

Eiren Kate Jacobson

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EDUCATION

Scripps Institution of Oceanography, University of California, San Diego

Ph.D. in Biological Oceanography

M.S. 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
Anticipated 2017
March 2014

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
May 2010

PUBLICATIONS

Jacobson, E. K., K. A. Forney, and J. Barlow. *Submitted*. Using visual survey data to estimate passive acoustic detection parameters for harbor porpoise abundance estimates. *Journal of the Acoustical Society of America*.

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.
DOI: 10.1111/mms.12154.

TECHNICAL REPORTS

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. DOI: 10.13140/RG.2.1.2282.9680.

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. DOI: 10.13140/RG.2.1.1234.3923.

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

ACADEMIC AWARDS AND FUNDING RECEIVED

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

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.

POSTER PRESENTATIONS

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

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

Supervisor: Karin Forney

Southeast Alaska Harbor Porpoise Survey NOAA NMML Cetacean Ecology and Assessment Program

Field Acoustician

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

Supervisor: Marilyn Dahlheim

California Current Cetacean and Ecosystem Assessment Survey NOAA SWFSC Marine Mammal and Turtle Division

Field Acoustician

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

Supervisor: Shannon Rankin

California Cooperative Oceanic Fisheries Investigations Scripps Institution of Oceanography and NOAA SWFSC

Graduate Student Researcher

R/V *New Horizon*, California
November 2013

Supervisor: James Wilkinson

Monterey Bay Harbor Porpoise Aerial Surveys NOAA SWFSC Marine Mammal and Turtle Division

Visual Observer

Monterey Bay, California
October 2013

Supervisor: Karin Forney

Southern California Behavioral Response Study NOAA SWFSC Marine Mammal and Turtle Division

Field Acoustician

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

Supervisor: Jay Barlow

Pacific Islands Cetacean and Ecosystem Assessment Survey NOAA PIFSC Protected Species Division

Field Acoustician

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

Supervisor: Erin Oleson

U.S. West Coast Harbor Porpoise Aerial Surveys NOAA SWFSC Marine Mammal and Turtle Division

Visual Observer

California and Oregon
September 2011 - December 2011

Supervisor: Karin Forney

**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 - June 2016

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, Matlab, LaTeX, HTML, SAS, ArcGIS

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

Certifications: Water Ditching and Survival

Languages: Fluent Spanish