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EDUCATION:

Ph.D. Oceanography, University of Southampton, National Oceanography Centre, UK, 2002
M.A. Marine Science, Virginia Institute of Marine Science, VA, 1996
M.Sc. Bio-aeronautics, Cranfield Institute of Technology, Bedford, UK, 1987
B.Sc. Biological Sciences (Honors), University of Essex, UK, 1985

PROFESSIONAL DEVELOPMENT:

2018-present: Full Research Faculty, Florida State University Coastal and Marine Lab, FL
2013-2018: Associate Research Faculty, Florida State University Coastal and Marine Lab, FL
2008-2013 Courtesy Research Associate, Oregon Institute of Marine Biology, OR
2008-2013 Director of Coral Conservation, Marine Conservation Institute, WA
2007-2008 Instructor of Marine Biology, University of Oregon, OR
2006-2007 Associate Research Scientist, Florida Fish and Wildlife Institute, FL
2002-2006 Research Associate, Oregon Institute of Marine Biology, OR

MANUSCRIPTS: (*denotes student or +post-doctoral author)

Liu Q, AD Rogers, C Roch, K Gordon, CM Duarte, LF Robinson, RG Waller, C Ferrier-Pages, **S Brooke** + 25 others (2025) Review: Critical knowledge gaps in the conservation and restoration of cold-water corals. *Restoration Ecology* doi: 10.1111/rec.70286

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Bowman R*, **S Brooke** (2025) Physiological responses of the symbiotic octocoral *Muricea laxa* to dynamic thermal conditions. *Marine Ecology Progress Series* 757:71-83.

Bueno J*, SE Lester, JL Breithaupt, **S Brooke** (2024) The application of unoccupied aerial systems (UAS) for monitoring intertidal oyster density and abundance. *Remote Sensing in Ecology and Conservation*. doi: 10.1002/rse2.417

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Cordes EE, AW Demopoulos, AJ Davies, R Gasbarro, **S Brooke**... +22 others (2023) Expanding our view of the cold-water coral niche and accounting of the ecosystem services of the reef habitat. *Scientific Reports* 13:19482

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- Blank Nicole*, BK Walker, **S Brooke** (2022) Spatial variation in hard-bottom coral communities of the coastal West Florida Shelf. Bulletin of Marine Science 98(4):509-527
- Walker BK, JK Reed, J Ash, CG Messing, **S Brooke**, S Farrington (2021) Regionalization of benthic hard-bottom communities across the Pourtales Terrace, Florida. Deep Sea Research 1. 172: 103514
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- Ross SW, M Rhode, **SD Brooke** (2017) Deep sea coral and hardbottom habitats on the west Florida slope, eastern Gulf of Mexico. Deep Sea Research II. 120: 14-28
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BOOK CHAPTERS

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TECHNICAL REPORTS:

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- Brooke S** et al. (2025) Apalachicola Bay System Initiative Annual Report (2024-2025). Report for Project # 69 submitted to Triumph Gulf Coast Inc. pp54
- Brooke S** et al. (2024) Apalachicola Bay System Initiative Annual Report (2023-2024). Report for Project # 69 submitted to Triumph Gulf Coast Inc. pp55
- Liu Q, AD Rogers, C Roch, K Gordon, CM Duarte, LF Robinson, RG Waller, C Ferrier-Pages, **S Brooke** + 22 others (2024) CORDAP: Roadmap for conservation and restoration of cold-water corals. CORDAP. www.cordap.org
- Brooke S (2024) Summary of shell retention and recycling programs to inform oyster restoration and management. Technical report submitted to the Florida Wildlife Federation pp34 + database.
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- Anderson C, B Bankovich, J Bock, **S Brooke**, J Brucker, V Encomio, L Geselbracht, A Gillis (2023). Florida Oyster Recovery Science Guidance Series: 001 - Oyster Habitat Mapping.
- Vogt C, N Benfer, **S Brooke**, M Clark, + 14 others (2022) Best Management Practices for Deep Sea Tailings Disposal pp 66 <https://craigvogt.com>
- Cordes EE, AW Demopoulos, BB Bernard, **S Brooke**, +15 others (2022). Deepwater Atlantic Habitats II: Continued Atlantic Research and Exploration in Deepwater Ecosystems with Focus on Coral, Canyon and Seep Communities. Final report. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region, 575 p. Report No.: OCS Study BOEM. Contract No.: M17PC00009

