

Abbreviated CVs for Key Project Personnel

Dr. Jason Earl Adolf

Monmouth University Biology Department and Urban Coast Institute

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Google Scholar profile: <https://scholar.google.com/citations?user=5U1ptnAAAAAJ&hl=en>

(A) Professional Preparation

Roger Williams College	Marine Biology	B.S.	1993
University of Hawai'i at Manoa	Botany	M.S.	1996
University of Maryland College Park	Biol. Oce.	Ph.D.	2002

Postdoctoral training:

UMD Horn Point Laboratory	Phytoplankton Ecology	2002-2004
UMD Center of Marine Biotechnology	Phytoplankton Ecology	2004-2008

My **research interests** are in the field of marine ecology including harmful algal blooms and fish communities. Particularly, understanding the environmental conditions and mechanisms that drive changes in community composition, and how these changes impact the functioning of marine and aquatic ecosystems.

(B) Appointments

2017 – pres.: Endowed Associate Professor of Marine Science, Monmouth University
2013 – 2017: Associate Professor and Chair, Marine Science, University of Hawaii Hilo, HI
2008 – 2013: Assistant Professor, Marine Science, University of Hawaii Hilo, HI
2006 – 2008: Adj. Assistant Professor, Environmental Science, Gettysburg College, PA
2004 – 2008: Assistant Research Scientist, UMBI COMB
2003 – 2004: Assistant Research Scientist, Horn Point Laboratory
2001 – 2002: Maryland Sea Grant Traineeship, Horn Point Laboratory
1996 – 2001: Grad. Research Asst., Horn Point Laboratory
1994 – 1996: Grad. Research Asst., Dept. of Chemistry, University of Hawaii Manoa
1993: Teaching Assistant, Department of Biology, University of Hawaii Manoa

(C) Relevant peer-reviewed papers (abbreviated list. 40 total. * = undergraduate co-author)

Stoeckle, M. Y., **Adolf, J.**, Ausubel, J. H., Charlop-Powers, Z., Dunton, K. J., & Hinks, G. (2022). Current laboratory protocols for detecting fish species with environmental DNA optimize sensitivity and reproducibility, especially for more abundant populations. *ICES Journal of Marine Science*, 79(2), 403–412. <https://doi.org/10.1093/icesjms/fsab273>

*Badlowski, G.A., **Adolf, J.E.**, and Fouad, G. 2021. Spatial analysis of water quality parameters in Hilo Bay, Hawai'i using a combination of interpolated surfaces and hot spot analysis. *Env. Mon. Assessment*
Published online Feb 10, 2021 <https://doi.org/10.1007/s10661-021-08894-6>

Stoeckle, M.Y., **Adolf, J.E.**, Charlop-Powers, Z., Dunton, K.J., Hinks, G., VanMorter, S.M. 2020. Trawl and eDNA assessment of marine fish diversity, seasonality, and relative abundance in coastal New Jersey, USA. *ICES J Mar Sci.* pp. 1-12. doi:10.1093/icesjms/fsaa225

- Adolf, J.E.**, *Salduti, K., *Conlon, E., Ernst, E., Heddendorf, B., Shifren, S., and Schuster, R. (2022) Nitrogen-limited harmful algal blooms in Deal Lake, New Jersey. *Urban Naturalist*, 57. <https://www.eaglehill.us/URNAonline2/access-pages/057-Adolf-accesspage.shtml>
- Harding, L.W. Jr, Mallonnee, M.E., Perry, E.S., Miller, W.D., **Adolf, J.E.**, Gallegos, C.L., and Paerl, H.W. 2020. Seasonal to interannual variability of primary production in Chesapeake Bay: Prospects to reverse eutrophication and change trophic classification. *Scientific Reports*. 10(1): 1-20.
- Adolf, J.E.**, Burns, J., Walker, J.K., and Gamiao, S. 2019. Near shore distributions of phytoplankton and bacteria in relation to submarine groundwater discharge-fed fishponds, Kona coast, Hawai'i, USA. *Est. Coast. Shelf Sci.* 219:341-353.
- Harding, L.W. Jr., Mallonnee, M.E., Perry, E.S., Miller, W.D., **Adolf, J.E.**, Gallegos, C.L., and Paerl, H.W. 2019. Long-term trends, current status, and transitions of water-quality in Chesapeake Bay. *Scientific Reports* (Published online April 30, 2019) 9:6709 <https://doi.org/10.1038/s41598-019-43036-6>
- Shamshirbrand, S., Nodoushan, E.J., **Adolf, J.E.**, Manaf, A.A., Mosavi, A., and Chau, K.-W. 2019. Ensemble models with uncertainty analysis for multi-day ahead forecasting of chlorophyll *a* concentration in coastal waters. *Eng. App. Comp. Fluid Mech.* 13(1):91-101.
- Alizadeh, M.J., Kavianpour, M.R., Danesh, M., **Adolf, J.E.**, Shamshirbrand, S., and Chau, K.-W. 2018. Effects of river flow on the quality of estuarine and coastal waters using machine learning models. *Eng. App. Comp. Fluid Mech.* 12(1):810-823.
- Adolf, J.E.**, Yeager, C.L., Mallonee, M.E., Miller, W.D., and Harding, L.W. Jr. 2006a. Environmental forcing of phytoplankton floral composition, biomass, and primary productivity in Chesapeake Bay, USA. *Estuarine, Coastal and Shelf Science* 67:108-122.
- (book chapter)**
- Adolf, J.E.**, Parrow, M.W., and Place, A.R. 2020. 'Karlodinium veneticum: still blooming and still toxic sixty-two years later' In: D.V. Subba Rao [Ed.] *Dinoflagellates: classification, evolution, physiology, and ecological significance*. Nova Science Publishers, Inc., New York

