

CASSANDRA BROOKS
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Environmental Studies Program
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EDUCATION

2017 Ph.D., Environment and Resources, Stanford University
2009 Graduate Certificate, Science Communication, University of California, Santa Cruz
2008 M.S., Marine Science, Moss Landing Marine Laboratories, California State University
2001 B.S., Biology, Bates College

PROFESSIONAL EXPERIENCE

Academic appointments

2017-present Assistant Professor, University of Colorado, Boulder, Environmental Studies.

Affiliations

2021-present Global Associate, Center for Environmental Law, Macquarie University
2020-present Faculty Affiliate, Institute of Arctic and Alpine Research, CU Boulder
2017-2020 Faculty Affiliate, Center for Science and Technology Policy Research, CU Boulder

Policy & Outreach

2013-2018 National Geographic. Washington, DC. Guest blogger for *Ocean Views* news blog.
2014-17 Pew Charitable Trusts. Washington, DC. Science advisor, Southern Ocean Sanctuaries Campaign.
2015-16 Conservation International. Washington, DC. Consultant, Oceans campaign.
2012 Antarctic and Southern Ocean Coalition. Washington, DC. Contract writer, marine protected area policy reports.
2010-12 The Last Ocean. News Director (Boulder, CO) and USA Coordinator (Christchurch, New Zealand) on international outreach effort focused on protecting the Ross Sea, Antarctica.
2009-12 Society for the Advancement of Chicanos and Native Americans in Science. Founder & video producer for SACNAS Science Video Podcast series; Writer for biography project & *SACNAS News*.
2011 Sanctuary: The Last Stand for Sharks, in partnership with the Pew Charitable Trusts. Development & execution of high impact media.
2011 Guardians of Raja Ampat, in partnership with Conservation International. Development of high impact conservation media in remote communities of Raja Ampat, Indonesia.
2009-11 Point Reyes National Seashore, National Park Service, Point Reyes, CA, Science communication specialist, producing science podcasts, videos & slideshows.
2010 Seattle Times. Seattle, WA. Kaiser Media Health Fellow Intern, Reported on health, science & environment with an emphasis on minority and diverse communities.
2007-10 Winds of Change. Contributing writer and editor. Magazine of the American Indian Science and Engineering Society.
2009 Stanford University. Stanford, CA. Science & environmental writing intern for Stanford University press office & Stanford University Woods Institute for the Environment.
2008 Santa Cruz Sentinel. Santa Cruz, CA. 2008. Science writing intern.
2008 San Francisco Exploratorium, San Francisco, CA. Contributor to the International Polar Year National Science Foundation "Ice Stories" outreach effort.

2002-03 Summit Achievement. Stowe, ME. Wilderness Therapy Guide.
 2002-03 Student Conservation Association. Crew Leader, student trail crews in National Parks.
 2001 Sierra Club & NH Public Interest Research Group, Concord, NH. Field Manager.
 2001 Hurricane Island Outward Bound Southern Programs. FL, Wilderness Therapy Guide.
 1998 New England Aquarium. Boston, MA. Environmental Education Intern.

Scientific Field Research

2013 Stanford University. Stanford, CA. Research assistant on National Science Foundation TRACERS cruise: *Tracing the fate of Algal Carbon Export in the Ross Sea, Antarctica*.
 2006-11 Antarctic Marine Living Resources, NOAA. La Jolla, CA. Seasonal research technician on Antarctic zooplankton and finfish survey cruises.
 2008 Moss Landing Marine Laboratories. Moss Landing, CA. Research technician, California Collaborative Fisheries Research Program, tagging fish in collaboration with CA fishers.
 2004-08 Moss Landing Marine Laboratories. Moss Landing, CA. Graduate research assistant on NSF grant: *Radiometric Age Validation of the Patagonian and Antarctic toothfishes*.
 2002-03 National Marine Fisheries Service. Gloucester, MA. Fisheries Observer.
 2000 School for Field Studies. Bamfield, British Columbia. Environmental field & coursework.
 2000 Virginia Institute of Marine Science. Gloucester Pt., VA. Research Experience for Undergraduates.
 1999 Mount Desert Island Biological Lab. Salisbury Cove, ME. Research Experience for Undergraduates.
 1998 Shoals Marine Laboratory. Appledore Island, ME. Summer field & coursework.

GRANTS

External Funding Received

2023-2025 National Science Foundation. *Collaborative Research: ORCC: Understanding Organismal Behavioral Responses to Climate Change to Forecast Eco-evolutionary Dynamics of Albatrosses Populations*. (Co-PI, Institutional PI: \$1,385,464)
 2022-2023 National Science Foundation. *Planning: Formulating and Sustaining a System-Level Understanding of a Large Marine Ecosystem in the Ross Sea Region Marine Protected Area to Better Conserve and Guide Policy*. (Co-PI: \$99,999)
 2022-2027 National Science Foundation. *CAREER: Using otolith chemistry to reveal the life history of Antarctic toothfish in the Ross Sea, Antarctica: Testing fisheries and climate change impacts on a top fish predator*. (PI: \$801,042)
 2022-2022 Pew Charitable Trusts. *Conserving the Southern Ocean: Informing the design, implementation and value of protecting the waters around Antarctica*. (PI: \$141,000).
 2021-2025 NASA. *Hotspots in the ice: Revealing the importance of polynyas for sustaining Antarctic marine ecosystems*. (Co-PI, Institutional PI: \$1,190,429).
 2021-2022 Antarctic and Southern Ocean Coalition. *Identifying Ecologically and Biologically Significant Areas in the Southern Ocean*. (PI: \$80,000)
 2021-2027 Australian Research Council. *Securing Antarctica's Environmental Future*. (International Collaborator: \$36,000,000 AUD).
 2020-2021 Pew Charitable Trusts. *Managing the Southern Ocean under environmental change: Marine protected areas and sustainable fisheries management* (PI: \$250,000).
 2020-2025 National Science Foundation, *Collaborative Research: Climate sensitivity of Alaskan rivers, fish and communities as told through storylines* (Co-PI: \$2,200,000).
 2018-2019 Pew Charitable Trusts, *Conservation Policies Towards Developing, Adopting, and Implementing Marine Protected Areas in Antarctica's Southern Ocean* (PI: \$250,000).

Internally Funded Competitive Grants

- 2016 Stanford University, EIPER, Conference Grant
2013-2016 Stanford University, EIPER, Summer Research Grant
2013-2014 Stanford University, School of Earth Sciences, McGee Grant

AWARDS & FELLOWSHIPS

- 2022 Society of Woman Geographers, Ronne Award for Antarctic Research or Exploration.
2022 Explorer's Club 50 honoree.
2022 University of Colorado Boulder, Research & Innovation Office Faculty Fellow
2021 Association for Environmental Studies & Sciences, Early Career Award.
2012-17 Stanford University, EIPER, William & Eva Price Dissertation Fellowship Fund
2016 Scientific Committee for Antarctic Research. First Place Award, Oral Presentation
2015-16 Switzer Foundation, Environmental Leadership Fellowship Award
2013 National Science Foundation, Antarctic Service Medal
2010 Kaiser Family Foundation, Kaiser Media Health Fellowship
2009 Institutes for Journalism and Natural Resources, Environmental Journalism Fellowship
2008 Scientific Committee on Antarctic Research, Conference Travel Fellowship
2008 Moss Landing Marine Laboratories, Packard, Grant, Conference Travel Fellowship
2007 American Fisheries Society, First Place Award, Student Oral Presentation.
2007 American Fisheries Society, First Place Award, Student Poster Presentation
2007 Professional Association of Diving Instructors, Project AWARE Grant
2006-07 Environmental Entrepreneurship Program, NOAA Minority Student Graduate Fellowship