- Brooke S**, A Baco-Taylor, J Ingels, S Morey, M Poti, A Winship (2022) Combining habitat suitability and physical oceanography models for targeted discovery of new benthic communities on the west Florida slope. Final Report for NOAA OER Grant No. NA18OAR0110285, pp42
- Wang Z, **S Brooke**, M Jiang, M Ringham, G Alsenas, E Busold (2022) Exploration and Characterization of Fine-scale Physical-biogeochemical Environment over Deep Coral Reefs on the West Florida Slope using Integrated ROV-lander-sensor Systems. Final Report for NOAA OER Grant No. NA18OAR0110352
- Brooke S** (2022) An accounting and summary of oyster restoration projects in the Gulf of Mexico funded by Deepwater Horizon oil spill disaster funds. Technical report and database submitted to the Florida Wildlife Federation in fulfillment of Contract No. 32723 pp36
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- Brooke S**, M Wolf-Watts, AD Heil, K Meyer, DK Coykendall, M Rhode, CM Young, SW Ross (2017) Chapter 8: Benthic invertebrate communities. In: Exploration and Research of Mid-Atlantic Deepwater Hard Bottom Habitats and Shipwrecks with Emphasis on Canyons and Coral Communities. CSA Ocean Sciences (Eds). U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Atlantic OCS Region. OCS Study BOEM 2017-060 p333-434 plus Appendices
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- Brooke S** (2017) Habitat characterization and vulnerability assessment of coral and sponge reefs in the northeastern Gulf of Mexico. Final report submitted to NOAA Coral Reef Conservation Program. Award NA14NOS4820083. 76pp
- Brooke S** (2017) Deep water coral habitat areas of particular concern in the Gulf of Mexico. Technical Report submitted to the Florida Wildlife Federation in fulfillment of Contract No. 29282 pp 62
- Koenig CK, **S Brooke**, K Kingon, C Stallings (2015) Reef fish communities on natural and artificial reefs in the northeastern Gulf of Mexico: seasonal patterns and habitat associations. Final report submitted to FWC. Contract No. FWC11179. 74pp
- Stone R, D Stevenson, **S Brooke** (2015) Assessment of a pilot study to collect coral bycatch data from the Alaska commercial fishing fleet. NOAA technical memorandum NMFS-AFSC-296 pp23

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- Gulick S, **S Brooke**, J Ardron (2011) The Biology of the Sargasso Sea: A Preliminary Review. Sargasso Sea Alliance Science Report Series, No 4, 18 pp. ISBN 978-0-9847520-5-8
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EDITORIAL CONTRIBUTIONS

- Coral Reefs of the World: Coral Reefs of Cuba (2024). Volume Editors: VN Zlatarski, JK Reed, **S Brooke**, S Pomponi, S Farrington. Springer. Chapters 1-27.
- Frontiers in Marine Science (2019-2021) Special Edition Vulnerable Marine Ecosystems and Deep-Sea Fisheries. Editors: L Watling, J. Ingels, **S Brooke**, C Pham, K Howell,
(<https://www.frontiersin.org/research-topics/9611/vulnerable-marine-ecosystems-and-deep-sea-fisheries>)