(D) Synergistic Activities

- (1) Leader of Monmouth University Phytoplankton and Harmful Algal Blooms undergraduate research lab (2017-present); (2) Teaching undergraduate courses in marine biology, biological oceanography and research methods at Monmouth University; (3) extensive and ongoing experience conducting research with undergraduate students, including operation and maintenance of ocean observing systems; (4) affiliate of Monmouth University Urban Coast Institute; (5) Established and coordinates the Coastal lakes Observing Network (CLONet), a participatory citizen science water quality and HAB monitoring program; (6) Co-leader NJ HAB and Lake Management Expert Team; (7) Part 107 FAA certified drone pilot (sUAS)

Recently funded projects and accomplishments (J.E. Adolf)

1. Dunton, K.J. and J.E. Adolf. 2021. eDNA Fisheries Monitoring Survey. Funded through Orsted (Wind Developer) (6 years total beginning summer 2021. \$1,306,323)

We are working with Rutgers University to implement the fisheries monitoring plan for the Orsted Ocean Winds 1 development area. Monmouth University is in charge of the eDNA surveys and has successfully completed all planned sampling to date; analyzed >200 eDNA samples (with associated environmental data) from these trips; prepared presentations for regional and national meetings

2. Jason E. Adolf, co-I Megan Phifer-Rixey and Keith Dunton. ‘Investigating environmental DNA (eDNA) as a tool for biological monitoring of the lower Hudson-Raritan Estuary’, Source: Achelis and Bodman Foundation (\$50,000, Jan 2020 – Dec 2021)

We successfully completed six planned survey trips on the lower Hudson-Raritan Estuary, including paired eDNA – trawl sampling of fish as well as associated environmental / hydrographic data. Results have been prepared in a final report for the funding agency.

3. Urban Coast Institute (w/ Tony MacDonald, Tom Herrington, and Jason E. Adolf). 2021 – 2023. 150,000 dollars for the Monmouth University Urban Coast Institute (UCI) to extend and further develop the Coastal Lakes Observing Network (CLONet). Source: Plangere Foundation. (\$300k since 2019)

Continuation of a project begun in 2019 that bring together university, state, and citizen scientists to improve our understanding of coastal lake ecosystems. Included development and supervision of a new technician position at Monmouth University.

4. Jason E. Adolf. Coastal lakes portion of 2020 - 2021 EPA HABs Multi-Purpose Grant (PI: Robert Newby). Source U.S. Environmental Protection Agency via NJ Dept. of Environmental Protection. (\$127,000)

Subaward with NJDEP to investigate harmful algal blooms (HABs) in Monmouth County coastal Lakes. Includes eDNA metabarcoding analysis of phytoplankton communities present during HAB events.

Prior awards demonstrating project management experience

Integrated Ocean Observing System, National Ocean Service, NOAA, Dept. of Commerce. ‘Enhancing and sustaining the Pacific Islands Ocean Observing System’. PI – Chris Ostrander. *AWARDED*: \$248,180 to co-PI **Adolf** for Hawaii Island water quality buoys 2016-2021

After establishing Hawaii Island’s first continuous water quality buoy in Hilo Bay (2009), gained funding through PacIOOS for operation, maintenance and expansion including hiring and supervision of technician. Award transferred to Dr. Steven Colbert when I left UH Hilo in 2017.

