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**HIGHER EDUCATION**

University of Washington Ph. D. Fisheries Biology. 1998  
University of California, Berkeley B. A. Biology and Environmental Science. 1990

**EXPERIENCE**

University of Miami. Rosenstiel School Associate Dean for Graduate Studies 2024-present; Marine Biology and Ecology Professor 2020-present, Associate Professor 2015-2020, Assistant Professor. 2009-2015, Research Assistant Professor. 2003-2009.

Wildlife Conservation Society. New York. Fisheries Scientist. 1999 – 2003.

**SELECTED PUBLICATIONS**

- O'Farrell, H.B., **E.A. Babcock**, and K. McCarthy. 2024. Bycatch mitigation for commonly caught shark species in the Gulf of Mexico reef bottom longline fishery. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science*. 2024;16:e10310: -12. Doi:10.1002/mcf2.10310
- Karlovic, T.C., F. S. M. Chioatto, **E.A. Babcock**, and J. F. Dias. 2024. Secondary sexual dimorphism and ontogenetic shifts in habitat use by the lesser guitarfish *Zapteryx brevirostris*. *Journal of Fish Biology*. 1–13. <https://doi.org/10.1111/jfb.15833>
- Chigbu, P, **E.A. Babcock**, D.M. Gibson, D. Hoskins-Brown, R. Jagus, J.A. Miller, M.A. Sexton, S.L. Smith, B. Stevens, D.J. Die, E. Schott, and V. Young. 2023. Preparing a diverse future workforce in marine and fisheries science: The NOAA Living Marine Resources Cooperative Science Center. *Oceanography* 36(4) preprint doi:10.5670/oceanog.2024.139
- Urquhart, J. P., D. B. Olson and **E. A. Babcock**. 2023. Generalized additive models for categorical count data: An exploration of the decline of queen triggerfish *Balistes vetula* in the Bahamas and Turks and Caicos. *Fisheries Management and Ecology* 00:1-12 DOI: 10.1111/fme.12617
- Tewfik, A., **E. A. Babcock**, M. Phillips, J. F. Moreira-Ramírez, F. Polanco, J. Marroquin, M. Castillo, N. Auil Gomez, and R. McNab. 2022. Simple length-based approaches offer guidance for conservation and sustainability actions in two Central American small-scale fisheries. *Aquatic Conservation: Marine and Freshwater Ecosystems* 32:1372–1392. DOI: 10.1002/aqc.3827
- Quennessen, V. I., **E. A. Babcock**, and J. W. White. 2023. Accounting for transient dynamics could improve the use of marine protected areas as a reference point for fisheries management. *Canadian Journal of Fisheries and Aquatic Sciences* 80: 85-104. Doi: <https://doi.org/10.1139/cjfas-2022-012>
- Flowers, K. I., **E. A. Babcock**, Y. P. Papastamatiou, M. E. Bond, N. Lamb, A. Miranda, R. Nuñez, J. Valentin-Albanese, G. M. Clementi, M. C. Kelley and D. D. Chapman. 2022. Varying reef shark abundance trends inside a marine reserve: evidence of a Caribbean reef shark decline. *Marine Ecology Progress Series* 683:97-107. DOI: <https://doi.org/10.3354/meps13954>
- O'Farrell, H. and **E. A. Babcock**. 2021. Shortfin mako hot sets – Defining high bycatch conditions as a basis for bycatch mitigation. *Fisheries Research* 244 (2021) 106123 doi: 10.1016/j.fishres.2021.106123
- Karlovic, T.C., R.R. Gomes, P.C. Paiva, **E.A. Babcock** and J. F. Dias. 2021. Functionality and effectiveness of Marine Protected Areas in Southeastern Brazilian waters for demersal elasmobranchs. *Frontiers in Marine Science* 8:694846. doi: 10.3389/fmars.2021.694846

- Omori, K.L., C.A. Tribuzio, **E.A. Babcock**, and J.M. Hoenig. 2021. Methods for identifying species complexes using a novel suite of multivariate approaches and multiple data sources: A case study with Gulf of Alaska rockfish. *Frontiers in Marine Science* 8:663375. doi: 10.3389/fmars.2021.663375
- Ramirez, M. D., T. Popovska, and **E. A. Babcock**. 2021. Global synthesis of sea turtle von Bertalanffy growth parameters through Bayesian hierarchical modeling. *Marine Ecology Progress Series* 657:191-207. doi: 10.3354/meps13544
- Perryman, H. A., J. H. Tarnecki, A. Grüss, **E. A. Babcock**, S. R. Sagarese, C. H. Ainsworth, and A. M. Gray DiLeone. 2019. A revised diet matrix to improve the parameterization of a West Florida Shelf Ecopath model for understanding harmful algal bloom impacts. *Ecological Modelling* 416:108890. doi:10.1016/j.ecolmodel.2019.108890
- Tewfik, A., **E. A. Babcock**, R. S. Appeldoorn, and J. Gibson. 2019. Declining size of adults and juvenile harvest threatens sustainability of a tropical gastropod, *Lobatus gigas*, fishery. *Aquatic Conservation: Marine and Freshwater Ecosystems* 2019:1-21. doi: 10.1002/aqc.3147
- Grüss, A., J. F. Walter, **E. A. Babcock**, F. C. Forrestal, J. T. Thorson, M. V. Lauretta, and M. J. Schirripa. 2019. Evaluation of the impacts of different treatments of spatio-temporal variation in catch-per-unit-effort standardization models. *Fisheries Research* 213:75–93. doi: 10.1016/j.fishres.2019.01.008
- Babcock, E. A.**, A. Tewfik, and V. Burns-Perez. 2018. Fish community and single-species indicators provide evidence of unsustainable practices in a multi-gear reef fishery. *Fisheries Research* doi: 10.1016/j.fishres.2018.07.003
- O'Farrell H, A. Grüss, S. R. Sagarese, **E. A. Babcock**, and K. A. Rose. 2017. Ecosystem modeling in the Gulf of Mexico: current status and future needs to address ecosystem-based fisheries management and restoration activities. *Reviews in Fish Biology and Fisheries*. DOI 10.1007/s11160-017-9482-1
- Harford, W. J., S. G. Smith, J. S. Ault and **E. A. Babcock**. 2016. Cross-shelf habitat occupancy probabilities for juvenile groupers in the Florida Keys coral reef ecosystem. *Marine and Coastal Fisheries* 8:147-159. doi:10.1080/19425120.2015.1074967
- Babcock, E. A.**, W. J. Harford, R. Coleman, J. Gibson, J. Maaz, J. Foley and M. Gongora. 2015. Bayesian depletion model estimates of spiny lobster abundance at two marine protected areas in Belize with or without in-season recruitment. *ICES Journal of Marine Science* 72 (Suppl. 1):i232–i243. doi: 10.1093/icesjms/fsu226
- Karnauskas, M. and **E. A. Babcock**. 2012. Comparisons between abundance estimates from underwater visual census and catch-per-unit-effort in a patch reef system. *Marine Ecology Progress Series* 468: 217-230. doi: 10.3354/meps10007

### **SYNERGISTIC ACTIVITIES**

International Commission for the Conservation of Atlantic Tunas. Member of the U. S. Delegation to the Standing Committee on Research and Statistics (1999-present)

Living Marine Resources Cooperative Science Center: Project director (2015-present)

Courses taught: Bayesian Statistics for Marine Scientists, Fishery Management and Conservation, Statistics for Environmental Management, Conservation Biology of the Galapagos.