RESEARCH GRANTS: *denotes graduate student

- Clam-Seagrass Coordinated Network Experiment: Florida Panhandle. Florida Sea Grant. **\$197,295** (2026-2027)
PI: S. Brooke, Co-PIS, A, Andres, A. Searles
- Effects of bivalve species, size, density and temperature on filtration performance and soil carbon stability in Florida seagrass beds. Florida Sea Grant. **\$203,567** (2026-2027) **PI: J. Breithaupt**, Co-PIs: **S Brooke**, A. Andres.
- Influences of upwelling and riverine nutrient plumes on the mesophotic coral ecosystems of the west Florida shelf. Florida Centers of Excellence Research Grants Program. FSU subcontract **\$171,591** (2025-2028) **PI: S. Brooke**
- Integrating oyster farmers into habitat restoration in the Florida Panhandle. The Nature Conservancy **\$25,000** (2024-2026). **PI: S. Brooke**, E. Fuqua*.
- Impact of carry-over effects on crop dynamics in the eastern oyster, *Crassostrea virginica* **\$69,358** (2024-2025).
PI: E. Fuqua*, **S. Brooke**
- Effect of probiotic use on larval survival, growth and settlement success of three shellfish species. Aquaculture Research Council **\$39,313** (2023-2024) **PI: M. Hawkins***, **S. Brooke**
- Summary of oyster restoration material retention and recycling. Florida Wildlife Federation **\$20,000** (2022-2023).
PI: S. Brooke
- Stabilizing and expanding bivalve shellfish seed supply: The mobile oyster hatchery. Oyster Seed Holdings. **\$78,629** (2022-2024) **PI: S. Brooke**
- A review of oyster restoration projects in the Gulf of Mexico. Florida Wildlife Federation. **\$15,000** (2020-2021).
PI: S. Brooke
- The Apalachicola Bay System Initiative. Triumph Inc. **\$7,998,678** (2019-2024). **PI: S. Brooke**, Co-PI: F Coleman

Rearing of bay scallop (*Argopecten irradians*) juveniles for research and restoration. Florida. Florida Fish and Wildlife Commission. **\$35,000** (2019-2020) PI: **S. Brooke**

Assessment of benthic invertebrate and fish communities associated with artificial reefs off Wakulla County. Florida. Florida Fish and Wildlife Commission. **\$36,928** (2019-2020) PI: **S. Brooke**

Seasonal and latitudinal variation in community structure of Symbiodinium associated with stony corals. Florida Inst. Oceanography. Use of the Florida Keys Marine Lab facilities: **\$3,024** (2019-2020). PI **S. Brooke**

Combining habitat suitability and physical oceanography models for targeted discovery of new benthic communities on the west Florida Slope. NOAA Office of Ocean Exploration. **\$426,316**. (2018-2021) PIs: **S. Brooke**, A Baco-Taylor, J. Ingels, S. Morey.

Exploration and characterization of fine-scale physical-biogeochemical environment over deep coral reefs on the west Florida slope using integrated ROV-lander-sensor systems. NOAA Office of Ocean Exploration. FSU subcontract **\$44,485** (2018-2021). PI: **S. Brooke**

Development of a pilot bay scallop (*Argopecten irradians*) hatchery and grow out facility. Florida Fish and Wildlife Research Institute. **\$33,300** (2018-2019). PI: **S. Brooke**

Data Dissemination from Past Projects. Deep-Sea Coral Research off South Florida. NOAA DSCRTP. **\$8,000** (2017-2018). PI: **S Brooke**

Continuing research on Atlantic deep-water habitats. Bureau of Ocean Energy Management. FSU subcontract **\$389,000** (2017-2022). **S. Brooke**

Applications of Green Technology for Habitat Restoration and Artificial Reef Construction. Schmidt Ocean Technologies. FSU subcontract \$40,000 (2017-2018). **S. Brooke**

Assessment of proposed deep-water coral habitat areas of particular concern in the Gulf of Mexico. Florida Wildlife Federation. **\$10,000** (2016-2017). PI: **S Brooke**

Seagrass abundance and productivity in St George Sound and Apalachee Bay, Florida. Florida Fish and Wildlife Conservation Commission. **\$100,000** (2016-2017). PIs: **S. Brooke**, F. Coleman

In situ growth rates of stony corals in the northeastern Gulf of Mexico. PADI Foundation **\$5,785** (2014-2016). PI: **S. Brooke**

Habitat characterization and vulnerability assessment of coral and sponge reefs in the northeastern Gulf of Mexico. NOAA Coral Reef Conservation Program **\$62,660** (2014-2016). PI: **S. Brooke**

Role of environmental cues in driving variability of reproductive periodicity in North Atlantic deep-water corals. Marine Alliance Science Technology Scotland **\$20,500** (2012-2013). PIs: **S. Brooke**, JM Roberts

Extreme corals 2011: Habitat characterization and video analysis. NOAA Deep Sea Coral Research and Technology Program **\$95,000** (2011-2012). PIs: SW Ross, **S Brooke**.