NOAA Coastal Storms Program: ‘Installation of coastal radar arrays to monitor ocean currents and improve community storm preparedness: Hilo Bay, Hawai‘i Island’ PI – Jason E. Adolf. Co-PIs Steven Colbert, Henry Carson, Pierre Flament (UH Manoa). *AWARDED 2013-2015, \$200k*

Oversaw the installation, operation, and maintenance of Hawaii Island’s first high-frequency radar (HF radar) system for tracking coastal surface currents. System was integrated with PacIOOS HF radar systems.

NSF Major Research Instrumentation – “MRI: Acquisition of a Hitachi S-3400N-II Variable Pressure Scanning Electron Microscope with an Analytical Quantitative Element Detector for the University of Hawaii at Hilo”. Jason Adolf (PI), Co-PI’s Marta deMaintenon, Mazen Hamad, Brian Perry, Steven Lundblad. *AWARDED* – Sept 24, 2010 – 2013, \$396,208

Led equipment proposal and oversaw installation of new equipment at UH Hilo. Served as SEM lab manager for multiple research and student groups who used the facility after installation (until 2017 when I left UH Hilo for Monmouth University).

Keith Joseph Dunton, Ph.D.

CONTACT INFORMATION

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EDUCATION

- Ph.D. 2014 Marine and Atmospheric Sciences.** School of Marine and Atmospheric Sciences, Stony Brook University, Stony Brook, New York.
- M.S. 2005 Marine and Atmospheric Sciences.** Marine Science Research Center, Stony Brook University, Stony Brook, New York.
- B.S. 2001 Biology with a concentration in Marine Biology.** Stony Brook University, Stony Brook, New York
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RECENT RELEVANT RESEARCH EXPERIENCE

- 2021 – Present Associate Professor of Conservation Biology,** Department of Biology, School of Science, Monmouth University, West Long Branch, NJ.
- 2015 - 2021 Assistant Professor of Conservation Biology,** Department of Biology, School of Science, Monmouth University, West Long Branch, NJ.
- 2014 - 2015 Postdoctoral Associate and Co-Principle Investigator,** College of Agriculture and Related Sciences, Delaware State University, Dover, DE
- 2009 –2014 Co-Principle Investigator/Graduate Research Assistant,** School of Marine and Atmospheric Sciences, Stony Brook University, Stony Brook, NY.
- 2005 – 2009 Research Scientist,** School of Marine and Atmospheric Sciences, Stony Brook University, Stony Brook, NY
- 2002 – 2005 Graduate Research Assistant,** Marine Science Research Center, Stony Brook University, Stony Brook, NY.

