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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. Marine Biology and Ecology. Associate Professor. 2015-present.

University of Miami. Marine Biology and Fisheries. Assistant Professor. 2009-2015.

University of Miami. Marine Biology and Fisheries. Research Assistant Professor. 2003-2009.

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

PUBLICATIONS

1. Books and monographs:

1. Camhi, M. D., E. K. Pikitch and **E. A. Babcock**, editors. 2008. *Sharks of the Open Ocean*. Blackwell Publishing. Oxford. 502 pp.
2. **Babcock, E. A.** 1998. *Dynamic programming models of fishermen's choice of target species assemblage in the U. S. west coast groundfish trawl fishery*. Ph. D. Dissertation. University of Washington. Seattle, Washington. 164 pp.

Peer reviewed book chapters:

1. Dowling, N.A., J.R. Wilson, M. Rudd, **E.A. Babcock**, M. Caillaux, J. Cope, D. Dougherty, R. Fujita, T. Gedamke, M. Gleason, N. Gutierrez, A. Hordyk, G.W. Maina, P.J. Mous, D. Ovando, A.M. Parma, J. Prince, C. Revenga, J. Rude, C. Szuwalski, S. Valencia, and S. Victor. 2016. FishPath: A Decision Support System for Assessing and Managing Data- and Capacity-Limited Fisheries. In: T.J. Quinn II, J.L. Armstrong, M.R. Baker, J. Heifetz, and D. Witherell (eds.), *Assessing and Managing Data-Limited Fish Stocks*. Alaska Sea Grant, University of Alaska Fairbanks. doi:10.4027/amdlfs.2016.03
2. **Babcock, E. A.** 2008. A review of recreational fisheries for pelagic sharks worldwide. pp. 193-204 in *Sharks of the Open Ocean*. Camhi, M., E. K. Pikitch and **E. A. Babcock**, editors. Blackwell.
3. **Babcock, E. A.** and H. Nakano. 2008. Data collection, research and assessment efforts for pelagic sharks by the International Commission for the Conservation of Atlantic Tuna. pp. 472-477 in *Sharks of the Open Ocean*. Camhi, M., E. K. Pikitch and **E. A. Babcock**, editors. Blackwell.
4. Camhi, M., E. Lauck, E. K. Pikitch and **E. A. Babcock**. 2008. A global overview of commercial fisheries for open ocean sharks. pp. 166-192 in *Sharks of the Open Ocean*. Camhi, M., E. K. Pikitch and **E. A. Babcock**, editors. Blackwell.
5. McAllister, M. K., E. K. Pikitch and **E. A. Babcock**. 2008. Why are Bayesian methods useful for the stock assessment of sharks. pp. 351-368 in *Sharks of the Open Ocean*. Camhi, M., E. K.

Pikitch and **E. A. Babcock**, editors. Blackwell.

6. Pikitch, E. A., M. Camhi. and **E. A. Babcock**. 2008. Introduction to sharks of the open ocean. pp. 3-13 in *Sharks of the Open Ocean*. Camhi, M., E. K. Pikitch and **E. A. Babcock**, editors. Blackwell.
7. Skomal, G., **E. A. Babcock** and E. K. Pikitch. 2008. Indices of blue and mako shark abundance derived from U. S. Atlantic recreational fishery data. pp. 205-212 in *Sharks of the Open Ocean*. Camhi, M., E. K. Pikitch and **E. A. Babcock**, editors. Blackwell.