PUBLICATIONS

Peer-Reviewed Articles

*denotes student advisee

44. **C. M. Brooks**, D.G. Ainley, J. Jacquet, S.L. Chown, L.R. Perterra, E. Francis, A. Rogers, V. Chavez-Molina*, L. Teh, U.R. Sumaila. 2022. Protect global values of the Southern Ocean ecosystem. *Science*, 378: 477-479.
43. R.R. Reisinger, **C.M. Brooks**, B. Raymond, J.J. Freer, C. Cotté, J.C. Xavier, P.N. Trathan, H. Bornemann, J-B Charrassin, D.P. Costa, B. Danis, L. Hückstädt, I.D. Jonsen, M-A. Lea, L. Torres, S. Wotherspoon, A.S. Friedlaender, Y. Ropert-Coudert, M. Hindell. 2022. Predator-derived bioregions in the Southern Ocean: characteristics, drivers and representation in Marine Protected Areas. *Biological Conservation*, 272: 109630.
42. **Brooks, C.M.** & D.G. Ainley. 2022. A Summary of United States Research and Monitoring in Support of the Ross Sea Region Marine Protected Area. *Diversity* 2022, 14, 447.
41. Karcher, D.B....**C. Brooks**.... et al. 2022. Advancing knowledge exchange at the interface of marine science and policy: lessons from global bright spots. *Journal of Environmental Management*, 314: 114994.
40. White, C.*, S. Mangubhai, L. Rumetna & **C. Brooks**. 2022. The bridging role of non-governmental organizations in the planning, adoption, and management of the marine protected area network in Raja Ampat, Indonesia. *Marine Policy*, 141: 105095.
39. Sullivan-Stack, J., O. Aburto-Oropeza, **C. Brooks**, R. Cabral, J. Caselle, F. Chan, J. Duffy, D. Dunn, A. Friedlander, H. Fulton-Bennett, S. Gaines, L. Gerber, Hines, H. Leslie, S. Lester, J. MacCarthy, S. Maxwell, J. Mayorga, D. McCauley, F. Micheli, R. Moffitt, K. Nickols, S. Palumbi, D. Pearsall, E. Pike, E. Pikitch, G. Sancho, A. Spalding, D. Suman, S. Sykora-Bodie & K. Grorud-Colvert. A Scientific Synthesis of Marine Protected Areas in the United States: Status and Recommendations. 2022. *Frontiers in Marine Science*, 9.
38. Nocito, E.*, J. Sullivan-Stack, E. Pike, K. Gjerde & **C. Brooks**. 2022. Applying Marine Protected

- Area Frameworks to Areas beyond National Jurisdiction. *Sustainability*, 14: 5971.
37. LaRue, M., **C. Brooks**, M. Wege, L. Salas, & N. Gardiner. 2022. High-resolution satellite imagery provides monitoring capabilities for marine protection. *Conservation Letters*. e12884
 36. Apelgren, N.* & **C. Brooks**. 2021. Norwegian interests and participation towards the creation of marine protected areas in the Southern Ocean. *Polar Journal*. doi: 10.1080/2154896X.2021.1994197
 35. Ashford, J., M. Dinniman, **C. Brooks**, L. Wei & G. Zhu. 2021. Tying policy to system: Does the Ross Sea region marine reserve protect transport pathways connecting the life history of Antarctic toothfish? *Marine Policy*. 136: 104903.
 34. **Brooks C.**, E. Bloom, A. Kavanagh, E. Nocito*, G. Watters & J. Weller. 2021. The Ross Sea, Antarctica: A highly protected marine protected area in international waters. *Marine Policy*. 134: 104795.
 33. Van de Putte, A., H.J. Griffiths, A. Benson, **C. Brooks**, P. Bricher, M. Sweetlove, S. Halfter & B. Raymond. 2021. From data to Marine Ecosystem Assessments of the Southern Ocean, achievements, challenges and lessons for the future. *Frontiers in Marine Science*. 8: 1240.
 32. Sylvester, Z.T.* , M. Long, **C. Brooks**. 2021. Detecting Climate Signals in Southern Ocean Krill Growth Habitat. *Frontiers in Marine Science*. doi: 10.3389/fmars.2021.669508
 31. Caccavo, J.A., H. Christiansen, A. Constable, L. Ghigliotti, R. Trebilco, **C.M. Brooks**, C. Cotte, T. Desvignes, T. Dornan, C.D. Jones, P. Koubbi, R. Saunders, A. Strobel, M. Vacchi, A. van de Putte, A. Walters, C.M. Waluda, B. Woods & J. Xavier. 2021. Productivity and change in fish and squid in the Southern Ocean. *Frontiers in Ecology & Evolution*. 9: 624918.
 30. Wagner, D., L. van der Meer, M. Gorny, J. Sellanes, C.F. Gaymer, E.H. Soto, E.E. Easton, A.M. Friedlander, D.J. Lindsay, T.N. Molodtsova, B. Boteler, C. Durussel, K.M. Gjerde, D. Currie, M. Gianni, **C.M. Brooks**, M.J. Shiple, T.A. Wilhelm, M. Quesada, T. Thomas, P.K. Dunstan, N.A. Clark, L.A. Villanueva, R.L. Pyle, M.R. Clark, S.E. Georgian & L. E. Morgan. 2021. The Salas y Gómez and Nazca ridges: A review of the importance, opportunities and challenges for protecting a global diversity hotspot on the high seas. *Marine Policy*. 126: 104377.
 29. Bestley, S., Y. Ropert-Coudert, S.B. Nash, **C.M. Brooks**, C. Cotté, M. Dewar, A.S. Friedlaender, J.A. Jackson, S. Labrousse, A.D. Lowther, C.R. McMahon, R.A. Phillips, P. Pistorius, P.S. Puskic, A.O.A. Reis, R.R. Reisinger, M. Santos, E. Tarszisz, P. Tixier, P.N. Trathan, M. Wege & B. Wienecke. 2020. Marine Ecosystem Assessment for the Southern Ocean: Birds and Marine Mammals in a Changing Climate. *Frontiers in Ecology & Evolution*. 8: 566936.
 28. Wagner, D., A. Friedlander, R. Pyle, **C. Brooks**, K. Gjerde & 'Aulani Wilhelm. 2020. Coral reefs on the high seas: hidden biodiversity hotspots in need of protection. *Frontiers in Marine Biology* 7: 567428.
 27. Berkowitz, H, L. Crowder & **C. Brooks**. 2020. Organizational perspectives on oceans governance: Meta-organizations and cross-sectoral collective action. *Marine Policy*. 118: 104026.
 26. **Brooks, C.**, S. Chown, L. Douglass, B. Raymond, J. Shaw, Z. Sylvester* & C. Torrens*. 2020. Progress towards a representative network of Southern Ocean protected areas. *PLOS ONE*. 15(4): e0231361.
 25. Nocito, E.* , **C. Brooks** & A. Strong. 2020. Gazing at the Crystal Ball: Predicting the Future of Marine Protected Areas through Voluntary Commitments. *Frontiers in Marine Science*. 6: 835.
 24. Sylvester, Z.* & **C. Brooks**. 2020. Protecting Antarctica through co-production of usable science: Lessons from the CCAMLR marine protected area process. *Marine Policy*. 111: 103720.
 23. Chown, S. & **C. Brooks**. 2019. The State and future of Antarctic environments in a global context. *Annual Reviews in Environment and Resources*. 44: 1-30.
 22. **Brooks, C.**, G. Epstein & N. Ban. 2019. Managing marine protected areas in remote areas: The subantarctic Heard and McDonald Islands. *Frontiers in Marine Science*. 6: 631.
 21. **Brooks, C.**, L. Crowder, H. Österblom, A. Strong. 2019. Reaching consensus for conserving the global commons: The case of the Ross Sea, Antarctica. *Conservation Letters*, e12676.
 20. Kennicutt, M., D. Bromwich, D. Liggett, B. Njastad, L. Peck, S. Rintoul, C. Ritz, M. Siegert, A. Aitken, **C. Brooks**, J. Cassano, S. Chaturvedi, D. Chen, K. Dodds, N. Golledge, C. Le Bohec, M.