GRANTS/CONTRACTS RECEIVED

- 2023*** U.S. Department of the Navy – \$34,161. K.J. Dunton. Atlantic Sturgeon Research Naval Weapons Station Earle, NJ (awaiting final contract effective 9/25/23)
- 2022** New Jersey Resource Monitoring Initiative. PENDING. K.J. Dunton, J.E. Adolf, J.Kneebone. Acoustic telemetry, an innovative, non-extractive approach for monitoring protected, prohibited, and commercially/recreationally important species within a major migratory corridor through Wind Lease Areas and cable landing sites along the NJ coast.
- 2022** U.S. Department of the Navy – \$33,407. K.J. Dunton. Atlantic Sturgeon Research Naval Weapons Station Earle, NJ
- 2021** Orsted Ocean Wind - \$1,306,323 K.J. Dunton and J. A. Adolf. eDNA Fisheries Monitoring Surveys for Ocean Wind Array. 2021 – 2023 Pre-Construction monitoring \$443,255; 2023 – 2025 Construction monitoring \$413,017; 2025 – 2027 Post-Construction \$430,900
- 2021** Orsted South Fork - \$531,438. K.J. Dunton. Export Cable Monitoring Study for South Fork Wind Farm.
- 2021** U.S. Department of the Navy – \$75,138. K.J. Dunton. Atlantic Sturgeon Research Naval Weapons Station Earle, NJ
- 2020** U.S. Department of the Navy – \$38,382. K.J. Dunton. Atlantic Sturgeon Research Naval Weapons Station Earle, NJ
- 2019** New Jersey Sea Grant – \$136,774. K.J. Dunton and J. Kneebone Survivorship and post-released behavior of prohibited sharks captured in the land-based recreational shark Fishery.
- 2019** The Achelis and Bodman Foundation. \$50,000. Adolf, J.E., M. Phifer-Rixey, and K.J. Dunton. Investigating Environmental DNA (eDNA) as a tool for biological monitoring of the lower Hudson – Raritan Estuary.
- 2019** Fisheries Research Foundation – 3 weeks ship time aboard a 210ft. M/V Albula. Tracing migration pathways and foraging hotspots for vulnerable pelagic sharks across the northwest Atlantic Ocean. Proposal selected and ship time was granted.
- 2019** New York Department of Environmental Conservation. \$100,000. *Contracted* through Stony Brook University. Marine Atlantic Sturgeon addition to the Hudson River Sturgeon Acoustic Database.
- 2017** Urban Coast Institute Faculty Enrichment Grant. \$4,479. K.J. Dunton Evaluating essential finfish habitat and movements within the leased New York Wind Energy Area
- 2016** U.S. Department of the Interior Bureau of Ocean Energy Management; \$199,000. M.G. Frisk, E.Ingram and K.J. Dunton. Monitoring Atlantic sturgeon habitat use in the New York Wind Farm Lease Area.
- 2016** New York Department of Environmental Conservation; \$299,979. Frisk, M.G., D. Fox, M Breece, K.J. Dunton. *Contracted* through Stony Brook University. Characterization of Atlantic and Shortnose sturgeon biology in the Hudson River Estuary.

- 2016 Urban Coast Institute Faculty Enrichment Grant.** \$4,774. **K.J. Dunton** and J. Nickels. Integrating emerging technological tools of fisheries science into the classroom
- 2016 Urban Coast Institute Faculty Enrichment Grant.** \$4,985. **K.J. Dunton** and J. Webb. Evaluating Habitat Use of Atlantic Sturgeon around Naval Weapons Station Earle.
- 2016 Urban Coast Institute Faculty Enrichment Grant.** \$4,994. **K.J. Dunton**. Evaluating the potential habitat use of the endangered Atlantic Sturgeon in Sandy Hook Bay.
- 2014 National Marine Fisheries Service Saltonstall-Kennedy Grant.** Federal Share \$316,325; Total Grant \$532,203. Fox, D., **K.J. Dunton**, L.A. Bonacci, K.A. McKown, and J. Armstrong. Conservation engineering within the Monkfish Gillnet Fishery: Reducing negative fishery interaction through gear modification and assessing post-release mortality and behavior of Atlantic sturgeon.
- 2010 NOAA Species Recovery Grant Program.** Federal Share \$2,442,460; Total Grant \$2,715,716. Frisk, M.G., A. Jordaan, **K.J. Dunton**, D.O. Conover, D.D. Chapman, E.K. Pikitch, and M.C. Melnychuk. Determining the connectivity among and fine-scale habitat use within Atlantic sturgeon aggregation areas in the Mid-Atlantic Bight: implications for gear restricted management areas to reduce bycatch and improve population status.
- 2010 Hudson River Foundation Graduate Fellowship.** Total Grant \$16,000. **Dunton, K.J.** Population dynamics and development of an effective area-based management scenario to reduce bycatch, conserve and improve the population status of Atlantic sturgeon.
- 2008 USFWS – New York State Wildlife Grant.** Federal Share \$354,414; Total Grant \$674,659. Frisk, M.G., A. Jordaan, **K.J. Dunton**, and D.O. Conover. Development of an effective area-based management scenario to reduce bycatch and improve the population status of Hudson River Atlantic sturgeon.