2. Journal articles

1. Fields, A.T., G. A. Fischer, S. K. H. Shea, H. Zhang, D. L. Abercrombie, K. A. Feldheim, **E. A. Babcock**, and D. D. Chapman. 2018. Species composition of the international shark fin trade assessed through a retail-market survey in Hong Kong. *Conservation Biology* doi:10.1111/cobi.13043
2. Goes, M., **E. A. Babcock**, F. Bringas, P. Ortner, and G. Goni. 2017. The impact of improved thermistor calibration on the expendable bathythermograph profile data. *Journal of Atmospheric and Oceanic Technology* 9:1947-1961. doi:10.1175/JTECH-D-17-0024.1
3. Tewfik, A., **E. A. Babcock**, J. Gibson, V. R. Burns-Perez, S. Strindberg. 2017. Benefits of a replenishment zone revealed through trends in focal species at Glover's Atoll, Belize. *Marine Ecology Progress Series* 580: 37–56, 2017. doi:10.3354/meps12290
4. Bond, M. E., J. Valentin-Albanese, **E. A. Babcock**, D. Abercrombie, N. F. Lamb, A. Miranda, E. K. Pikitch, D. D. Chapman. 2017. Abundance and size structure of a reef shark population within a marine reserve has remained stable for more than a decade. *Marine Ecology Progress Series* 576:1-10. doi:10.3354/meps12241
5. Grüss, A., J.T. Thorson, **E.A. Babcock**, and J. H. Tarnecki. 2017. Producing distribution maps for informing ecosystem-based fisheries management using a comprehensive survey database and spatio-temporal models. *ICES Journal of Marine Science* doi:10.1093/icesjms/fsx120
6. 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
7. Grüss, A., K. A. Rose, J. Simons, C. H. Ainsworth, **E. A. Babcock**, D. D. Chagaris, K. De Mutsert, J. Froeschke, P. Himchak, I. C. Kaplan, H. O'Farrell and M. J. Zetina-Rejon. 2017. Recommendations on the Use of Ecosystem Modeling for Informing Ecosystem-Based Fisheries Management and Restoration Outcomes in the Gulf of Mexico. *Marine and Coastal Fisheries*. 9:1, 281-295, DOI:10.1080/19425120.2017.1330786
8. Grüss, A., J. T. Thorson, S. R. Sagarese, **E. A. Babcock**, M. Karnauskas, J. F. Walter III, M. Drexler. 2017. Ontogenetic spatial distributions of red grouper (*Epinephelus morio*) and gag grouper (*Mycteroperca microlepis*) in the U.S. Gulf of Mexico. *Fisheries Research* 193:129-142 doi:10.1016/j.fishres.2017.04.006
9. McDonald, G., B. Harford, A. Arrivillaga, **E. A. Babcock**, R. Carcamo, J. Foley, R. Fujita, T. Gedamke, J. Gibson, K. Karr, J. Robinson and J. Wilson. 2017. An indicator-based adaptive management framework and its development for data-limited fisheries in Belize. *Marine Policy* 76: 28–37. doi:10.1016/j.marpol.2016.11.027
10. Harford, W. J., T. Gedamke, **E.A. Babcock**, R. Carcamo, G. McDonald and J.R. Wilson. 2016. Management strategy evaluation of a multi-indicator adaptive framework for data-limited fisheries management. *Bulletin of Marine Science* 92(4) doi: 10.5343/bms.2016.1025