- Leppe, A. Murray, P.C. Nath, M. Raphael, M. Rogan-Finnemore, D. Schroeer, L. Talley, T. Travouillon, D. Vaughan, A. Weatherwax & S. Chown. 2019. Sustained Antarctic research – a 21st century imperative. *One Earth*, 1(1): 95-113.
19. Benson, A., **C. Brooks**, G. Canonico, J.E. Duffy, F.E. Muller-Karger, H.M. Sosik, P. Miloslavich & E.Klein. 2018. Integrated observations and informatics improve understanding of changing marine ecosystems. *Frontiers in Marine Science*. 5: 428.
 18. Liu, N. & **C. Brooks**. 2018. China's changing position towards marine protected areas in the Southern Ocean: Implications for future Antarctic governance. *Marine Policy*, 94: 189-195.
 17. Davies T., G. Epstein, S. Aguilera, **C. Brooks**, M. Cox, L. Evans, S. Maxwell, M. Nenadovic & N. Ban. 2018 Assessing the performance of large marine by evaluating trade-offs in social-ecological system outcomes. *PLoS ONE* 13(4): e0195760.
 16. **Brooks**, C. J. Caccavo, J. Ashford, R. Dunbar, K. Goetz, M. La Mesa, L. Zane. Early life history connectivity of Antarctica silverfish (*Pleuragramma antarctica*) in the Ross Sea. 2018. *Fisheries Oceanography*, 27(3): 274-287.
 15. Finkbeiner E., N. Bennett, **C. Brooks**, T. Frawley, J. Mason, C. Ng, R. Ourens, K. Seto, S. Swanson, J. Orteaga, D. Wingfield & L. Crowder. Reconstructing overfishing: Moving beyond Malthus for comprehensive and equitable solutions. 2017. *Fish & Fisheries*, 18(6): 1180-1191.
 14. Ashford, J., M. Dinniman, **C. Brooks**. 2017. Physical-biological interactions in large Antarctic toothfish (*Dissostichus mawsoni*) found over the inner shelf of the Ross Sea. 2017. *Antarctic Science*, 29(6): 487-494.
 13. Chown S., **C. Brooks**, A. Terauds, C. Le Bohec, C. van Klaveren-Impagliazzo, J. Whittington, S. Butchart, B. Coetzee, B. Collen, P. Convey, K. Gaston, N. Gilbert, M. Gill, R. Hoft, S. Johnston, M. Kennicutt, H. Kriesell, Y. Le Maho, H. Lynch, M. Palomares, R. Puig-Marco, P. Stoett & M. McGeoch. 2017. Antarctica and the Strategic Plan for Biodiversity 2011-2020. *PLoS Biology* 15(3): e2001656.
 12. Ban N., T. Davies, S. Aguilera, **C. Brooks**, M. Cox, G. Epstein, L. Evans, S. Maxwell & M. Nenadovic. 2017. Social and ecological effectiveness of large marine protected areas. *Global Environmental Change*. 43: 82-91.
 11. **Brooks C.**, L. Crowder, L. Curran, R. Dunbar, D. Ainley, K. Dodds, K. Gjerde & U.R. Sumaila. 2016. Science-based management in the decline in the Southern Ocean. *Science*. 354 (6309): 185-187.
 10. Jacquet J., E. Blood-Patterson, **C. Brooks** & D. Ainley. 2015. 'Rational use' in Antarctic waters. *Marine Policy* 63: 28-34.
 9. **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. *Stanford Journal of Law, Science & Policy*. 33(3): 289-324.
 8. 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.
 7. 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.
 6. **Brooks C.** 2013. Competing values on the Antarctic high-seas: CCAMLR and the challenge of marine protected areas. *Polar Journal*. 2(3): 277-300.
 5. 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): 1903-1919.
 4. 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.

3. **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.
2. Brooks L. & **C. Brooks**. 2010. The Reciprocity Principle and ITEK: Understanding the Significance of indigenous protest on the Presumpscot. *World Futures Journal*. 3(2): 11-28.
1. Gehnrich 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.

Commentaries & Letters

6. Sumaila, U.R..... **C. Brooks**, et al. (~300 co-authors). 2021. WTO must ban harmful fisheries subsidies. *Science* 374: 544.
5. Hogg, C.J., M.A. Lea, M.G. Soler, V.N. Vasquez, A. Payo-Payo, M. Parrott, M.M. Santos, J. Shaw, **C. Brooks**. 2020. Protect the Antarctic Peninsula – before it’s too late. *Nature* 586: 496-499.
4. Siders, A.R., **C. Brooks**, A. Cravens, R. Nelson, D. Reineman & N. Ulibarri. 2020. How to beat isolation? Academic feedback groups promote growth as scholars and humans. *Nature*. 582: 597-598.
3. **Brooks, C.**, D. Ainley, P. Abrams, P. Dayton, R. Hofman, J. Jacquet & D. Siniff. 2018. Antarctic fisheries: factor climate change into their management. *Nature*, 558: 177-180.
2. Jacquet J. & **C. Brooks**. 2015. Conservation: It is rational to protect Antarctica. *Nature* 529: 39.
1. Ainley D., J. Eastman & **C. Brooks**. 2016. Comments on The Antarctic toothfish: biology, ecology and life history in the Ross Sea region.” by Hanchet et al. *Hydrobiologia*. 771 (1): 1-7.

Books

1. Liu N., **C. Brooks** & T. Qin. 2019. *Governing marine living resources in the polar regions*. Edward Elgar Publishing (Cheltenham, UK).

Book Chapters

10. **C. Brooks** & J. Weller. In Press. Leadership in the global commons: Protecting the Ross Sea, Antarctica. In *Navigating our way to solutions in Marine Conservation*. Crowder L. (ed) Open Book Publishers.
9. Christian C. & **C. Brooks**. In Press. Antarctica and the Southern Ocean: our last great wilderness. In *The Ocean and Us*. F. Obaidullah (ed) Women4Oceans.
8. Wagner, D., T.A. Wilhelm, A.M. Friedlander, R.L. Pyle, K.M. Gjerde, E.E. Easton, C.F. Gaymer, J. Sellanes, **C.M. Brooks**, L. van der Meer, S.E. Georgian & L.E. Morgan. 2021. Conservation on the high seas. In: D Wright & C Harder (eds.). *GIS for Science Volume 3 – Maps for Saving the Planet* (pp. 94-105). ESRI Press. DOI: <https://doi.org/10.17128/9781589486713>.
7. **Brooks C.** In 2021. Fishing in the Southern Ocean and the role of CCAMLR. In *Antarctic Resolution*. Foscari, G. (ed) Lars Müller Publishers
6. **Brooks C.** 2019. Geopolitical complexity at the bottom of the world: CCAMLR’s ongoing challenge of adopting marine protected areas. Pp 43-65. In *Governing marine living resources in the polar regions*. Edward Elgar Publishing (Cheltenham, UK).
5. Liu, N., **C. Brooks**, & T. Qin. 2019. Introduction. Pp 1-7. In *Governing marine living resources in the polar regions*. Edward Elgar Publishing (Cheltenham, UK).
3. Liu, N. **C. Brooks**. 2019. The future of governing marine living resources in the Polar Regions. Pp 222-228. In *Governing marine living resources in the polar regions*. Edward Elgar Publishing (Cheltenham, UK).
3. **Brooks C.** & D. Ainley. 2017. Fishing the bottom of the Earth: The political challenges of ecosystem-based management. Pp 422-438. In *Handbook on Antarctic Politics*. K. Dodds, A. Hemmings & P. Roberts (eds). Edward Elgar Publishing (Cheltenham, UK).

2. Ainley D. & C. **Brooks**. 2013. Exploiting the Southern Ocean: Rational use or reversion to tragedy of the Commons? Pp 143-154. In *Exploring Antarctic Values*. D. Liggett & A. Hemmings (eds) Gateway Antarctica Special Publication Series (Christchurch, NZ).
1. Ainley D., C. **Brooks**, J. Eastman & M. Massaro. 2012. Unnatural selection of Antarctic toothfish in the Ross Sea, Antarctica. Pp 53-75. In *Polar Protection of the Three Poles*. F. Heuttemann (ed) Springer (Tokyo, Japan).