PUBLICATIONS

19. Stoeckle, M.Y., Adolf, J., Ausubel, J.H., Charlop-Powers, Z., **Dunton, K.J.** and Hinks, G., 2022. Current laboratory protocols for detecting fish species with environmental DNA optimize sensitivity and reproducibility, especially for more abundant populations. ICES Journal of Marine Science 79 (2): 403-412.
18. **Dunton, K.J.**, K. Sparta, C.M. Martinez, M.G. Frisk, O.N. Shipley. 2021. First observation of movement rates and repeated migration in a Western Atlantic torpedo ray (*Tetronarce occidentalis*, Storer, 1843) in the northwest Atlantic Ocean. Northeastern Naturalist 28(2): N7.
17. Stoeckle, M.Y., J. Adolf, Z. Charlop-Powers, **K.J. Dunton**, G. Hinks. S.M. Vanmorter. 2020. Trawl and eDNA Assessment of Marine Fish Diversity, Seasonality, and Relative Abundance in Coastal New Jersey, U.S.A. ICES Journal of Marine Sciences. doi:10.1093/icesjms/fsaa225
16. Rulifson, R.A., C.W. Bangley, J.L. Cudney, A. Dell’Apa, **K.J. Dunton**, M.G. Frisk, M.S. Loeffler, M.T. Balazik, C. Hager, T. Savoy, H.M. Brundage, and W.C. Post. 2020. Seasonal Presence of Atlantic Sturgeon and Sharks at Cape Hatteras, a Large Continental Shelf Constriction to Coastal Migration. Marine and Coastal Fisheries 12:308–321

15. Ingram, E.C., R.M. Cerrato, **K.J. Dunton**, and M.G. Frisk. 2019. Endangered Atlantic sturgeon in the New York Wind Energy Area: implications of future development in an offshore wind energy site. *Scientific Reports* 9: 12432.
14. Frisk, M.G., O.N. Shipley, C.M. Martinez, K.A. McKown, J.P. Zacharias, and **K.J. Dunton**. 2019. First observations of long-distance migration in a large skate species, *Leucoraja ocellata*: Implications for population connectivity, ecosystem dynamics, and management. *Marine and Coastal Fisheries* 11(202):202-212.
13. Fox, A.G., E. S. Stowe, **K.J. Dunton**, and D. L. Peterson. 2018. Seasonal Occurrence of Atlantic Sturgeon in the St. Johns River, Florida. *Fisheries Bulletin* 116: 219-227.
12. Melnychuk, M.M., **K.J. Dunton**, A. Jordaan, K.A McKown, and M.G. Frisk. 2017. Informing conservation strategies for the endangered Atlantic sturgeon using acoustic telemetry and multi-state mark-recapture models. *Journal of Applied Ecology* 54 (3): 914-925.
11. **Dunton, K.J.**, A. Jordaan, D.H. Secor, C.M. Martinez, T. Kehler, K.A. Hattala, J.P. Van Eenennaam, M. Fisher, K.A. McKown, D.O. Conover and M.G. Frisk. 2016. Age and growth of Atlantic Sturgeon, *Acipenser oxyrinchus oxyrinchus*, in the New York Bight. *North American Journal of Fisheries Management* 36(1): 62-73
10. Breece, M.W., D.A. Fox, **K.J. Dunton**, M.G. Frisk, A. Jordaan, and M.J. Oliver. 2016. Dynamic Seascapes Predict the Marine Occurrence of an Endangered Species: Atlantic Sturgeon *Acipenser oxyrinchus oxyrinchus*. *Methods in Ecology and Evolution* 7: 725-733.
9. **Dunton, K.J.**, A. Jordaan, K.A McKown, L.A. Bonacci, D.O. Conover, and M.G. Frisk. 2015. Marine distribution and habitat use of Atlantic sturgeon (*Acipenser oxyrinchus*) in New York leads to fisheries interactions and bycatch. *Marine and Coastal Fisheries* 7:18-32.
8. Tomichuk, C., J. Colby, M.A. Adonizio, **K.J. Dunton**, M.G. Frisk, D. Fox, and A. Jordaan. 2014. Tagged species detection: approach to monitoring marine species at marine hydrokinetics projects. *Proceedings of the 2nd Marine Energy Technology Symposium*. Seattle, WA, 2014. 8 pages.
7. O'Leary S.L., **K.J. Dunton**, T.L. King, D. Chapman, and M.G. Frisk. 2014. Genetic diversity and effective size of Atlantic sturgeon, *Acipenser oxyrinchus oxyrinchus*, river spawning populations estimated from the microsatellite genotypes of marine-captured juveniles. *Conservation Biology* 15: 1173-1181.
6. Sokolowski, M.S., B.A. Allam, **K.J. Dunton**, M. Clark, E. Kurtz, and M.D. Fast. 2012. Immunophysiology of Atlantic sturgeon, *Acipenser oxyrinchus oxyrinchus* (Mitchill), and the relationship to parasitic copepod, *Dicheilesthium oblongum*, (Abilgaard) infection. *Journal of Fish Diseases* 35: 649–660.
5. Wuenschel, M., K. Able, J. Buckel, J. Morley, T. Lankford, A. Branson, D. Conover, D. Drisco, A. Jordaan, **K. Dunton**, D. Secor. R. Woodland, and F. Juanes. 2012. Recruitment patterns and habitat use of young-of-the-year bluefish along the United States east coast: insights from coordinated coastwide sampling. *Reviews in Fisheries Science* 20(2):80-102.