11. Grüss, A., **E. A. Babcock**, R. Sagarese, M. Drexler, D. D. Chagaris, C. H. Ainsworth, B. Penta, S. deRada and T. T. Sutton. 2016. Improving the spatial allocation of functional group biomasses in spatially-explicit ecosystem models: insights from three Gulf of Mexico models. *Bulletin of Marine Science* 92(4) doi:10.5343/bms.2016.1057
12. Hoenig, J., A.Y-H. Then, **E. A. Babcock**, N. G. Hall, D. Hewitt and S. A. Hesp. The logic of comparative life history studies for estimating key parameters, with a focus on natural mortality rate. *ICES Journal of Marine Science* 73: 2453-2467. doi:10.1093/icesjms/fsw089
13. Harford, W.H., and **E. A. Babcock**. 2016. Aligning monitoring design with fishery decision-making: examples of management strategy evaluation for reef-associated fisheries. *Aquatic Living Resources* 29 (205). doi:10.1051/alr/2016018
14. 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
15. Ortiz de Zárate, V. and **E. A. Babcock**. 2016. Estimating individual growth variability in albacore (*Thunnus alalunga*) from the North Atlantic stock; aging for assessment purposes. *Fisheries Research* 180:54-66 doi:10.1016/j.fishres.2015.07.030
16. Harford, W. J., C. Ton, and **E. A. Babcock**. 2015. Simulated mark-recovery for spatial assessment of a spiny lobster (*Panulirus argus*) fishery. *Fisheries Research* 165:42-53. doi: 10.1016/j.fishres.2014.12.024
17. **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
18. Karnauskas, M. and **E. A. Babcock**. 2014. An analysis of indicators for the detection of effects of marine reserve protection on fish communities. *Ecological Indicators* 46:454-465. doi:10.1016/j.ecolind.2014.07.006
19. Feldheim, K.A., S. H. Gruber, J. D. Dibattista, **E. A. Babcock**, S. T. Kessel, A. P. Hendry, E. K. Pikitch, M. V. Ashley and D. D. Chapman. 2014. Two decades of genetic profiling yields first evidence of natal philopatry and long-term fidelity to parturition sites in sharks. *Molecular Ecology* 23:110-117. doi: 10.1111/mec.12583
20. **Babcock, E. A.**, R. Coleman, M. Karnauskas and J. Gibson. 2013. Length-based indicators of fishery and ecosystem status: Glover’s Reef Marine Reserve, Belize. *Fisheries Research* 147:434-445 doi:10.1016/j.fishres.2013.03.011
21. Bond, M. E., **E. A. Babcock**, E. K. Pikitch, D. L. Abercrombie, N. F. Lamb and D. D. Chapman. 2012. Reef Sharks Exhibit Site-Fidelity and Higher Relative Abundance in Marine Reserves on the Mesoamerican Barrier Reef. *PLoS One* 7(3): e32983. doi:10. 1371/journal.pone.0032983
22. 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
23. Karnauskas, M., L. M. Chérubin, B. E. Huntington, **E. A. Babcock** and D. A. Thoney. 2012. Physical forces influence the trophic structure of reef fish communities on a remote atoll. *Limnology and Oceanography* 57(5):1403-1414. doi:10.4319/lo.2012.57.5.1403
24. Avellaneda, P. M., J. D. Englehardt, J. Olascoaga, **E. A. Babcock**, L. Brand, D. Lirman, W. F. Rogge, H. Solo-Gabriele and G. Tchobanoglous. 2011. Relative risk assessment of cruise ship’s biosolids disposal alternatives. *Marine Pollution Bulletin* 62: 2157–2169. doi:10. 1016/j.marpolbul. 2011.07.006
25. **Babcock, E. A.** and A. D. MacCall. 2011. How useful is the ratio of fish density outside versus

