
CASSANDRA BROOKS

EDUCATION

Ph.D. Environment and Resources. Stanford University. Expected to graduate in 2017.

Dissertation: *Policies for Managing the Global Ocean Commons: The case of Marine Protected Areas in Antarctica.* Co-Advisors: Drs. Larry Crowder & Lisa Curran.

Graduate Cert. Science Communication, 2009, University of California, Santa Cruz.

M.S. Marine Science, 2008, Moss Landing Marine Labs, California State University.

Thesis: *Radiometric age validation and spatial distribution of the Antarctic toothfish: Implications for a deep-sea Antarctic fishery.* Advisor: Dr. Gregor Cailliet.

B.S. Biology, 2001, Bates College. Lewiston, Maine.

Thesis: *Missing Link: Absence of Native American Presence in the Cod fishery history.*

School for Field Studies. Bamfield, British Columbia. Spring 2000. Boston University.

Shoals Marine Laboratory. Appledore Island, ME. Summer 1998. Cornell University.

RESEARCH EXPERIENCE

Pew Charitable Trusts. 2014 – present. Science advisor for the Southern Ocean Sanctuaries Campaign.

Stanford University. 2013. Graduate research assistant on National Science Foundation TRACERS cruise: Tracing the fate of Algal Carbon Export in the Ross Sea, Antarctica.

Antarctic Marine Living Resources, NOAA Fisheries. 2006, 2008, & 2011. Research technician on Antarctic zooplankton and finfish survey cruises.

Moss Landing Marine Laboratories. Moss Landing, CA. 2004 – 2008. Graduate Research Assistant on NSF grant, Collaborative Research: Radiometric Age Validation of the Patagonian and Antarctic toothfishes (*Dissostichus eleginoides* & *D. mawsoni*). Research Technician on the California Collaborative Fisheries Research Program, tagging fish in and out of marine protected areas off the central California coast.

National Marine Fisheries Service. 2002-2003. Fisheries Observer in New England commercial fishing ports.

Virginia Institute of Marine Science. Gloucester Point, VA. 2000. REU (Research Experience for Undergraduates). Baltic clam and blue crab population dynamics.

Mount Desert Island Biological Laboratory. Salisbury Cove, ME. 1999. REU. Molecular biology research on green crabs and winter flounder.

OUTREACH & COMMUNICATIONS EXPERIENCE

National Geographic. 2013 – present. Guest blogger for *Ocean Views* news blog.

The Last Ocean Project. Boulder, CO & Christchurch, New Zealand. 2010 – 2012. News Director. Outreach about the Ross Sea, Antarctica, including assisting with *The Last Ocean* documentary. Also worked to develop and execute high impact media in the Bahamas and Raja Ampat, Indonesia. Further, writing, editing and multi-media production for a new online news site dedicated to fisheries and oceans issues.

Point Reyes National Seashore, National Park Service. Point Reyes, CA. 2009 – 2012. Science Communication Specialist. Producing science podcasts, videos, & slideshows.

Society for the Advancement of Chicanos and Native Americans in Science. 2009 – 2012. Founder and video producer for the SACNAS Science Video Podcast series. Contributing writer for the SACNAS biography project and *SACNAS News*.

- Seattle Times.** Seattle, WA. 2010. Kaiser Media Health Fellow. Reported on health and science with an emphasis on minority and diverse communities.
- Winds of Change.** 2007-2010. Contributing writer and editor. Magazine of the American Indian Science and Engineering Society.
- Stanford University.** Stanford, CA. 2009. Science writing intern for Stanford University public information office and Woods Institute for the Environment.
- Santa Cruz Sentinel.** Santa Cruz, CA. 2008. Science writing intern for newspaper.
- San Francisco Exploratorium.** 2008. Blogger for the International Polar Year “Ice Stories” program.
- Summit Achievement.** Stowe, ME. 2002-2003. Wilderness Therapy Guide.
- Student Conservation Association.** 2002 and 2003. Crew Leader for high school trail crews in Jean LaFitte National Park and Cumberland Gap National Historic Park.
- Hurricane Island Outward Bound Southern Programs.** 2001. Assistant Instructor with adjudicated youth during 30-day canoe wilderness courses throughout Florida.
- New England Aquarium.** 1998. Environmental Education Intern. Outreach in aquarium, including independent projects on watersheds, by-catch and deep-sea fishes.