4. **Dunton, K.J.**, D. Chapman, A. Jordaan, K. Feldheim, S.L. O’Leary, K.A. McKown, and M.G. Frisk. 2012. Genetic mixed-stock analysis of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) in a heavily impacted marine habitat indicates the need for routine genetic monitoring. *Journal of Fish Biology* 80: 207–217
 3. Fast M.D., **K.J. Dunton**, A.J. Brown, E. Kurtz, M. Clark, and M.S. Sokolowski. 2011. Host-Pathogen Interactions of Atlantic Sturgeon (*Acipenser oxyrinchus*) and the Parasitic Copepod *Dichelesthium oblongum*. Pages 215-224 in Cipriano, RC, Bruckner AW and Shchelkunov IS, editors. Bridging America and Russia with shared perspectives on aquatic animal health. Proceedings of the third bilateral conference between Russia and the United States. 12-20 July, 2009. Shepardstown, West Virginia. Khaled bin Sultan Living Oceans Foundation, Landover, Maryland, USA.
 2. **Dunton, K.J.**, A. Jordaan, K.A. McKown, M.G. Frisk, and D.O. Conover. 2010. Abundance and distribution of Atlantic sturgeon (*Acipenser oxyrinchus*) within the Northwest Atlantic Ocean: spatial and habitat analyses of five fishery-independent surveys. *Fisheries Bulletin* 108: 450-465.
 1. Fast, M.D., M.S. Sokolowski, **K.J. Dunton**, and P.R. Bowser. 2009. *Dichelesthium oblongum* (Copepoda:Dichelethiidae) infection in wild caught Atlantic Sturgeon, *Acipenser oxyrinchus*. *ICES Journal of Marine Science* 66 (10):2141-2147.
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PRESENTATIONS

Contributed presentations to Professional Societies (and bold indicate Monmouth University Students, # is Stockton University Students)*

60. Zemeckis, D. T. Grothues, J. Adolf, G. DeCelles, **K. Dunton**, J. Kohut, J. Morson, D. Munroe, S. O’Leary, G. Saba, and. 2022. Fisheries monitoring of an offshore windfarm off New Jersey, northeast United States. The Mid-Atlantic Chapter of the American Fisheries Society Meeting, November 15-16, Asbury Park, New Jersey.
59. Adolf, JE., **K.J. Dunton**, S. O’leary. 2022. Integration of Environmental DNA Surveys in Fisheries Monitoring Plans for Offshore Wind. The Mid-Atlantic Chapter of the American Fisheries Society Meeting, November 15-16, Asbury Park, New Jersey.
58. **Craft, H.** *, E. Ingram, M.G. Frisk, **K.J. Dunton**. 2022. Spatial and temporal occurrence of the Endangered Atlantic Sturgeon (*Acipenser oxyrinchus*) at Naval Weapons Station Earle. The Mid-Atlantic Chapter of the American Fisheries Society Meeting, November 15-16, Asbury Park, New Jersey.
57. **Maguire, J.** *, **A. Bryan** *, G. Hinks, L. Barry, **K.J. Dunton**. 2022. Occurrence of the Atlantic Angel Shark, *Squatina dumeril*, along the coast of New Jersey. The Mid-Atlantic Chapter of the American Fisheries Society Meeting, November 15-16, Asbury Park, New Jersey.
56. Scully, R., T. Grouthes, **K.J. Dunton**, C. Wunder. 2022. Analysis of New Jersey Migrant Fishes and Shelf-Estuary Connectivity using Acoustic Telemetry. The Mid-Atlantic Chapter of the American Fisheries Society Meeting, November 15-16, Asbury Park, New Jersey.