- inside no-take marine reserves as a metric for fishery management control rules? *Canadian Journal of Fisheries and Aquatic Sciences* 68: 343–359. doi:10. 1139/F10-146
26. Karnauskas, M., B. E. Huntington, **E. A. Babcock** and D. Lirman. 2011. Pre-existing spatial patterns in fish abundances influence species-specific responses in a Caribbean marine reserve. *Marine Ecology Progress Series* 432: 235–246. doi: 10. 3354/meps09151
 27. Karnauskas, M., D. B. McClellan, J. W. Wiener, M. W. Miller and **E. A. Babcock**. 2011. Inferring trends in a small-scale, data-limited tropical fishery based on fishery-independent data. *Fisheries Research* 111: 40-52. doi:10. 1016/j.fishres. 2011.06.010
 28. Salomon A. K, S. K. Gaichas, O. P. Jensen, V. N. Agostini, N. A. Sloan, J. Rice, T. R. McClanahan, M. H. Ruckelshaus, P. S. Levin, N. K. Dulvy and **E. A. Babcock**. 2011. Bridging the divide between fisheries and marine conservation science. *Bulletin of Marine Science* 87(2):251–274. doi:10. 5343/bms. 2010. 1089
 29. Bakun, A., **E. A. Babcock**, S. E. Lluch-Cota, C. Santora and C. J. Salvadeo. 2010. Issues of ecosystem-based management of forage fisheries in “open” non-stationary ecosystems: the example of the sardine fishery in the Gulf of California. *Reviews in Fish Biology and Fisheries* 20:9-29. doi:10. 1007/s11160-009-9118-1
 30. Doukakis, P., **E. A. Babcock**, E. K. Pikitch, A. R. Sharov, M. Baimukhanov, S. Erbulekov, Y. Bokova and A. Nimatov. 2010. Management and recovery options for Ural River beluga sturgeon. *Conservation Biology* 24:769–777. doi: 10. 1111/j. 1523-1739. 2010.01458.x
 31. Huntington, B. E., M. Karnauskas, **E. A. Babcock** and D. Lirman. 2010. Untangling natural seascape variation from marine reserve effects using a landscape approach. *PLOS One* 5(8):e12327. doi:10. 1371/journal.pone.0012327
 32. Bakun, A., **E. A. Babcock** and C. Santora. 2009. Regulating a complex adaptive system via its wasp-waist: grappling with ecosystem-based management of the New England herring fishery. *ICES Journal of Marine Science* 66: 1768-1775. doi:10. 1093/icesjms/fsp073
 33. Chapman D. D., **E. A. Babcock**, S. H. Gruber, J. D. Dibattista , B. R. Franks, S. A. Kessel, T. Guttridge, E. K. Pikitch and K. A. Feldheim. 2009. Long term natal site-fidelity by immature lemon sharks (*Negaprion brevirostris*) at a subtropical island. *Molecular Ecology* 18:3500-3507. doi:10. 1111/j. 1365-294X. 2009.04289.x
 34. Pikitch, E. K. C. Santora and **E. A. Babcock**. 2008. New frameworks for reconciling conservation with fisheries: incorporating uncertainty and ecosystem processes into fisheries management. pp. 1177–1187 in Nielsen, J, J. J. Dodson, K. Friedland, T. R. Hamon, J. Musick and E. Verspoor, editors. *Reconciling Fisheries with Conservation: Proceedings of the Fourth World Fisheries Congress*. American Fisheries Society Symposium 49.
 35. **Babcock, E. A.**, M. K. McAllister and E. K. Pikitch. 2007. Comparison of harvest control policies for rebuilding overfished populations within a fixed rebuilding time frame. *North American Journal of Fisheries Management* 27:1326–1342. doi:10.1577/M06-124.1
 36. Chapman, D. D., E. K. Pikitch, **E. A. Babcock** and M. S. Shivji. 2007. Deep-diving and diel changes in vertical habitat use by Caribbean reef sharks, *Carcharhinus perezii*. *Marine Ecology Progress Series* 344: 271–275. doi:10.3354/meps06941
 37. Apostolaki P., **E. A. Babcock** and M. K. McAllister. 2006. Contrasting deterministic and probabilistic ranking of catch-quotas and area/size-based fisheries management. *Canadian Journal of Fisheries and Aquatic Sciences* 63: 1777-1792. doi:10.1139/F06-078
 38. **Babcock, E. A.**, E. K. Pikitch, M. K. McAllister, P. Apostolaki and C. Santora. 2005. A perspective on the use of spatialized indicators for ecosystem-based fishery management through spatial zoning. *ICES Journal of Marine Science* 62:469-476. doi: 10.1016/j.icesjms.2005.01.010
 39. Chapman, D. D., E. K. Pikitch, **E. A. Babcock** and M. S. Shivji. 2005. Marine reserve design

and evaluation using automated acoustic telemetry: a case-study involving coral reef-associated sharks in the Mesoamerican Caribbean. *Marine Technology Society Journal* 39:42-55.