Policy Papers & Reports

20. **Brooks, C.M.**, M. Dinniman, K. Bernard, J. Ashford & Z. Sylvester*. 2022. Connectivity of toothfish and krill in the Southern Ocean. SC-CAMLR-41/BG/27.
19. **Brooks, C.M.**, S. Becker*, C. Boyd, J. Handley, M-A Lea, B. Raymond, M. Santos & A. Spadone. 2022. Workshop on Identifying Key Biodiversity Areas for the Southern Ocean using tracking data. SC-CAMLR-41/BG/22.
18. Chown, S.L., R.I. Leihy, T.R. Naish, **C.M. Brooks**, P. Convey, B.J. Henley, A.N. Mackintosh, L.M. Phillips, M.C. Kennicutt II & S.M. Grant (Eds.). 2022. Antarctic Climate Change and the Environment: A Decadal Synopsis and Recommendations for Action. Scientific Committee on Antarctic Research, Cambridge, United Kingdom. www.scar.org
17. Sylvester, Z.*, **C. Brooks**, A. DuVivier, K. Krumhardt, L. Landrum, M. Holland, M. Long, S. Jenouvrier, L. Bourreau & S. Labrousse. 2022. Hot spots in the ice: revealing importance of polynyas for sustaining present and future Antarctic marine ecosystems. WG-EMM-2022/40.
16. Makhado, A.B....**C. Brooks**, et al. 2022. Online sub-Antarctic workshop on pelagic regionalization – 1 June 2022. WG-EMM-2022/10.
15. Ainley, D. & **C. Brooks**. 2021. Workshop report and synthesis: United States research and monitoring in support of the Ross Sea region Marine Protected Area. WG-EMM-2021/04.
14. Sylvester, Z.*, D. Veytia, A. Bahl, E. Hofmann, E. Murphy, N. Johnston, S. Corney, **C. Brooks**, B. Meyer & S. Thorpe. 2021. Using Models to improve our understanding of Antarctic krill and their ecological role in the Southern Ocean. WG-EMM-2021/05.
13. Wagner, D.... **C. Brooks** et al. 2020. The Salas y Gomez and Nazca ridges: a global biodiversity hotspot in need of protection. South Pacific Regional Fisheries Management Organization, 8th meeting of the Science Committee.
12. Sylvester, Z.*, **C. Brooks**, M. Long & A. Van de Putte. 2020. Krill Growth and Climate Change in the Presence of Internal Climate Variability. CCAMLR WG-EMM.
11. Hofmann, E., L. Biddle, T. de Bruin, **C. Brooks**, et al. 2020. Report: 1st Southern Ocean Regional Workshop. UN Decade of Ocean Science for Sustainable Development. San Diego, CA.
- 10 Makhado, A.B., A. Lowther, P. Koubbi, I. Ansorge, **C. Brooks** et al. 2019. Expert Workshop on Pelagic Spatial Planning for the eastern subantarctic region (Domains 4, 5 and 6). SC-CAMLR-38/BG/29.
9. **Brooks C.**, S. Chown, L. Douglass & B. Raymond. 2018. Progress towards a representative network of Southern Ocean protected areas. CCAMLR WS-SM-18/12.
8. **Brooks C.** 2017. A summary of best practices in research and monitoring of protected areas. CCAMLR WS-RMP-17/05.
7. Ainley D., **C. Brooks** et al. 2017. Toward developing a research and monitoring plan for the Ross Sea region marine protected area. CCAMLR WS-RMP-17/03
6. Antarctic Ocean Legacy: Protection for the East Antarctic Coastal Region. 2012. Antarctic Ocean Alliance. 28pp. Lead Author.
4. Antarctic Ocean Legacy: A Vision for Circumpolar Protection. 2012. Antarctic Ocean Alliance. 60pp. Lead Author.
4. The Global Threat to Manta and Mobula Rays. 2012. Shark Savers and Wild Aid. 21pp. Editor.
3. Caccavo J., **C. Brooks**, L. Zane & J. Ashford. 2015. Identification of *Pleuragramma antarctica* larvae in the Ross Sea via mitochondrial DNA. CCAMLR WG-FSA-15/61, Hobart, Australia.

2. **Brooks C.** & K. Goetz. 2014. *Pleuragramma antarcticum* distribution in the Ross Sea during late austral summer 2013. CCAMLR WG-EMM-14/38, Hobart, Australia.
1. **Brooks C.** & J. Ashford. 2008. Spatial distribution and age structure of Antarctic toothfish (*Dissostichus mawsoni*) in the Ross Sea, Antarctica. CCAMLR WG-FSA-08/18, Hobart, Australia.

Other academic publications

- Nocito, E.* & **C. Brooks**. 2020. Marine protected areas: A way to protection our oceans. *Frontiers for Young Minds* 8:529996. doi: 10.3389/frym.2020.529996
- C. Brooks**. 2013. Commission for the Conservation of Antarctica Marine Living Resources: 2nd Intercessional Meeting, preceded by the 1st Intercessional Meeting of the Scientific Committee. *The Polar Journal* 3: 5-7.

Popular articles & multi-media (selected clips from ~175; articles hyperlinked)

- Protecting the Southern Ocean. October 2021. *Advances in Chilean Antarctic Science, Chilean Antarctic Institute Newsletter*.
- New paper explores highly effective management of world's largest marine protected area. *Pew Charitable Trusts*. 23 September 2021. (w/Andrea Kavanagh)
- Marine protection falls short of the 10% 2020 target. A UN treaty and lessons from Antarctica could help. *The Conversation*. 13 December 2020. (w/ N. Gardiner)
- Humans threaten the Antarctic Peninsula's fragile ecosystem. A marine protected area is long overdue. *The Conversation*. 18 October 2020. (w/ M. Parrott, C. Hogg, J. Shaw & M. Marquez)
- Another grim climate report on oceans – what will it take to address the compounding problems? *The Conversation*. 25 Sept 2019.
- Cracks in the Future of the Antarctic. *National Geographic Blog*. 5 Nov 2018.
- The Complexity of Consensus: Protecting the World's Most Remote Ocean. *Prometheus CIRES Science Policy Blog*. 31 May 2018.
- Antarctic Geopolitics and the Ross Sea Marine Protected Area. *E-International Relations*. 20 Feb 2018.
- Why are talks over an Antarctic marine park still deadlocked? *The Conversation*. 2 Nov 2017.
- International Leadership, a Global Community, and Renewed Hope: Protecting the Ross Sea, Antarctica. *National Geographic, Ocean Views*. 2 Nov 2016.
- David Attenborough's Great Barrier Reef. *Atlantic Productions*. Online Media contributor. 2016.
- A Plea for Adélie (Penguins). *National Geographic, Ocean Views*. 4 Nov 2015.
- Fishing at the bottom of the earth: Ross Sea Antarctic toothfish. *Journal of Antarctic Affairs*. Mar 2015.
- Forecast: More vessels stuck in Antarctic Ice. *National Geographic Ocean Views*. 10 Jan 2014.
- Tragedy on the Antarctic high seas. *National Geographic, Ocean Views*. 22 July 2013.
- Video: Two-months breaking ice (in under five minutes). *National Geographic Ocean Views*. 2 May 2013.
- Op-ed: Monterey Bay Aquarium Seafood Watch program should revisit toothfish designation. *Monterey County Herald*. 21 Apr 2013.
- The Last Ocean. Documentary Film, Researcher. 2012.
- The Most Remote Fishery on Earth. *Pacific Ecologist*. Winter 2011.
- Video: Ocean Acidification: Where will all the seashells go? *Pacific Coast Science and Learning Center*, Point Reyes National Seashore. 12 May 2011.
- Science Interlude: Batty Behavior in *The Darwin Awards: Countdown to Extinction*. 2010.
- How much local fish is safe to eat? Cover story, *The Seattle Times*. 26 July 2010.
- Fish oil supplements may cut breast-cancer risk. *The Seattle Times*. 12 July 2010.
- Resiliency in the face of climate change. *SACNAS News*. Winter/Spring 2010.
- A little fellatio goes a long way. *ScienceNOW*. 30 Oct 2009.
- Two Worlds Working Together: Forming a Link Between Traditional Knowledge and Western Science. *SACNAS News*. Summer/Fall 2009.

Relocating species in the face of climate change. *Stanford Woods Institute for the Environment*. 10 June 2009.

Delivering Ecstasy. Cover story, *Monterey County Weekly*. 30 Apr 2009.

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

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

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

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

Mother, red in tooth and claw. *Orion*. May/June 2007.

PRESENTATIONS

Invited Talks

2023 Antarctic Women in Science Project, Aquarium of the Pacific, Long Beach, CA.

2023 Polar Marine Science Gordon Research Conference, Ventura, CA.

2023 Fifth International Marine Protected Areas Congress, Vancouver, BC, Canada.

2022 Antarctic Sea Ice & Southern Ocean Seminar, Snow & Ice Geophysics Lab. Online.

2022 Center for Environmental Journalism, Scripps Fellowship seminar. Boulder, CO.

2021 Marine Research and Education Conference. [Special session on biodiversity conservation in the High seas and Southern Ocean](#). Moscow, Russia. Online.

2021 Woods Hole Oceanographic Institute, Biology Seminar, Woods Hole, MA. Online.

2021 Center for the Blue Economy, Monterey Institute for International Studies, [Ocean and Coastal Management Speaker Series](#), Monterey, CA. Online.

2021 Blue Water Summit. Future for Antarctica and protection of the Southern Ocean. Online.

2021 EU Global Leadership: Winning protection of Antarctica & the Southern Ocean. Online.

2021 Coloradan Conversations – Climate Change, University of Colorado, Boulder. Online.

2021 The role of scientists in advocacy work, online event, University of Colorado, Boulder.

2020 Silver Lining For Learning, [Episode #39](#), Digital broadcast.

2020 Pew Bertarelli Ocean Legacy Program, French Ocean Climate Platform, Antarctica 2020 & Antarctica and Southern Ocean Coalition, [Protéger l’océan Austral](#), Online event (broadcast in French & English).