Atlantic Deepwater Canyons Study. Bureau of Ocean Energy Management. **\$3,000,000** (2010-2016). PIs: CSA Inc. **S. Brooke**, SW Ross.

Insights into the sensitivity of cold-water communities to drilling mud: enhancing diagnosis and decision-making with emphasis on *Lophelia*. Norwegian Research Council. FSU subcontract **\$15,000** (2010-2011). PI: **S. Brooke**

Extreme corals 2010: Exploration of deep coral habitat in the SEUS. NOAA Deep Sea Coral Research and Technology Program **\$115,000** (2010-2011). PIs: SW Ross, **S Brooke**.

Lophelia II: Reproductive biology. Continuing Ecological Research on Deep-sea Corals. US Geological Survey **\$28,000** (2010-11). PI: **S. Brooke**

Benthic-pelagic coupling in deep coral ecosystems. NOAA CIOERT **\$80,389** (2010). PIs: T Frank, **S Brooke**, T Sutton, A Remsen.

South Atlantic information resources: data search and literature synthesis. Research Planning Inc. **\$11,000** (2009-11). PI: **S. Brooke**

The Linkage Between Pelagic and Benthic Ecosystems. NOAA CIOERT **\$84,369** (2009-2010). PIs: T Frank, **S Brooke**, T Sutton, A Remsen.

Recovery potential of damaged deep-water *Oculina* habitat and fish populations: the effect of human intervention. NURC \$40,000, 11 days ship/technical divers (2008-2009). PIs C Koenig, **S Brooke**.

Florida's deep-water oases: Exploration and characterization of deep reef ecosystems. NOAA Office of Ocean Exploration **\$262,000** (2007-2008). PIs: C Messing, **S Brooke**.

Mapping and characterization of deep sea coral ecosystems off the coast of Florida. NOAA Office of Ocean Exploration **\$101,571** (2004-2005): PIs: **S Brooke**, C Messing, J Reed

Reproduction and larval biology of deep-water hydrocorals from the Aleutian Islands. NMFS Alaska \$12,000 (2004-2005): PI. **S. Brooke**

Characterization of northern Gulf of Mexico deep-water hard-bottom communities with emphasis on *Lophelia* coral. Minerals Management Service **\$229,848** (2003-2006). PIs: CM Young, **S Brooke**.

Reproduction and larval biology of deep-water hydrocorals from the Aleutian Islands. NMFS Alaska **\$10,000** (2003). PI: **S Brooke**

The occurrence and ecology of deep-water corals and associated communities in the Gulf of Mexico. NOAA Office of Ocean Exploration, **7 days ship/ROV** (2003-2004). PIs: W Schroeder, **S Brooke**, J Olson.

Maintenance of critical fish spawning habitat: reproduction of the Ivory Tree Coral, *Oculina varicosa*. NOAA MARFIN **\$68,396** (1999-2001): PI **S Brooke**

TEACHING AND SUPERVISORY EXPERIENCE:

Courses developed

2008 University of Oregon upper level undergraduate course
 Marine Biology lecture (Bi357): 3 credits (2008)
 Marine Biology lab (Bi357L): 1 credit (2008)

Postdoctoral Scholars

2025-present: Lauren Rice
 2023-present: Elizabeth Mansfield
 2021-2023: Cheston Peterson

Students

Current

2023-present: Co-supervisor, MSc, Ecology and Evolution, FSU (A Domen)
 2021-present: Co-supervisor, PhD, Ecology and Evolution, FSU (M Hawkins)
 2020-present: Co-supervisor, PhD, Ecology and Evolution, FSU (L Anthony)
 2020-present: Co-supervisor, PhD, Geography, FSU (J Bueno)
 2019-present: Co-supervisor, Ph.D Earth Ocean and Atmospheric Sciences, FSU (A Alfasso)
 2018-present: Committee member, PhD, Ecology and Evolution, FSU (J. Horacek)