40. Pikitch, E. K., D. D. Chapman, **E. A. Babcock** and M. S. Shivji. 2005. Habitat use and demographic population structure of elasmobranchs at a Caribbean atoll (Glover's Reef, Belize). *Marine Ecology Progress Series* 302:187-197. doi: 10.3354/meps302187
 41. **Babcock, E. A.** and E. K. Pikitch. 2004. Can we reach agreement on a standardized approach to ecosystem-based fishery management? *Bulletin of Marine Science* 74:685-692.
 42. Pikitch, E. K., C. Santora, **E. A. Babcock**, A. Bakun, R. Bonfil, D. O. Conover, P. Dayton, P. Doukakis, D. Fluharty, B. Heneman, E. D. Houde, J. Link, P. Livingston, M. Mangel, M. K. McAllister, J. Pope and K. J. Sainsbury. 2004. Ecosystem-based fishery management. *Science* 305:346-7. doi:10.1126/science.1098222
 43. Majluf, P., **E. A. Babcock**, J. C. Riveros, M. Arias Schreiber and W. Alderete. 2002. Catch and bycatch of seabirds and marine mammals by the small scale fishery of Punta San Juan, Peru. *Conservation Biology* 16: 1333-1343. doi:10.1046/j.1523-1739.2002.00564.x.
 44. McAllister, M. K., E. K. Pikitch and **E. A. Babcock**. 2001. Using demographic methods to construct Bayesian priors for the intrinsic rate of increase in the Schaefer model and implications for stock rebuilding. *Canadian Journal of Fisheries and Aquatic Sciences* 58: 1871–1890. doi: 10.1139/cjfas-58-9-1871
 45. **Babcock, E. A.** and E. K. Pikitch. 2000. A dynamic programming model of fishing strategy choice in a multispecies trawl fishery with trip limits. *Canadian Journal of Fisheries and Aquatic Science*. doi:57:357-370. 10.1139/cjfas-57-2-357
 46. Pikitch, E. K., J. R. Wallace, **E. A. Babcock**, D. L. Erickson, M. Saelens and G. Oddsson. 1998. Pacific halibut bycatch in the Washington, Oregon and California groundfish and shrimp trawl fisheries. *North American Journal of Fisheries Management* 18:569-586. doi:10.1577/1548-8675(1998)018<0569:PHBITW>2.0.CO;2
3. Other works, publications and abstracts:

International Commission for the Conservation of Atlantic Tunas (ICCAT) publications (available from www.iccat.int)

1. **Babcock E.A.**, and Cortes E. 2017. Bayesian surplus production models for shortfin mako sharks: are the results consistent when using different software packages? ICCAT Collective Volume of Scientific Papers SCRS/2017/055
2. O, Farrell, H. and **E. A. Babcock**. 2017 Evaluation of environmental conditions as predictors for mako shark CPUE using generalized linear mixed modeling and quantile regression. ICCAT Collective Volume of Scientific Papers SCRS/2017/057
3. Perryman, H. and **E. A. Babcock**. 2016. Generalized Additive Models for Predicting the Spatial Distribution of Billfishes and Tunas across the Gulf of Mexico. *ICCAT Collective Volume of Scientific Papers* 73 SCRS/2016/099.
4. **Babcock, E.A.** and E. Cortes. 2015. Bayesian surplus production model applied to blue shark catch, CPUE and effort data. *ICCAT Collective Volume of Scientific Papers*
5. **Babcock, E.A.** and F. Arocha. 2015. Standardized CPUE from the rod and reel and small-scale gillnet fisheries of La Guaira, Venezuela. *ICCAT Collective Volume of Scientific Papers* 71(5):2239-2255.
6. **Babcock, E. A.** 2014. Application of a Bayesian Surplus Production model to preliminary data for south Atlantic albacore. *ICCAT Collective Volume of Scientific Papers*. 70(3): 1326-1334.
7. **Babcock, E. A.** 2013. Updated index of abundance for shortfin mako sharks from the U.S. Marine