55. Grothues, T., J. Adolf, G. DeCelles, **K.J. Dunton**, J. Kohut, J. Morson, D. Munroe, G. Saba, and D. Zemeckis. 2022. Fisheries monitoring of an offshore windfarm off New Jersey, northeast United States. International Council for the Exploration of the Sea (ICES) Annual Science Conference, September 19 - 22, Dublin, Ireland.
54. Ingram, E., L. Butler, **K.J. Dunton**, M.G. Frisk. 2022. Telemetry-Derived SDMs as a Conservation Tool to Inform Offshore Energy Development Interactions. The 152nd Annual Meeting of The American Fisheries Society, Spokane WA August 21-25.
53. Manz, M., O.N. Shipley, **K.J. Dunton**, E. Ingram, M. Fogg, A. Stigliano, J. Zacharias, M. Frisk. 2022. Movements and habitat use of shark species along the US east coast. The 152nd Annual Meeting of the American Fisheries Society, Spokane WA August 21-25.
52. O’leary, S., **K.J. Dunton**, and J.E. Adolf. 2022. Integration of Environmental DNA Surveys in Fisheries Monitoring Plans for Offshore Wind. The 152nd Annual Meeting of the American Fisheries Society, Spokane WA August 21-25.
51. **Dunton, K.J.**, M. Nguyen, D[#]. Dyson[#], B. DiRenzi^{*}, and J. Kneebone. Land-based shark fishing and prohibited sharks in New Jersey. 2022. The 152nd Annual Meeting of the American Fisheries Society, Spokane WA August 21-25.
50. Grothues, T., J. Adolf, G. DeCelles, **K. Dunton**, J. Kohut, J. Morson, D. Munroe, G. Saba, and D. Zemeckis. 2022. Fisheries monitoring of an offshore windfarm off New Jersey: Non-extractive sampling of structured habitat. The 152nd Annual Meeting of the American Fisheries Society, Spokane WA August 21-25.
49. O’leary, S., **K.J. Dunton**, and J.E. Adolf. 2022. The potential of environmental DNA as a low equipment, non-extractive technique for fisheries assessments of offshore wind. 2022. Advanced Non-Extractive Techniques for Resource Assessment for Offshore Wind Status of the Science Workshop on Wildlife and Offshore Wind Energy, July 26, 2022. Tarrytown, New York.
48. Grothues, T., J. Adolf, G. DeCelles, **K. Dunton**, J. Kohut, J. Morson, D. Munroe, G. Saba, and D. Zemeckis. 2022. Fisheries monitoring of an offshore windfarm off New Jersey: Non-extractive sampling of structured habitat. Advanced Non-Extractive Techniques for Resource Assessment for Offshore Wind Status of the Science Workshop on Wildlife and Offshore Wind Energy 2022. July 26, 2022. Tarrytown, New York.
47. **Dunton, K.J.**, M. Nguyen[#], D. Dyson^{*}, B. DiRenzi^{*}, and J. Kneebone. 2021. Demographics Post-Release Survival of Sharks Captured in the Recreational Land-Based Surf Fishery. 151st American Fisheries Society Annual Meeting, Balitmore MD 11-6 to 11-10.
46. Stoeckle, M.Y., Adolf, J., Charlop-Powers, Z., **Dunton, K.J.**, Hinks, G. and VanMorter, S.M. 2021 Trawl and eDNA Assessment of Marine Fish Diversity, Seasonality, and Relative Abundance in Coastal New Jersey. 151st American Fisheries Society Annual Meeting, Balitmore MD 11-6 to 11-10.
45. **Craft, H.**^{*}, M.G. Frisk, E.C. Ingram, and **K.J Dunton**. 2021. Temporal Monitoring of the Endangered Atlantic Sturgeon (*Acipenser oxyrinchus*) in Sandy Hook and Raritan Bay, NJ. 151st American Fisheries Society Annual Meeting, Balitmore MD 11-6 to 11-10.