PEER-REVIEWED PUBLICATIONS

- Jacquet J, E Blood-Patterson, **C Brooks** & D Ainley. In Press. ‘Rational use’ in Antarctic waters. *Marine Policy*.
- Brooks C** & D Ainley. In Press. Fishing the bottom of the Earth: The political challenges of ecosystem-based management. *Handbook on Antarctic Politics*. Edward Elgar Publishing.
- Brooks C**, J Weller, K Gjerde, R Sumaila, J Ardron, N Ban, D Freestone, K Seto, S Unger, D Costa, K Fisher, L Crowder, P Halpin & A Boustany. 2014. Challenging the ‘Right to Fish’ in a Fast-Changing Ocean. Joint issue of *Stanford Journal of Law, Science & Policy* and *Stanford Environmental Law Journal*. 33(3): 289-324.
- Brooks C.** 2013. Competing Values on the Antarctic high-seas: CCAMLR and the challenge of marine protected areas. *Polar Journal* 2(3): 277-300.
- Brooks C**, A Andrews, J Ashford, G Cailliet, N Ramanna, C Jones, & C Lundstrom. 2011. Age estimation and lead-radium dating of Antarctic toothfish, *Dissostichus mawsoni*. *Polar Biology*. 34(3): 329-338.
- Kittinger J, Z Koehn, E Le Cornu, N Ban, M Gopnik, M Armsby, **C Brooks**, M Carr, J Cinner, A Cravens, M D’lorio, A Erickson, E Finkbeiner, M Foley, R Fujita, S Gelcich, K St. Martin, E Prahler, D Reineman, J Shackeroff, C White, M Caldwell & L Crowder. 2014. Putting People into Ecosystem-Based Management. *Frontiers in Ecology and the Environment*. 12: 448-456.
- Ardron J, N Clark, K Seto, **C Brooks**, D Currie & E Gilman. 2014. Tracking 24 years of discussions about transparency in international marine governance: Where do we stand? *Stanford Environmental Law Journal*. 33(2): 167-190.
- Ainley D & **C Brooks**. 2013. Exploiting the Southern Ocean: Rational Use or Reversion to Tragedy of the Commons? In *Exploring Antarctic Values*. D. Liggett & A. Hemmings (eds). University of Canterbury, Gateway Antarctica Special Publication Series. Christchurch, NZ.
- Ashford J, M Dinniman, **C Brooks**, A Andrews, E Hofmann, G Cailliet, C Jones & N Ramanna. 2012. Does large-scale circulation structure life history connectivity in

- Antarctic toothfish? *Canadian Journal of Fisheries and Aquatic Science*. 69(12).
- Ainley D, C Brooks, J Eastman & M Massaro. 2012. Unnatural selection of Antarctic toothfish in the Ross Sea, Antarctica. In *Polar Protection of the Three Poles*. F. Heuttemann (ed) Springer (Tokyo, Japan).
- Andrews A, J Ashford, C Brooks, K Krusic-Golub, G Duhamel, M Belchier, C Lundstrom & G Cailliet. 2011. Lead-radium dating provides a framework for coordinating age estimation of Patagonian toothfish (*Dissostichus eleginoides*) between fishing areas. *Marine and Freshwater Research*. 62: 781-789.
- Brooks L & C Brooks. 2010. The Reciprocity Principle and ITEK: Understanding the Significance of Indigenous Protest on the Presumpscot. *World Futures Journal*.
- Gehrich S & C Brooks. (2000). Carbonic Anhydrase in gene expression in the gills of the shore crab during acclimation to low salinity. *American Zoologist*. 8(35): 65A.

