, NY

18 May 2010

Research Experience

Scripps Institution of Oceanography, University of California, San Diego

Graduate Student Researcher

Supervisors: Jay Barlow and Peter Franks

La Jolla, CA

June 2012 - Present

NOAA SWFSC Marine Mammal and Turtle Division

Research Biologist

Supervisor: Karin Forney

Santa Cruz, CA

August 2011 - June 2012

Bio-Waves, Inc.

Acoustic Technician

Supervisor: Julie Oswald

San Diego, CA

February 2011 - August 2011

NOAA SWFSC Marine Mammal and Turtle Division

Acoustic Technician

Supervisor: Jay Barlow

La Jolla, CA

June 2010 - August 2011

Wildlife Conservation Society

Acoustic Technician

Supervisor: Salvatore Cerchio

New York, NY

November 2007 - March 2010

Scientific Publications

Jacobson, E. K., K. A. Forney, and J. Barlow. *In Preparation.* Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates.

Jacobson, E. K., K. A. Forney, and J. T. Harvey. 2016. Evaluation of a passive acoustic monitoring network for harbor porpoise in California. California Energy Commission. Publication number: CEC-500-2016-008.

Jacobson, E. K., K. A. Forney, and J. T. Harvey. 2015. Acoustic evidence that harbor porpoises (*Phocoena phocoena*) avoid bottlenose dolphins (*Tursiops truncatus*). *Marine Mammal Science* 31:386-397.

Jacobson, E. K., T. M. Yack, and J. Barlow. 2013. Evaluation of an automated acoustic beaked whale detection algorithm using multiple validation and assessment methods. U.S. Department of Commerce. NOAA Technical Memorandum NOAA-TM-NMFS-SWFSC-509.

Academic Awards and Funding Received

Oliver Chair in Marine Biodiversity and Conservation Science Travel Award *2016*
Kenneth E. Hill Endowed Fund for Marine Conservation Award *2015*
Achievement Rewards for College Scientists Scholarship *2015*
SIO Department Graduate Student Excellence Travel Award *2015*
E. W. Fager Award for Outstanding Contributions to Quantitative Education at SIO *2015*
Mia J. Tegner Memorial Fellowship in Coastal Ecology *2015*
California Institute for Energy and Environment Research Grant (with K. Forney and J. Harvey) *2012*
National Science Foundation Graduate Research Fellowship *2012*
National Science Foundation Integrative Graduate Education and Research Traineeship *2012*
Columbia College Dean's List *2007, 2008, 2010*
Columbia University Earth Institute Travel Grant *2009*
Columbia University Parent and Alumni Internship Fund Grant *2008*
Joseph Wood Krutch Scholarship *2007, 2008*
National Merit Scholarship *2006*

Conference Presentations

- Jacobson, E. K.,** K. A. Forney, and J. Barlow. 2016. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates. Oral Presentation, International Statistical Ecology Conference. 28 Jun.-1 Jul. 2016, Seattle, WA.
- Jacobson, E. K.,** K. A. Forney, and J. Barlow. 2015. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates. Oral Presentation, Society of Marine Mammalogy Biennial Conference. 14-18 Dec. 2015, San Francisco, CA.
- Jacobson, E. K.,** and K. A. Forney. 2015. Evaluating the use of C-PODs for passive acoustic studies of harbor porpoises. Oral Presentation, Society of Marine Mammalogy Biennial Conference Workshop on Harbor Porpoise. 12 Dec. 2015, San Francisco, CA.
- Jacobson, E. K.,** K. A. Forney, and J. Barlow. 2015. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates. Oral Presentation, 7th International Workshop on Detection, Classification, Localization, and Density Estimation of Marine Mammals. 13-16 Jul. 2015, San Diego, CA.
- Jacobson, E. K.,** K. A. Forney, and J. T. Harvey. 2014. Acoustic evidence that harbor porpoises avoid bottlenose dolphins. Invited Presentation, Southern California Marine Mammal Workshop. 31 Jan.-1 Feb. 2014, Newport Beach, CA.
- Jacobson, E. K.,** K. A. Forney, and J. T. Harvey. 2013. Acoustic evidence that harbor porpoises avoid bottlenose dolphins. Poster Presentation, Society of Marine Mammalogy Biennial Conference. 9-13 Dec. 2013, Dunedin, NZ.
- Jacobson, E. K.,** K. A. Forney, and J. T. Harvey. 2012. Developing a passive acoustic monitoring network for harbor porpoise in central California. Poster Presentation, Southern California Marine Mammal Workshop. 3-4 Feb. 2012, Newport Beach, CA.
- Jacobson, E. K.,** T. M. Yack, and J. Barlow. 2011. Evaluation of an automated beaked whale detector using multiple validation and assessment methods. Poster Presentation, 5th International Workshop on Detection, Classification, Localization, and Density Estimation of Marine Mammals. 21-25 Aug. 2011, Mt. Hood, OR.