2020 Earth Echo International, Youth Action Network Meet up, Online event.

2020 International Union for Conservation of Nature, [The Journey to Marseille](#), Online event.

2020 Vienna University, Austria, [Climate Lecture Series](#), Online event.

2020 CU Boulder, Environmental Studies Program, [Colloquium Series](#), Online event.

2020 CU Boulder, Chancellor’s [CU Boulder Where You Are](#), Digital series.

2020 Explorer’s Club, [World Ocean Week](#), Digital broadcast.

2020 World Economic Forum, [Virtual Ocean Dialogues](#), Digital broadcast.

2020 Boulder Faculty Climate Science & Education Committee, [Annual Presentation](#). Online.

2020 University of Colorado Museum of Natural History. Boulder, CO.

2019 University of Colorado Boulder, Environmental Studies Graduate Commencement

2019 Antarctic & Southern Ocean Coalition. Antarctic Marine Protected Areas Workshop. Seoul, South Korea (w/ Bob Zuur)

2019 Environmental Peacebuilding Association. Online webinar.

2019 Ocean First Divers, Boulder, CO.

2019 Conference on World Affairs, Boulder, CO.

2019 Futures Congress, [Santiago & Punta Arenas](#), Chile.

2018 Paris Peace Forum, Paris, France.

2018 Colorado State University, Fort Collins, CO.

2017 Hopkins Marine Station, Stanford University, Monterey, CA.

2017 Korean Society of Oceanography. Busan, South Korea.

- 2017 Shanghai American Center. Shanghai, China.
- 2017 Conservation of Marine Living Resources in the Polar Regions: Science, Politics and Law. Wuhan University, Wuhan China.
- 2017 National Center for Atmospheric Research. Boulder, CO.
- 2016 New York University, School of Law. High Seas Workshop. New York, NY.
- 2016 Antarctic and Southern Ocean Coalition. Antarctic Marine Protected Areas Workshop. Seoul, South Korea.
- 2016 Korean Federation of Environmental Movement. Seoul, South Korea.
- 2016 Marine Mammal Commission. Bethesda, MD.
- 2016 Pew Charitable Trusts. Washington, DC.
- 2016 Stanford University. Conservation in Antarctica Seminar. Stanford, CA.
- 2016 Human Dimensions Thank Tank on Large-Scale Marine Protected Areas, Honolulu, HI. (with N. Ban)
- 2015 Antarctica & the Strategic Plan for Biodiversity 2011-2020: the Monaco Assessment Workshop. Monaco.
- 2015 Point Blue Conservation Science. Petaluma, CA.
- 2014 Scientific Committee on Antarctic Research. Auckland, New Zealand (w/ D. Ainley).
- 2013 Georgetown University. Antarctic Governance & Natural Resources Seminar. Washington, DC.
- 2013 Fishwise. Santa Cruz, CA.
- 2012 Scientific Committee on Antarctic Research. Association of Polar Early Career Scientists' Panel. Portland, OR.
- 2012 Scientific Committee on Antarctic Research. Climate Change for Polar Institutions' Panel. Portland, OR.
- 2012 Workshop to Identify Significant Uncertainties Concerning the Effects of Climate Change and the Antarctic Toothfish Fishery on the Ross Sea Marine Ecosystem. La Jolla, CA.
- 2011 The Coastal Society, Stanford University Chapter, Stanford, CA.
- 2011 Point Reyes National Seashore, Pacific Coast Science & Learning Ctr, Point Reyes, CA.
- 2010 Society for the Advancement of Chicanos & Native Americans in Science. Science Writing Panel. Anaheim, CA.
- 2009 Society for the Advancement of Chicanos & Native Americans in Science. Science Writing Panel. Dallas, TX.

Symposia Organized

- 2022 Co-Convener (w/ Jilda Caccavo & Christopher Jones), Scientific Committee on Antarctic Research. Online. *Management implications of Southern Ocean ecosystem dynamics and biodiversity thresholds*.
- 2022 Co-Convener (w/ Natasha Gardiner & others). Scientific Committee on Antarctic Research. Online. *How SCAR informs and guides Antarctic policy and conservation*.
- 2015 Co-Chair (w/ L. Crowder & U.R. Sumaila), American Association for the Advancement of Science. San Jose, CA. *Can our ocean commons be sustainably managed? Innovative strategies for the high seas*.

Conferences Organized

- 2021 Co-Organizer (w/ N. Liu), Global Dialogue on Biodiversity Law and Governance. Online.

Workshops & Planning Meetings Organized

- 2022 Ross Sea Research Planning Meeting (NSF-funded). Boulder, CO.
- 2022 Identifying Key Biodiversity Areas in the Southern Ocean Workshop. Online.
- 2021 Co-convener (w/ D. Ainley), Ross Sea region Marine Protected Area Research and

- Monitoring USA Workshop. Online.
- 2021 Co-organized (w/ Z. Sylvester et al.), Integrating Climate and Ecosystem Dynamics (ICED) workshop: Using models to improve our understanding of Antarctic krill and their ecological role in the Southern Ocean. Online.

Oral Presentations at Refereed Professional Meetings

*indicates student advisee

- Van de Putte, A., H. Griffiths, **C. Brooks**, P. Bricher, S. Hafter & B. Raymond. 2022. Data to marine ecosystem assessments of the Southern Ocean: An integrated approach to Antarctic and Southern Ocean Management. *Scientific Committee on Antarctic Research (SCAR)*, Online.
- DuVivier, A.K. L. Landrum, K. Krumhardt, Z. Sylvester*, M.M. Holland, **C. Brooks** & M. Long. 2022. Using satellite observations and Earth System models to reveal biological hotspots in coastal Antarctica. *American Geophysical Union (AGU)*, Chicago, IL.
- DuVivier, A.K. M. Molina, K. Krumhardt, L. Landrum, Z. Sylvester*, M.M. Holland, **C. Brooks**, S. Jenouvrier, S. Labrousse, L. Bourroeu & M. Long. 2022. Hot spots in the ice: revealing relationships between marine ecosystems and sea ice in coastal Antarctica. *SCAR*, Online.
- Becker, S.*, C. Boyd, J. Handley, B. Davis, T. Davies, L. Huckstadt, M-A. Lea, B. Raymond, R. Reisinger, Y. Ropert-Coudert, M. Santos, P. Trathan & **C. Brooks**. 2022. Identifying a network of Key Biodiversity Areas in the Southern Ocean using animal tracking data. *SCAR*, Online.
- Musselman, K.N., N. Herman-Mercer, A. Newman, Y. Cheng, D. Blaskey, K. Cozzetto & **C. Brooks**. 2022. Informing climate and land surface model decisions with Indigenous guidance. *Frontiers in Hydrology* annual meeting, San Juan, Puerto Rico; also presented at the *National Tribal and Indigenous Climate Conference*.
- Ainley, D., V. Morandini, L. Salas, N. Nur, J. Rotella, F. Shanhun, M. LaRue, R. Foster, C. Parkinson, K. Arrigo, G. van Dijken, R. Beltran, S. Kim, **C. Brooks**, J. Kooyman, P. Ponganis & D. Anderson. 2022. Resurgence of the Anthropocene in the Ross Sea, Antarctica. *Pacific Seabird Group*, Online; also presented at *SCAR*, Online.
- Ainley, D...**C. Brooks** et al. 2021. Why are penguins and seals dramatically increasing in southern Ross Sea? *United States SCAR Antarctic Science Meeting*, Online.
- Sylvester, Z.*, D. Veytia, A. Bahl, E. Hofmann, E. Murphy, N. Johnston, S. Corney, **C. Brooks**, B. Meyer & S. Thorpe. 2021. Using Models to improve our understanding of Antarctic krill and their ecological role: Report of the Integrating Climate and Ecosystem Dynamics of the Southern Ocean (ICED) Workshop, 2021. *United States SCAR Antarctic Science Meeting*, Online.
- Brooks, C.** 2021. Leadership in conserving the global commons: Protecting the Ross Sea, Antarctica. *Global Dialogue on Biodiversity Law and Governance*. Online.
- Wagner, D., A. Friedlander, R. Pyle, **Brooks, C.** & K. Gjerde. 2021. Coral reefs of the high seas: hidden biodiversity hotspots in need of protection. *Global Dialogue on Biodiversity Law & Gov.*, Online.
- Brooks, C.**, M. Dinniman, J. Ashford, Lian Wei, Guoping Zhu & Steven Parker. 2020. Transport pathways structuring life history distributions of Antarctic toothfish. *SCAR*, Online.
- Wagner, D., A. Friedlander, R. Pyle, **Brooks, C.** & K. Gjerde. 2020. Coral reefs of the high seas: hidden biodiversity hotspots in need of protection. *Deep-Sea Biology Society Conference*, Online; also presented at the *World Conference of Marine Biodiversity*, Online.
- Brooks, C.** & J. Weller. 2020. Using grand scale media to drive conservation: Protecting the Last Ocean. *AGU, Ocean Sciences, San Diego, CA*.
- Brooks, C.**, G. Epstein & N. Ban. 2020. Managing marine protected areas in remote areas: The case of the subantarctic Heard and McDonald Islands. *AGU, Ocean Sciences, San Diego, CA*.
- Brooks, C.**, L. Crowder, H. Österblom & A. Strong. 2020. Reaching consensus for conserving the global commons: The case of the Ross Sea, Antarctica. *AGU, Ocean Sciences, San Diego, CA*.
- Brooks, C.** 2018. Towards a representative network of protected areas in the Southern Ocean. *SCAR. Davos, Switzerland*.