- Recreational Fisheries Statistics Survey. *ICCAT Collective Volume of Scientific Papers* 69(4): 1639-1646.
8. Schirripa, M. J. and **E. A. Babcock**. 2012. Possible stock production models for blue marlin in the Atlantic Ocean up to 2009. *Collective Volume of Scientific Papers ICCAT* 68(4):1479-1497.
 9. **Babcock, E. A.** 2012. Application of a Bayesian surplus production model to preliminary data for south Atlantic and Mediterranean albacore *Collective Volume of Scientific Papers ICCAT* 68(2):519-528
 10. **Babcock, E. A.** and Cortes, E. 2010. Bayesian surplus production model applied to porbeagle catch, CPUE and effort data. *Collective Volume of Scientific Papers ICCAT* 65(6): 2051-2057.
 11. **Babcock, E. A.** and Cortes, E. 2009. Updated Bayesian surplus production model applied to blue and mako shark catch, CPUE and effort data. *Collective Volume of Scientific Papers ICCAT*. 64(5): 1568-1577.
 12. **Babcock E. A.** and G. Skomal. 2008. Indices of blue, mako and thresher shark abundance derived from U. S. Atlantic recreational fishery data. *Collective Volume of Scientific Papers ICCAT* 62(5):1405-1416.
 13. Simpfendorfer, C., E. Cortés, M. Heupel, E. Brooks, **E. Babcock**, J. Baum, R. McAuley, S. Dudley, J. D. Stevens, S. Fordham and A. Soldo. 2009. An integrated approach to determining the risk of over-exploitation for data-poor pelagic Atlantic sharks. *Collective Volume of Scientific Papers ICCAT* 62(5):1405-1416.
 14. **Babcock E. A.** 2007. Application of a Bayesian surplus production model to Atlantic white marlin. *Collective Volume of Scientific Papers ICCAT* 60(5): 1643-1651
 15. **Babcock, E. A.** 2006. Integrating habitat-based CPUE standardization into assessment models for Atlantic billfish. *Collective Volume of Scientific Papers ICCAT* 59(1): 161-169.
 16. **Babcock, E. A.** and E. Cortes. 2005. Surplus production model applied to the data for blue and mako sharks available at the 2001 ICCAT Bycatch Working Group and other published data. *Collective Volume of Scientific Papers ICCAT* 58(3):1044-1053.
 17. Apostolaki, P., E. Cortes, **E. A. Babcock**, E. Brooks and L. Beerkircher. 2005. Use of an age-structured model for the stock assessment of blue shark in the North Atlantic. *Collective Volume of Scientific Papers ICCAT* 58(3):1001-1018.
 18. Skomal, G., **E. A. Babcock** and E. K. Pikitch. 2005. Indices of blue and mako shark abundance derived from U. S. Atlantic recreational fishery data. *Collective Volume of Scientific Papers ICCAT* 58(3):1034-1043.
 19. **Babcock, E. A.** and M. K. McAllister. 2004. Modeling biases and contradictions among catch rate indices of abundance for Atlantic white marlin (*Tetrapterus albidus*). *Collective Volume of Scientific Papers ICCAT* 56(1):110-119.
 20. McAllister, M. K., **E. A. Babcock**, P. Apostolaki and E. K. Pikitch. 2004. Outlining a statistical modelling framework to support the development of a new area-based management regime for Atlantic bluefin tuna. *Collective Volume of Scientific Papers ICCAT* 56(3):1134-1143.
 21. Apostolaki, P., **E. A. Babcock** and M. K. McAllister. 2004. Further investigation of the effects of stock mixing on estimates of the size of North Atlantic bluefin tuna population using the six-area population dynamics model presented in SCRS/02/88. *Collective Volume of Scientific Papers ICCAT* 56(3):1121-1133.
 22. Apostolaki, P., **E. A. Babcock**, G. Scott, J. Cramer and M. K. McAllister. 2003. Using an age-structured and partially spatially-structured population dynamics model to evaluate the potential effects of area closures on stock rebuilding of North Atlantic Swordfish. *Collective Volume of Scientific Papers ICCAT* 55(4): 1597-1619.