Field Research Experience

Monterey Bay C-POD Array Development
NOAA SWFSC Marine Mammal and Turtle Division
Project Lead
Supervisor: Karin Forney

R/V *Sheila B.*, Monterey Bay
2013 - 2016

Southeast Alaska Harbor Porpoise Survey
NOAA NMML Cetacean Ecology and Assessment Program
Field Acoustician
Supervisor: Marilyn Dahlheim

M/V *Lady Gundy*, SE Alaska
July 2015 - August 2015

California Current Cetacean and Ecosystem Assessment Survey
NOAA SWFSC Marine Mammal and Turtle Division
Field Acoustician
Supervisor: Shannon Rankin

R/V *Ocean Starr*, U.S. West Coast
July 2014 - August 2014

California Cooperative Oceanic Fisheries Investigations
Scripps Institution of Oceanography and NOAA SWFSC
Graduate Student Researcher
Supervisor: James Wilkinson

R/V *New Horizon*, California
November 2013

Monterey Bay Harbor Porpoise Aerial Surveys
NOAA SWFSC Marine Mammal and Turtle Division
Visual Observer
Supervisor: Karin Forney

Monterey Bay, California
October 2013

Southern California Behavioral Response Study
NOAA SWFSC Marine Mammal and Turtle Division
Field Acoustician
Supervisor: Jay Barlow

Derek M. Baylis, Channel Islands
July 2013 - August 2013

Pacific Islands Cetacean and Ecosystem Assessment Survey
NOAA PIFSC Protected Species Division
Field Acoustician
Supervisor: Erin Oleson

R/V *Oscar Elton Sette*, Pacific Islands
April 2012 - May 2012

U.S. West Coast Harbor Porpoise Aerial Surveys
NOAA SWFSC Marine Mammal and Turtle Division
Visual Observer
Supervisor: Karin Forney

California and Oregon
September 2011 - December 2011

NRDA Offshore Deep Meso- and Bathypelagic Fish Sampling Survey
Bio-Waves, Inc. and Geo-Marine, Inc.
Field Acoustician
Supervisor: Tom Norris

R/V *Pisces*, Gulf of Mexico
June 2011 - July 2011

Hawaiian Islands Cetacean and Ecosystem Assessment Survey
NOAA SWFSC Marine Mammal and Turtle Division
Field Acoustician
Supervisor: Shannon Rankin

R/V *McArthur II*, Hawaiian Islands
August 2010 - October 2010

Teaching Experience

Introduction to R
Scripps Institution of Oceanography
Co-Instructor (with J. Carrière-Garwood)

Spring 2015

Academic Service and Community Involvement

Marine Mammal Science
Reviewer

June 2015 - present

Women and Minorities in Science at SIO
Co-Coordinator

January 2013 - present

SIO Ecology Seminar
Co-Coordinator

September 2013 - June 2014

Scripps Peers
Mentor

August 2014 - August 2015

San Diego Summer Training Academy for Research in the Sciences
Graduate Advocate

June 2012 - August 2012

Columbia University Environmental Biology Society
President

May 2008 - May 2010

Other Experience

UW FISH 558: Decision Analysis in Natural Resource Management
Instructor: Andre Punt

Fall 2015

AquaMarina Center for Studies in Marine Science
Field Assistant

January 2009 - February 2009

Argentine Universities Study Abroad Program
Student

February 2009 - July 2009

NMFS Marine Resources Population Dynamics Workshop
Instructor: Jim Berkson

January 2008

Skills and Certifications

Programming Languages: R, SAS, Matlab, LaTeX, ArcGIS, HTML

Acoustics Software Programs: PAMGUARD, ISHMAEL, Raven, XBAT, Triton, CPOD

Certifications: Water Ditching and Survival

Languages: Fluent Spanish