- Brooks, C.** & J. Weller. 2018. Using grand scale media to drive conservation: Protecting the Last Ocean. *SCAR. Davos, Switzerland.*
- Torrens, C.* & **C. Brooks.** 2018. Changing climate patterns threaten West Antarctic Peninsula penguin populations. *International Arctic Workshop, Boulder, CO.*
- Benson, A., G. Canonico, F.E. Muller-Karger, H.M. Sosik, P. Miloslavich, **C. Brooks** & E. Klein. 2018. Using Essential Biodiversity Variables and Essential Ocean Variables, FAIR Guiding Principles, and the Principles of Action Ecology to Inform Understanding of Changing Marine Ecosystems. *AGU. Washington, D.C.*
- Bransome, N. & **C. Brooks.** 2017. Antarctic resilience through creation of an MPA network: Data needs and plans beyond the Ross Sea designation. *SCAR, Biology Symposium. Leuven, Belgium.*
- Brooks, C.,** L. Curran & L. Crowder. 2016. Competing values & political complexity in the Southern Ocean: CCAMLR & the challenge of marine protected areas. *SCAR. Kuala Lumpur, Malaysia.*
- Brooks, C.,** J. Caccavo, K. Goetz, L. Zane, J. Ashford & M. LaMesa. 2016. Pleuragramma antarcticum distribution in the Ross Sea: patterns of early life history & evidence of a new nursery ground. *SCAR. Kuala Lumpur, Malaysia*
- Brooks, C.** 2016. Science communication at the bottom of the world: Adventures in the Ross Sea, Antarctica. *SCAR. Kuala Lumpur, Malaysia.*
- Christian, C., R. Roura, J. Jacquet, **C. Brooks,** D. Ainley & E. Blood-Patterson. 2016. Out of Balance? Conservation, rational use, and the implementation of the Convention on the Conservation of Antarctic Marine Living Resources. *SCAR. Kuala Lumpur, Malaysia.*
- Brooks, C.** 2015. Marine protection at the bottom of the world: the challenge of Antarctic high seas. American Association for the Advancement of Science. San Jose, CA.
- Evans, L, N. Ban, G. Epstein, M. Nenadovic, M. Cox, S. Maxwell, **C. Brooks,** T. Davies & S. Aguilera. 2015. Diagnosing large-scale marine protected areas. *Royal Geographical Society-IBG Annual International Conference. Exeter, UK*
- Davies, T., N. Ban, M. Cox, G. Epstein, L. Evans, M. Nenadovic, M. Cox, S. Maxwell, **C. Brooks** & S. Aguilera. 2015. Diagnosing large-scale Marine Protected Areas: A comparative analysis of the social, ecological, and institutional drivers of successful conservation. *International Congress for Conservation Biology. Montpellier, France.*
- Brooks, C.** & D. Ainley. 2012. Exploiting the Southern Ocean: Rational use or tragedy of the commons? *SCAR. Portland, OR.*
- 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? *SCAR. Portland, OR.*
- Brooks, C.,** A.H. Andrews, J. Ashford & G. Cailliet. 2008. Age validation and spatial distribution of the Antarctic toothfish, *Dissostichus mawsoni*: Implications for a deep-sea fishery. *SCAR. St. Petersburg, Russia.*
- Brooks, C.,** A.H. Andrews, J. Ashford & G. Cailliet. 2007. Age estimation and lead-radium dating of Antarctic toothfish. *American Fisheries Society. Anchorage, AK.*

Posters Presented at Refereed Professional Meetings

- C. Brooks** & S. Chown. 2020. CCAMLR's challenge in managing the Southern Ocean under environmental change. *SCAR, Online.*
- C. Brooks,** G. Epstein & N. Ban. 2020. Managing Marine Protected Areas in Remote Areas: The case of the subantarctic Heard and McDonald Islands. *SCAR, Online.*
- Weller, J. & **C. Brooks.** 2020. Using grand scale media to drive conservation: Protecting the Last Ocean and beyond. *SCAR, Online.*
- Apelgren, N.* & **C. Brooks.** 2020. Norwegian interests and participation in the protection of the Southern Ocean. *SCAR, Online.*
- Sylvester, Z.* & **C. Brooks.** 2020. Protecting Antarctica through co-production of actionable science:

- Lessons from the CCAMLR marine protected area process. *SCAR*, Online.
- Sylvester, Z.*, M. Long & **C. Brooks**. 2020. The role of climate variability on krill habitat: Insights from the CESM Large Ensemble. *SCAR*, Online.
- Caccavo, J.... **C. Brooks**, et al. 2020. Marine Ecosystem Assessment for the Southern Ocean (MEASO): Productivity and change in fish and squid in the Southern Ocean. *SCAR*, Online.
- Shaw, J., **C. Brooks**, K. Duncan, S. Robinson & M. Lea. 2020. Antarctic governance and conservation: Global lessons in the Anthropocene. *SCAR*, Online.
- N. Bransome, **C. Brooks** & Annika Cobb*. 2020. Review of the impacts of climate change and fishing on penguin populations in the Western Antarctic Peninsula and Scotia Sea region. *AGU, Ocean Sciences, San Diego, CA*.
- N. Bransome, **C. Brooks** & Annika Cobb*. 2019. The impacts of climate change and fishing on penguin populations in the Western Antarctic Peninsula and Scotia Sea region. *World Penguin Conference. Dunedin, New Zealand*.
- C. Brooks**. 2018. Leadership in conserving the global commons: Protecting the Ross Sea, Antarctica. *SCAR. Davos, Switzerland*.
- Ballerini, T., D.G. Ainley, L.K. Blight & **C. Brooks**. 2013. Harvesting impacts on Antarctic marine ecosystems: changes in food web structure and loss of ecosystem value. *SCAR, Biology Symposium. Barcelona, Spain*.
- Brooks, C.**, A.H. Andrews, J. Ashford & G.M. Cailliet. 2007. Radiometric Age Validation of Antarctic toothfish. *American Fisheries Society. Anchorage, AK*.
- Brooks, L. & **C. Brooks**. 2002. TEK as Embedded Knowledge: A View from the River. *Refiguring the Ecological Indian Symposium, Laramie, WY*.

INTERNATIONAL DELEGATIONS

- 2022 41st annual meeting of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and its Scientific Committee (SC-CAMLR). Scientific Committee on Antarctic Research (SCAR) delegation advisor. Hobart, AU
- 2021 40th annual meeting of CCAMLR and SC-CAMLR. SCAR delegation advisor. Hobart, AU.
- 2020 39th annual meeting of CCAMLR and SC-CAMLR. SCAR delegation advisor. Hobart, AU.
- 2019 38th annual meeting of CCAMLR and SC-CAMLR. SCAR delegation advisor. Hobart, AU.
- 2018 37th annual meeting of CCAMLR and SC-CAMLR. SCAR delegation advisor. Hobart, AU.
- 2017 40th Antarctic Treaty Consultative Meeting (ATCM) and 20th meeting of the Committee on Environmental Protection (CEP). Antarctic and Southern Ocean Coalition (ASOC) delegation advisor. Beijing, China.
- 2017 Ross Sea region MPA Research and Monitoring Plan Workshop. International Union for the Conservation of Nature (IUCN) delegation representative. Rome, Italy.
- 2016 36th annual meeting of CCAMLR and SC-CAMLR. ASOC delegation advisor. Hobart, AU.
- 2015 35th annual meeting of CCAMLR and SC-CAMLR. ASOC delegation advisor. Hobart, AU.
- 2014 34th annual meeting of CCAMLR and SC-CAMLR. ASOC delegation advisor. Hobart, AU.
- 2013 2nd Special Meeting of CCAMLR and 1st Special Meeting SC-CAMLR. ASOC delegation advisor. Bremerhaven, Germany.
- 2013 33rd annual meeting of CCAMLR and SC-CAMLR. ASOC delegation advisor. Hobart, AU.
- 2012 32nd annual meeting CCAMLR and SC-CAMLR. ASOC delegation advisor. Hobart, AU.