POLICY REPORTS

- Antarctic Ocean Legacy: Protection for the East Antarctic coastal region. 2012. Antarctic Ocean Alliance. (Lead author)
- Antarctic Ocean Legacy: A Vision for Circumpolar Protection. 2012. Antarctic Ocean Alliance. (Lead author)
- The Global Threat to Manta and Mobula Rays. Manta Ray of Hope 2011 Report. 2012. Shark Savers and Wild Aid. (Editor)

PRESENTATIONS, MEETINGS & WORKSHOPS

- Antarctica and the Strategic Plan for Biodiversity 2011-2020: The Monaco Assessment.** Monaco. 2015. Invited expert.
- American Association for the Advancement of Science (AAAS).** San Jose, CA. 2015. Symposium organizer for *Can our ocean commons be sustainably managed? Innovative strategies for the high seas*. Presented *Marine protection at the bottom of the world: the challenge of Antarctic high seas*.
- Scientific Committee on Antarctic Research (SCAR).** Auckland, New Zealand. 2014. Invited presentation (with David Ainley) *Environmental Management as Diplomatic Method: CCAMLR's Marine Protected Area Challenge*.
- Stanford University.** Stanford, CA. 2014. Invited guest discussant for Think 40: A transition toward sustainability.
- Monterey Institute for International Studies.** Monterey, CA. 2014 and 2015. Invited speaker for IEPG 8516: High seas management and conservation: challenges and opportunities (2014) AND IEPG 8652: International Marine Law (2015).
- Georgetown University.** 2013. Invited speaker for *An Unfolding Story: Antarctic Governance and Natural Resources* seminar, held in honor of the late Antarctic scholar, Professor Christopher Joyner.
- University of California, Santa Cruz.** 2013. Invited guest speaker for SCICOMM 160: Introduction to Science Writing.
- Fishwise.** 2013. Invited guest presentation on *Antarctic toothfish: Managing the Most Remote Fishery on Earth*.
- Stanford University.** 2013. Intercampus Workshop on Interdisciplinarity. Organized workshop and presented on the Antarctic global commons.
- Scientific Committee on Antarctic Research.** Portland, OR. 2012. Presented *Exploiting*

the Southern Ocean: Rational use or tragedy of the commons? AND Does large-scale circulation structure life history connectivity in Antarctic toothfish? Also, invited participant for the Association of Polar Early Career Scientists career panel and invited speaker for climate change for polar institutions panel.

University of California, Berkeley. 2012. Presented and participated in the first Intercampus Workshop on Interdisciplinarity.

Stanford University. 2012. Invited guest speaker for PWR 1: Debating the Environment.

Ross Sea Marine Protected Area Planning Workshop. La Jolla, CA. 2012. Invited expert.

Harvard University. Cambridge, MA. 2010. Invited guest lecturer for FOLKMYTH 126: Continuing Oral Traditions in Indigenous Communities class.

Society for the Advancement of Chicanos and Native Americans in Science (SACNAS). Anaheim, CA. 2010. Invited speaker for science writing seminar.

SACNAS. Dallas, TX. 2009. Invited speaker for science writing seminar.

Scientific Committee on Antarctic Research. St. Petersburg, Russia. 2008. Presented *Age validation and spatial distribution of the Antarctic toothfish, Dissostichus mawsoni: Implications for a deep-sea fishery.*

American Fisheries Society. San Francisco, CA. 2007. Presented *Age estimation and lead-radium dating of Antarctic toothfish.*

SELECTED POPULAR ARTICLES & MEDIA

Fishing at the bottom of the earth: the Ross Sea Antarctic toothfish. *Journal of Antarctic Affairs.* 2015.

Two-months breaking ice (in under five minutes). *National Geographic.* 2013. Video went viral, reaching every country in the world. News outlets that featured the video included *CNN, Washington Post, the Smithsonian, Atlantic* and *The New York Times.*

Monterey Bay Aquarium Seafood Watch program should revisit toothfish designation. Op-ed in the *Monterey County Herald.* April 2013.

