

ADDIE LYNNE BINSTOCK

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Nationality: American

EDUCATION

University of New England, MSc Marine Science | June 2021-May 2023

Cumulative GPA: 4.0

Thesis: Integrating electronic and natural tags to advance elasmobranch life history studies over varied spatiotemporal scales

Advisor: Dr. John A. Mohan

University of Vermont, BS Animal Sciences, minor Wildlife Biology | Aug 2013-Dec 2016

Cumulative GPA: 3.41

Thesis: Impacts of Harmful Algal Blooms on California Sea Lions

EXPERIENCE

2021-Present *Graduate Research and Teaching Assistant, Mohan Shark and Fish Ecology Lab*

- Developed, led, and conducted research projects that focus on stock assessments and ecosystem-based management, utilizing mathematical and statistical models
- Explored environmental covariates, species-specific parameters and intraspecific variations for use in stock assessment and population delineations
- Disseminated research findings to management agencies, in presentations at scientific conferences, and in peer-reviewed publications. Content development for social media to engage the public.
- Manage and mentor undergraduate research assistants, including training and assistance with specific projects. Primary laboratory instructor for intro-level marine biology courses.

2020-2021 *Shark Dive Operations Manager, Admiralty Dive Center, St. Thomas USVI*

- Guiding and safety of guests on shark SCUBA dives up to 150ft depth
- Managing bookings and payments, communicate with customers
- Managing shopfront and rental equipment, tank filling, boat maintenance
- All duties associated with PADI Open Water Dive Instructor courses

2019-2020 *Marine Scientist, Western Australia Fisheries' Non-Lethal SMART Drumline trial*

- Caught, handled, tagged, and safely released large coastal sharks using drumlines
- Collected measurements, photographs, videos, and genetic material from sharks caught
- Management and input of large data sets and drumlines while at sea in rough conditions

2019-2018 *Research Operations Manager, Barefoot Conservation, West Papua, Indonesia*

- Managed all dive research operations on a remote field research station, including equipment preparation, scheduling, and conducting research dives

- Trained, planned, coordinated, and led research assistants on scientific dives to collect data for local and national monitoring programs, including Reef Check and Manta Trust
- Coral identification and monitoring
- Invasive species removal project planning and implementation

2018 *Assistant Research Coordinator, Gili Shark Conservation, Lombok, Indonesia*

- Planning, training, managing, and implementing SCUBA roving species density and diversity surveys and assessments of coral reef ecosystems, including benthic and fish communities
- BRUV deployment and video analysis
- Oversight, quality management and quality control of databases
- Taught PADI courses through a scientific lens, including Scientific Diving, Shark Conservation
- Train, supervise, and mentored research interns and volunteers

2017 *Marine Scientist, The Adventure Club, Koh Phi-Phi, Thailand*

- Coral nursery maintenance, including outplanting, maintenance, monitoring, and data management
- Conducted shark conservation program monitoring local Blacktip reef shark nurseries, presenting biology and conservation lectures to guests, and guiding guests on shark interaction experiences

INTERNSHIPS

2018 *Social Media Marketing & PADI Dive Instructor, Oceans 5 & Paradise Interns, Indonesia*

- Maintained and upkept various social media platforms for a 5-star Dive Resort with audiences of 100k+
- Planned, executed, and documented various community events, including beach clean ups and education workshops
- Completed PADI Instructor Development Course

2017 *Scientific Divemaster, Gili Shark Conservation, Lombok, Indonesia*

- Completed PADI Divemaster course
- Conducted subaquatic data collection, including roving species abundance and distribution surveys, BRUV deployment and analysis, Reef monitoring, and photographic tagging of sharks and rays
- Data entry and analysis, including quality control management

2015-2016 *Animal Care, ECHO Leahy Center for Lake Champlain, Burlington, VT*

- Assisted with animal husbandry and aquarium upkeep of in house reptiles, amphibians, and marine species
- Participated in endangered turtle species nest monitoring, rehabilitation, and release program
- Organized and participated in volunteer engagement events

TEACHING & OUTREACH

2022 Teaching Assistant, Cellular and Molecular Biology of Marine Organisms, Marine Speaker Series, University of New England

2022 Kennebunk Fire Department Shark Safety Lifeguard Training

~~2021~~ 2022 Teaching Assistant, Ecology and Evolution of Marine Organisms, University of New England

2019-2020 SMART Drumline Education and Outreach, Shark Surfing Safety, Gracetown, WA, Australia

2018 Lecturer, Manta Ray Biology and Conservation, Lost Paradise Charters, Indonesia

2017-Present PADI Open Water Scuba Instructor, including scientific diving instruction and mentoring

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PRESENTATIONS

Binstock, AL, Drymon, M., Falterman, B, Richards, T, Wells, D, Mohan, *This Gulf is Big Enough for All of Us: Intraspecific variability in Gulf of Mexico Blacktip sharks* In: University of New England College of Arts and Sciences Graduate Research Seminar. Oral presentation. UNE

Binstock, AL, Richards, T., Banks, K., Streich, M., Stunz, G., White, C., Whitney, N., Drymon, M., Wells, D., Mohan, *JA Sink or Swim? Variability in post-release mortality of four common shark species captured in shore-based recreational fisheries* In: American Fisheries Society Conference. Poster Presentation. August 20, 2022. Spokane, WA

Binstock, AL, Richards, T., Banks, K., Streich, M., Stunz, G., White, C., Whitney, N., Drymon, M., Wells, D., Mohan, *JA Sink or Swim? Variability in post-release mortality of four common shark species captured in shore-based recreational fisheries* In: University of New England College of Arts and Sciences Research Symposium. Oral presentation. UNE May 6, 2022. Biddeford, ME.

SOCIETY MEMBERSHIP

2021-Present American Elasmobranch Society

2021-Present American Fisheries Society

2016-Present Professional Association of Diving Instructors

RESEARCH SKILLS AND SPECIALIZATIONS

Field Techniques

- Research Vessel operations and deckhand duties, including in rough seas for long periods of time (500+ hours).
- Commercial vessel operations and deckhand duties, including at-sea management of guests, equipment, scheduling, etc.
- Small watercraft operation, trailering, and maintenance
- Fishing techniques: drumlines, beach seine, trawling, rod-and-reel, gill net

- Experience using GPS units and YSI sondes
- Tag deployment: acoustic, satellite, conventional. Internal and external tag implantation.
- Management, use, and care of acoustic receivers and shark monitoring programs while at sea
- BRUV deployment and analysis
- Roving underwater species density and diversity surveys, including transect surveys for reef health monitoring
- Underwater behavioral data collection for manta rays
- Photographic tagging and identification to manage population databases
- SCUBA diving research methods: training, planning, and implementation

Laboratory and Analytical Techniques

- Dissections of elasmobranchs, teleosts, and crustaceans
- Low-speed Isomet saw operation to section shark vertebrae
- Micromill systematic band pair sampling of shark vertebrae
- Stable isotope analysis of shark vertebrae and fish muscle tissue
- Satellite tag and acceleration data logger analysis, including GPS analysis
- R, Prism, Igor PRO Statistical coding program experience