TEACHING

Course Teaching

- 2022 CU Boulder. ENVS 4950. *ENVS Honors Thesis Seminar*.
- 2019 - 2022 CU Boulder. ENVS 5702. *Environmental Governance: Actors & Institutions*.
- 2019 - 2021 CU Boulder. ENVS 4800. *ENVS Capstone: Media with Meaning*.
- 2018 - 2020 CU Boulder. ENVS 3033. *Environmental Governance*.

2014 Stanford University. ENVRINST 220. *The Social Ocean: Ocean Conservation, Management, Ethics and Policy.*

Guest Lectures

2022 Stanford University. BIO71. Planet Ocean.
2022 New York University. ANTS-GA 2500. The People versus the sea.
2021 CU Boulder. EBIO 5460 Conservation Planning.
2021 Stanford University. ESS38 The Science, History and Literature of Polar Exploration.
2021 William Paterson University. ELCL 6230 Teaching Earth, Space & Life Sciences with a STEAM approach.
2020 MIT & Woods Hole Oceanographic Institute 7.431 Marine Global Change Ecology
2020, 2021 CU Boulder. ENVS 5100. *Special topics in Environmental Studies: Methods in ENVS.*
2020 CU Boulder. ENVS 1000. *Introduction to Environmental Studies.*
2019 Indiana University. R678. *Emerging Learning Technologies.*
2018, 2019 CU Boulder. EBIO 4090. *Coral Reef Ecology.*
2018-2020 CU Boulder. ENVS 5000. *Policy, Science & the Environment.*
2018 CU Boulder. ATOC 6020. *Communicating Science.*
2016-2018 Stanford University. ENVRINST 220. *The Social Ocean.*
2017 CU Boulder. GEOG 2852. *Contemporary Southeast Asia: Env Politics.*
2017 CU Boulder. IAFS 3000. *Climate Affairs in the Developing World.*
2016 Stanford University. ENVRES 315. *Interdisciplinary Research Design.*
2015- 2016 Middlebury Institute for International Studies. IEPG 8652. *International Marine Law.*
2014 Middlebury Institute for International Studies. IEPG 8516. *High seas management and conservation: Challenges and opportunities.*
2014 Stanford University. Think 40. *A transition toward sustainability.*
2013 University of California, Santa Cruz. SCICOMM 160. *Introduction to Science Writing.*
2012 Stanford University. PWR 1. *Debating the Environment.*
2010 Harvard University. FOLKMYTH 126. *Continuing Oral Traditions in Indigenous Communities.*

Workshop Teaching & Development

2022 Climate across the curriculum workshop, University of Colorado, Boulder, guest speaker.
2019 National Snow and Ice Data Center, Useful Arctic Knowledge science communication Workshop, University of Colorado, Boulder, guest speaker.
2018 Research and Innovation Office, Faculty Fellows Science Communication Workshop, University of Colorado Boulder, guest speaker.
2017 United States National Committee of the Association of Polar Early Career Scientists Workshop on Communicating Science for Polar Scientists. Boulder, CO. Speaker.
2012-16 Inter-campus Interdisciplinary Workshops in Environment & Resources. Liaison & organizer for graduate student and faculty workshops between UC Berkeley, UC Santa Cruz, & Stanford University.
2015 Stanford University. Case Study & Qualitative Methods Working Group. Organized, instructed, and led quarter long seminar.
2011 Society for Environmental Journalism. Video workshop, instructor.
2010 Northern California Association of Science Writers. Multi-media workshop, instructor.
2009 San Francisco Exploratorium. Multi-media training workshop, instructor.

MENTORING & ADVISING

Primary Advisees (at CU Boulder)

Graduate Students

Current:

Clare Gallagher (PhD, 1st year)
Vasco Chavez-Molina (PhD, 2nd year)
Sarah Becker (PhD, 2nd year)
Emily Nocito, ENVS (PhD, 5th year, advanced to candidacy).
Rawinorn Dulyakasem, ENVS (PhD, co-advisor, 5th year, advanced to candidacy).
Diana Dorman, ENVS (PhD, co-advisor, 4th year, advanced to candidacy).
Zephyr Sylvester, ENVS (MS, completed in 2020; PhD, 4th year, advanced to candidacy).

Completed:

Casey White, ENVS (MS, completed in December 2021).

Honors Students

Current:

Virginia Weiskopf, ENVS; also mentor on Undergraduate Research Opportunities Program grant.
Jacklyn Florman, ENVS; also mentor on Undergraduate Research Opportunities Program grant.

Completed:

Nora Apelgren, ENVS (2020); also mentor on Undergraduate Research Opportunities Program grant.
Annika Cobb, ENVS (2020); also mentor on Undergraduate Research Opportunities Program grant.
Isabella Sofio, ENVS (2020).
Mara Booth, ENVS (2021); also mentor on Undergraduate Research Opportunities Program grant.
Jack Barker, ENVS (2022); also mentor on Undergraduate Research Opportunities Program grant.
Josh Lipson, ENVS (2022); also mentor on Undergraduate Research Opportunities Program grant.
Seth Greer, ENVS (2022).

Committees

Graduate Students

Current:

Lee Frankel- Goldwater, CU Boulder (PhD, committee member).
Holly Olivarez, ENVS, CU Boulder (PhD, committee member).
Olivia Pearman, ENVS, CU Boulder (PhD, committee member).
Devon Reynolds, ENVS, CU Boulder (PhD, committee member).
Victoria Stout, ENVS, CU Boulder (PhD, committee member).
Mia Vanderwilt, ENVS, CU Boulder (MS, committee member).
Anna Wright, ENVS, CU Boulder (PhD, committee member).

Completed:

Ashby Leavell Sachs, ENVS, CU Boulder (PhD 2022, committee member).
Brendan Buzzard, ENVS, CU Boulder (PhD 2022, committee member).
Jeremiah Osborne-Gowey, ENVS, CU Boulder (PhD 2021, committee member).
Abigail Conner, Civil, Env & Architectural Engineering, CU Boulder (MS 2019, committee member).
Diana Dorman, ENVS, CU Boulder (MS 2019, committee member).
Emily Nocito, University of Maine, Orono (MS 2018, committee member).

Honors Students (all at CU Boulder)

Current:

Ben Woods, ENVS (2023, committee member).
Allison Riley, ENVS (2022, committee member).
Ziad Lien, ENVS (2022, committee member).
Shadia Nagati, ENVS (2022, committee member).
Lawrence Wagner, ENVS (2022, committee member).

Dylan Clements, Ecology and Evolutionary Biology (2023, committee member).

Completed:

Katie Ebinger, Ecology and Evolutionary Biology (2019, committee member).
Mariah Jimenez, Political Science (2021, committee member).
Hayley Wustenberg, Ecology and Evolutionary Biology (2021, committee member).
Rae Lewark, ENVS (2021, Honors council representative).
Taylor Heisler, ENVS (2021, Honors council representative).
Aiden Jorgenson, ENVS (2021, Honors council representative).
Caroline Wiygul, ENVS (2022, committee member).
Colin Lanier, ENVS (2022, committee member).
Erin Olesiewicz, ENVS (2022, committee member).
Juliette Nanos, ENVS (2022, committee member).
Michelle Leung, ENVS (2022, committee member).
Emilie Craig, ENVS (2022, committee member).

Other

2018-present CU Boulder. Internship and independent study advisor for multiple undergraduates (~5/year) in partnership with international conservation non-governmental organizations.
2021 Doctor of Philosophy Thesis Examination, University of Tasmania.
2016 Stanford University. Academic mentor, *Senior Reflection*, art & science senior project.

SERVICE & LEADERSHIP

Professional service within the University of Colorado, Boulder

2022 A&S Research Administrator Search Committee.
2021-present Faculty Advisor, Art+Science+Action Partnerships, Office of Outreach & Engagement
2020-present ENVS Executive Committee.
2020-present ENVS Honors Representative (Lead in 2021/22)
2019-present Faculty Advisor for ENVS Colloquium.
2018-present Arctic Certificate Committee
2021 MENV Admissions Committee.
2019-2020 Merit Review Committee.
2018-2020 Undergraduate Curriculum Committee.
2018 Peer Classroom Evaluation Committee.
2018 TEDx Salon, *The Melting Arctic*, University of Colorado, Boulder. Invited expert.
2018 Conference on World Affairs, University of Colorado, Boulder. Moderator.