Researcher for *The Last Ocean* Documentary on the Ross Sea, Antarctica. 2012 release. The Most Remote Fishery on Earth. *Pacific Ecologist.* Winter 2011.

Ocean Acidification: Where will all the seashells go? (video) Pacific Coast Science and Learning Center. Point Reyes National Seashore. Jan 2011.

Science Interlude: Batty Behavior. *The Darwin Awards: Countdown to Extinction.* 2010. How much local fish is safe to eat? Cover story. *The Seattle Times.* 26 July 2010.

Delivering Ecstasy. Science Notes. Published online, August 2009 and as the Cover Story for *the Monterey County Weekly,* 30 Apr 2009.

Two Worlds Working Together: Forming a Link Between Traditional Knowledge and Western Science. *SACNAS News.* Summer/Fall 2009.

How sustainable is your seafood? Cover Story. *Santa Cruz Sentinel.* 13 Dec 2008.

No Recovery for Atlantic Cod Population. *ScienceNOW.* 25 Nov 2008.

Underwater Oasis. *Santa Cruz Sentinel.* 24 Nov 2008.

Return of the Turtle. Cover Story. *Santa Cruz Sentinel.* 05 Oct 2008.

Indigenous Voices in the International Polar Year. *Winds of Change.* Fall 2008.

Traditional Ecological Knowledge and Resource Management: Bridging the Gap. *Winds of Change.* Winter 2007.

FELLOWSHIPS, AWARDS & GRANTS

Switzer Fellowship. 2015. Environmental Leadership Award.

McGree Grant & EIPER Summer Research Grant. 2013 & 2014. Student research fellowship for dissertation research.

William & Eva Price E-IPER Fellowship Fund. Support for 2012-2013 and renewed for the 2013/2014 and 2014/2015 academic year.

Antarctic Service Medal. 2013.

Institutes for Journalism and Natural Resources. 2009. Environmental journalism fellow with the Lake Country Institute.

National Science Foundation. 2004-2008. Graduate research assistant on Collaborative Research: Radiometric Age Validation of the Patagonian and Antarctic toothfishes.

Scientific Committee on Antarctic Research. 2008. Student travel fellowship.

Packard Grant. 2008. Student travel fellowship.

American Fisheries Society. 2007. Best student presentation & best student poster.

Project Aware Grant. 2007. Support for lead-radium dating of toothfish.

Environmental Entrepreneurship Program. 2004-2006. Graduate student participant in a NOAA research grant designed to support minority students in Business and Habitat Mapping at Moss Landing Marine Laboratories.

ACADEMIC SERVICE, LEADERSHIP & TEACHING

Emmett Interdisciplinary Program in Environment and Resources. 2014-2015. Executive Committee student representative.

Stanford University. 2014. Instructor for ENVRINST 220: Social Ocean: Ocean Conservation, Management, Ethics and Policy.

Stanford + Connects. February 1, 2013. Los Angeles. Student Ambassador.

Stanford Coastal Society. 2012-2014. President.

Stanford Graduate Student Advisory Council. 2013-2014. President.

Intercampus Interdisciplinary workshops. 2012-present. Stanford liaison for workshops between University of California Berkeley, UC Santa Cruz, and Stanford.

SKILLS & CERTIFICATIONS

PC, Mac, Windows Microsoft programs; Quantitative and qualitative analysis software ArcGIS; Adobe programs (including Photoshop); Final Cut Pro, Audacity, Soundslides Scientific, MLA style and public writing, videography, photography, radio and podcasts Public speaking; Website development and design
AAUS scientific diver, nitrox; WFR (Wilderness First Responder), CPR, First Aid

PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science, member

American Fisheries Society, member

Society for Environmental Journalists, student member

Gedakina (Native American education non-profit), advisory board member