Graduated

2025: Co-supervisor, PhD, Ecology and Evolution, FSU (E Fuqua)
 2025: Co-supervisor, MSc, Ecology and Evolution, FSU (M Wintermantel)
 2024: Co-supervisor, MSc, Ecology and Evolution, FSU (B Walton)
 2023: Co-supervisor, MSc, Ecology and Evolution, FSU (R Bowman)
 2023: Committee member, PhD, Earth Ocean and Atmospheric Sciences, FSU (W Brantley)
 2022: Supervisor, MSc Earth Ocean and Atmospheric Sciences, FSU (A Sogluizzo)
 2022: Committee member, PhD, Earth Ocean and Atmospheric Sciences, FSU (N Morgan)
 2021: Supervisor, MSc Earth Ocean and Atmospheric Sciences, FSU (N Blank)
 2020: Co-supervisor, Ph.D, Ecology and Evolution, FSU (A Engleman)
 2020: Committee member, MSc, Earth Ocean and Atmospheric Sciences, FSU (A Shantharam)
 2020: Supervisor, undergraduate Honors in the Major, Ecology and Evolution, FSU (Eli Myron)
 2019: Committee member, MSc, Halmos College of Natural Sciences Nova Southeastern University (S. Eagan)
 2019: Supervisor, undergraduate Independent Study, Ecology and Evolution, FSU (Lucia Gil-Morales)
 2019: Supervisor, undergraduate Independent Study, Ecology and Evolution, FSU (Halle Velasquez)
 2019: Co-supervisor, MSc Earth Ocean and Atmospheric Sciences, FSU (A Alfasso)
 2018: Committee member, MSc, University of South Florida, College of Marine Science (K Davis)
 2017: Co-Supervisor, MSc Earth Ocean and Atmospheric Sciences, FSU (AD Heil)
 2017: Committee member, MSc, Fish Ecology, University of South Florida (K Wall)

2015: Supervisor, undergraduate Independent Study, Ecology and Evolution, FSU (M Olguin)
2012: Committee member and co-supervisor, MSc Marine Biology, UNCW (A. Zilg)
2010: Committee member and co-supervisor, PhD Marine Biology, University of Oregon (M. Wolf)
2008: Committee member and co-supervisor, MSc Marine Biology, NOVA Southeastern (K. Shirur)
2006: Committee member and co-supervisor, MSc Marine Biology, University of Oregon (M. Holmes)
2005: Supervisor for an undergraduate student (S. Bund)

CERTIFICATIONS AND PERTINENT SKILLS:

Current: AAUS Scientific Diver. FSU academic dive program
BSAC qualified sports diver (1988). Nitrox certified (1995), VIMS dive team member (1994-1996), NOAA diver certified to 130ft (1995), Aquarius saturation diver (1995), HBOI dive team (1997-2002), FWC dive team (2006-2007). Pediatric First Responder (2003-2005), EMT-B (1993-1995), Emergency Vehicle Operator (1994).

US FEDERAL SERVICE:

Coral Advisory Panel Vice Chair, South Atlantic Fisheries Management Council (2019-present).
Systems Management Plan Working Group, South Atlantic Fisheries Management Council (2017-present)
Coral HAPC working group, Gulf of Mexico Fishery Management Council (2015-2018)
Coral Scientific and Statistical Committee, Gulf of Mexico Fishery Management Council (2013-present)
Conservation Seat, Olympic Coast National Marine Sanctuary Advisory Council (Jan 2012 - 2013)
Coral Advisory Panel, South Atlantic Fisheries Management Council (2005-2019).

OTHER SERVICE

Florida State University Coastal and Marine Lab Faculty Evaluation Committee Chair (2021-2023)
Florida Oyster Recovery Science: Member (2020-present), Mapping Sub-Committee (2021-2023), Steering Committee (2023-present), Data Gaps Committee (2023-present)
Florida State University Dive Control Board Member (2016-present)
Florida State University Coastal and Marine Lab Boating Safety Committee (2022-present)
Oyster Modeling and Management Project Advisory Panel (2022-present)

MEMBERSHIPS

American Academy of Underwater Sciences
Deep Sea Biology Society
Deep Ocean Stewardship Initiative