Professional service outside of the University of Colorado

2021-present Integrated Science to Inform Antarctic and Southern Ocean Conservation, Scientific Committee on Antarctic Research, SC-ATS Representative Steering Committee Member.
2019-present Homeward Bound, on-board science faculty (2019; 4th cohort) for women's leadership expedition to Antarctica (~100 women in STEMM; 12 month program; 3 week expedition). Online faculty (2021; 6th cohort).
2021-2022 National Ocean Protection Coalition, Science Advisory Team Member.
2020-2022 Ocean Visions, Leadership Team.
2020-present Antarctica NOW (international community of women in STEMM working to conserve the Antarctic Peninsula), co-founder.
2019-present Homeward Bound (women in STEMM leadership program). Science faculty.
2019-present Blue Parks, Marine Conservation Institute, Science Council member.

- 2018-present Standing Committee on the Antarctic Treaty System, (SCATS) Scientific Committee on Antarctic Research (SCAR), Deputy Chief Officer.
- 2019-2020 *Climatic Change*, Associate Deputy Editor.
- 2016 World Wildlife Fund, Expert Reviewer, Report (55pp): Tracking Antarctica: An update on the state of Antarctica and the Southern Ocean.
- 2014 Antarctic Ocean Alliance, Expert Reviewer, Report (31pp): Antarctic Ocean Legacy: Towards Protection of the Weddell Sea Region.
- 2014-15 Stanford University, Emmett Interdisciplinary Program in Environment and Resources, Executive Committee, Student Representative.
- 2013-14 Stanford University, Graduate Student Advisory Council. President.
- 2012-14 The Coastal Society. Stanford University Chapter. President.
- 2013 Stanford + Connects. Stanford University Alumni event. Student Ambassador.
- 2010-2011 Gedakina, Advisor Board Member.
- 2010-2011 Intertribal Youth Science Initiative, Advisory Board Member.

Journals reviewed for

Science, Conservation Biology, Conservation Letters, PLOS One, PLOS Biology, Frontiers in Marine Science, Marine Policy, Antarctic Science, Polar Record, Fisheries Oceanography, Polar Biology, CCAMLR Science, Global Environmental Change, Nature Climate Change, Nature Sustainability, Nature Communications, Nature Communications Earth and Environment, Climate Policy, Ambio, Global Change Biology, Global Ecology & Conservation, Biological Conservation, Progress in Oceanography, Ocean Development and International Law, One Earth, PNAS.

Memberships

The Explorer's Club; Society of Women Geographers; American Association for the Advancement of Science (AAAS); Association of Polar Early Career Scientists; World Commission on Protected Areas (WCPA), International Union for the Conservation of Nature (IUCN); IUCN WCPA Connectivity Conservation Specialist Group and Marine Connectivity Working Group; Association for Environmental Studies and Sciences.

POPULAR COVERAGE OF PROFESSIONAL WORK

Selected coverage of outlets that featured my professional work and/or expert opinion

- Time Magazine*. [Russia's war in Ukraine could jeopardize Antarctic Wildlife](#). October 2022.
- Daily Maverick*. [Fishing 'moratorium' could help save climate-stressed Antarctic species, say A-list scientists](#). October 2022.
- Eurasia Review*. [Researchers call for action to stop exploitation of Antarctic waters](#). October 2022.
- Colorado Arts & Sciences Magazine*. [Scientist who 'always undercut' herself now wins high praise, awards](#). Oct 22.
- Nature*. [Impact report: how biodiversity coverage shapes lives and policies](#). August 2022.
- Australian Broadcasting Corporation*. The Poles Revealed. 2021.
- OnlyOne*. [Hope in a Climate Catastrophe](#). 26 September 2021.
- CU Boulder Today*. [Human Driven Climate Change only half the picture for krill in the Southern Ocean](#). June 2021.
- NPR*. [Coming soon to an Atlas near you: A fifth ocean](#). 11 June 2021.
- Only One*. [Antarctic Champion](#). 8 March 2021.
- Storytellers of STEMM*. [Antarctic Series: Cassandra Brooks](#). 01 December 2020.
- PBS. Age of Nature Series*. Featured in the third episode [Changing](#). 28 October 2020.
- Colorado Public Radio*. [Boulder Researcher Helps Protect Antarctica In the Face of Climate Change](#). 27 Oct 2020.
- Scientific American*. [Double whammy of warming overfishing could spell disaster for Antarctica krill](#). 27 Oct 2020.
- Oceanographic Magazine*. [Scientific coalition calls for Marine Protected Area for Antarctic Peninsula](#). 19 Oct 2020.
- Finding Sustainability Podcast*. [Antarctic marine conservation with Cassandra Brooks](#). 25 May 2020.
- Pew Charitable Trusts*. [More of the Southern Ocean must be protected to safeguard marine biodiversity](#). Apr 2020.
- CU Boulder Today*. [More protections needed to safeguard biodiversity in the Southern Ocean](#). 22 April 2020.
- CU Independent*. [Homeward Bound alumni speaks on gender issues in Antarctica](#). 10 March 2020.

New York Times. [Tourism in Antarctica: Edging toward the \(risky\) mainstream](#). 25 Feb 2020

9News. [CU researchers were part of the largest ever all-women expedition to Antarctica](#). 16 Dec 2019.

China Dialogue Ocean. [Podcast: China's interest in Antarctica](#). 13 Dec 2019.

Colorado Arts and Sciences Magazine. [CU Boulder prof and 100 women set sail for Antarctica](#). 25 Nov 2019.

CU Boulder Today. [Antarctic marine protection treaty offers lessons for global conservation](#). 20 Sept 2019.

Nature Research Behavioural & Social Sciences Community. [Spotlight on early-career researchers: An interview with Dr. Cassandra Brooks](#). June 2019.

Prensa Antartica. [Cassandra Brooks: "La ciencia se mueve mas lento que el ritmo del cambio climatico"](#) Jan 2018.

Inside the Greenhouse. [More than scientists: Cassandra Brooks](#). August 2018.

Pew Charitable Trusts. [Southern Ocean Conservation Must Lean on Science, Expert Says](#). June 2018.

Wild Voices. [The battle to preserve the world's most pristine sea](#). March 2018.

Generation Anthropocene. [Saving the Last Ocean](#). June 2017.

Audubon. [The world's largest marine protected area is a conservation victory with caveats](#). 16 Nov 2016.

Speak Up For Blue. [Ross Sea marine protected area with Cassandra Brooks](#). 2 Nov 2016.

Financial Times. [Antarctic waters win protection in landmark international deal](#). 27 Oct 2016.

BBC. [Nations push to protect Antarctica's 'last ocean.'](#) 27 Oct 2016.

Reuters. [U.S. hopeful it can win Russia's agreement on Antarctic Ocean deal](#). 21 Oct 2016.

The Washington Post. [Finally, the world may protect one of the most pristine parts of Southern Ocean](#). 19 Oct 2016.

Spiegel (Germany). [Verhandlungen über Antarktis-Schutz](#) (Negotiations on Antarctic protection). 16 Oct 2016.

La Repubblica (Italy). [O's digest – Science](#). 14 Oct 2016.

ITechPost. [Antarctic marine protected areas could be in danger, here's what you can do to help](#). 14 Oct 2016.

ABC. [International science community pressures Russia to support Antarctic marine protection plan](#). 13 Oct 2016.

Phys.org. [Future of Antarctic marine protected areas at risk](#). 13 Oct 2016.

Science Daily. [Antarctic species threatened by willful misinterpretation of legal treaty](#). 21 Oct 2015.

Stanford University News Service. [Bold solutions for high seas marine conservation](#). 10 Feb 2015.

CNN. [Stunning time-lapse brings Antarctic ice breaking adventure to life](#). 30 May 2013.

Imaging Resource. [Beautiful time-lapse video captures the surprising nuances of the Antarctic](#). 13 May 2013.

Smithsonian. [Feel what it's like to live on an Antarctic Icebreaker for Two Months](#). 7 May 2013.

LiveScience. [Amazing Antarctic video brings Ice to Life](#). 7 May 2013.

The Atlantic. [What it's like to live on a ship sailing through the Antarctic ice](#). 6 May 2013.

Washington Post. [What it's like to ride an icebreaker around Antarctica](#). 6 May 2013.