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24. **Babcock, E. A.** and M. K. McAllister. 2003. Bayesian methods for accounting for data contradictions in stock assessment of Atlantic white marlin *Collective Volume of Scientific Papers ICCAT* 55(2): 541-558.
25. McAllister, M. K. and **E. A. Babcock**. 2002. Stock assessment approaches and their data requirements for dealing with mixing of western and eastern north Atlantic bluefin tuna: a Bayesian perspective. *Collective Volume of Scientific Papers ICCAT* 54: 377-389.0
26. Apostolaki, P., M. K. McAllister, **E. A. Babcock** and R. Bonfil. 2002. Use of a generalized stage-based, age-, and sex-structured model for shark stock assessment. *Collective Volume of Scientific Papers ICCAT* 54: 1182-1198.
27. **Babcock, E. A.** and M. K. McAllister. 2002. Bayesian generalized linear models for standardizing catch rate indices of abundance. *Collective Volume of Scientific Papers ICCAT* 54: 1641-1670.
28. McAllister, M. K., **E. A. Babcock** and E. K. Pikitch. 2001. Using Bayesian methods to improve stock assessment and management of stock rebuilding when there is uncertainty in processing affecting recruitment. *Collective Volume of Scientific Papers ICCAT* 52: 1071-1093.
29. McAllister, M. K., **E. A. Babcock** and E. K. Pikitch. 2001. Evaluating the relative merits of alternative methods to weight different time series of abundance indices in stock assessment. *Collective Volume of Scientific Papers ICCAT* 52: 1094-1115.
30. McAllister, M. K., **E. A. Babcock** and E. K. Pikitch. 2001. Using Bayesian methods and decision analysis as a rational basis for dealing with conflicting stock assessment results while providing management advice on stock rebuilding. *Collective Volume of Scientific Papers ICCAT* 52: 1706-1728.
31. McAllister, M. K., **E. A. Babcock**, E. K. Pikitch and M. H. Prager. 2000. Application of a non-equilibrium generalized production model to South and North Atlantic Swordfish: combining Bayesian and demographic methods for parameter estimation. *Collective Volume of Scientific Papers ICCAT* 51: 1523 - 1551.
32. **Babcock, E. A.**, E. K. Pikitch and M. K. McAllister. 2000. Catch rates of Blue sharks (*Prionace glauca*) in the U. S. Atlantic recreational fishery (revised). *Collective Volume of Scientific Papers ICCAT* 51: 1850 – 1858.

Fisheries stock assessment working papers

1. **Babcock, E.A.**, A. Tewfik, S. Strindberg, V. Burns, and J. Gibson. 2015. The Status of Queen Conch at Glover's Reef Marine Reserve. Wildlife Conservation Society research report to the Belize Fisheries Department, Belize.
2. **Babcock, E. A.** 2012. A standardized CPUE index of abundance for Gulf of Mexico blacktip sharks from the Marine Recreational Statistics Survey (MRFSS). Southeast Data Assessment and Review document SEDAR29-WP-10. www.sefsc.noaa.gov/sedar/
3. **Babcock, E. A.**, R. Coleman and J. Gibson. 2012. Toward catch quotas for spiny lobster (*Panulirus argus*) at Glover's Reef Marine Reserve. Wildlife Conservation Society research report to the Fisheries Department, Belize.
4. **Babcock, E. A.** 2010. Indices of Abundance from the Marine Recreational Fisheries Statistics Survey. SEDAR 21. HMS Sandbar, Dusky, and Blacknose sharks Southeast Data Assessment and Review document SEDAR21-DW-11. www.sefsc.noaa.gov/sedar/

5. Cortes, E. and **E. A. Babcock**. 2006. Assessment of large coastal, blacktip, and sandbar sharks using surplus production methods. Shark SEDAR Assessment Workshop Document SEDAR11-AW-05. www.sefsc.noaa.gov/sedar/
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Teaching Specialization :

1. MBE 716: Bayesian Statistics for Marine Scientists (Spring 2010-present, even years)
2. MBF 571: Fishery Management and Conservation (Spring 2011, 2012 with David Die)
3. RSM 612: Statistics for Environmental Management (Fall 2011-present)
4. MSC 423: Galapagos Conservation Biology (Spring 2010 (with Andy Bakun), 2011-2017)