44. Hinks, G., Stoeckle, M.Y., J. Adolf, Z. Charlop-Powers, **K.J. Dunton**, S.M. Vanmorter. 2020. Trawl and eDNA Assessment of Marine Fish Diversity, Seasonality, and Relative Abundance in Coastal New Jersey. Mid-Atlantic American Fisheries Society Annual Conference, November 13, 2020 (Virtual Online).
43. **Dyson, D[#], M. Nguyen[#], C. Vasas^{*}, J. Kneebone, and K.J. Dunton**. Insights into New Jersey Land Based Recreational Shark Fishery. 2020. Mid-Atlantic American Fisheries Society Annual Conference, November 13, 2020 (Virtual Online).
42. **McFeeters, K.L. ^{*} and K.J. Dunton**. Coastal Movements of Sandbar Sharks (*Carcharinus plumbeus*) Tagged in New Jersey. Mid-Atlantic American Fisheries Society Annual Conference, November 13, 2020 (Virtual Online).
41. Stoeckle, M.Y., J. Adolf, Z. Charlop-Powers, **K.J. Dunton (presented)**, G. Hinks. S.M. Vanmorter. 2020. Trawl and eDNA Assessment of Marine Fish Diversity, Seasonality, and Relative Abundance in Coastal New Jersey 150th Annual Meeting of the American Fisheries Society, Virtual, September 14-25.
40. **Nguyen, M.[#], C.J. Vasas^{*}, L. M. Kelly^{*}, H. Craft^{*}, and K.J. Dunton**. 2019. Demographics of Sharks Captured in the Recreational Land-Based Surf Fishery in Cape May, NJ. Mid-Atlantic Chapter of the American Fisheries Society, Lewes, DE, November 21 – 22.
39. **Vasas, C.J. ^{*}, L. M. Kelly^{*}, H. Craft^{*}, M. Nguyen[#], A.J. Rotondella, K.J. Dunton**. 2019. Cooperative efforts to determine the demographics and post-release survival of sharks captured in the recreational land-based surf fishery. 149th Annual Meeting of the American Fisheries Society and joint conference with the The Wildlife Society, September 29 – October 3, Reno, Nevada.
38. **Vasas, C.J. ^{*}, A. M. Salamone^{*}, G. A. Badlowski^{*}, L. M. Kelly^{*}, T.A. Ohntrup^{*}, A.J. Rotondella, and K.J. Dunton**. 2018. Collaborative Efforts to Evaluate the Demographics and Post-Release Movements of Sharks Captured in the Recreational Land-Based Surf Fishery. Symposium Titled: Bringing in the Experts: Collaborative Research Partnerships with Fishing Industry Stakeholders. 148th Annual Meeting of the American Fisheries Society Atlantic City, NJ, August 19-23.
37. **Dunton, K.J., J.A Webb^{*}, L. M. Kelly^{*}, ^{*}, E. Ingram, D.A. Fox, M.G. Frisk**. 2018. Temporal Monitoring of the Endangered Atlantic Sturgeon (*Acipenser oxyrinchus*) in Sandy Hook Bay. Symposium Titled: Applied Sturgeon Science: Impact Assessment, Monitoring, Protection, Management, and Restoration. 148th Annual Meeting of the American Fisheries Society Atlantic City, NJ, August 19-23.
36. **DeTorre, M.C^{*}**. L. Holt, M.G. Frisk, R.M. Cerrato, and **K.J. Dunton**. 2018. Seasonal Diet and Prey Selectivity of Atlantic Sturgeon in a Coastal Marine Aggregation. 148th Annual Meeting of the American Fisheries Society Atlantic City, NJ, August 19-23.
35. **Badlowski, G.A. ^{*}, and K.J. Dunton**. 2018. Trends in the Abundance and Spatial-Temporal variation of Sharks and Rays in New Jersey Coastal Waters. 148th Annual Meeting of the American Fisheries Society Atlantic City, NJ, August 19-23.

34. Ingram, E., **K.J. Dunton**, and M.G. Frisk. 2018. Occurrence of Atlantic Sturgeon in the New York Wind Energy Area. 148th Annual Meeting of the American Fisheries Society Atlantic City, NJ, August 19-23.
33. **DeTorre, M.C***, L. Holt, M.G. Frisk, R.M. Cerrato, and **K.J. Dunton**. 2017. Seasonal Diet and Prey Selectivity of Atlantic Sturgeon in a Coastal Marine Aggregation. National Coastal and Estuarine Research Federation 24th Biennial Conference, Providence Rhode Island, November 5th- 9th
32. **Badlowski, G***, **K.J. Dunton**. 2017. Trends in the Abundance and Spatial-Temporal variation of Sharks and Rays in New Jersey Coastal Waters. Mid-Atlantic Chapter of the American Fisheries Society, Dover, DE, October 26th-27th.
31. **DeTorre, M.C***, L. Holt, M.G. Frisk, R.M. Cerrato, and **K.J. Dunton**. 2017. Seasonal Diet and Prey Selectivity of Atlantic Sturgeon in a Coastal Marine Aggregation. Mid-Atlantic Chapter of the American Fisheries Society, Dover, DE, October 26th-27th.
30. Frisk, M.G., **K.J. Dunton**, C.M. Martinez, C. Ziegler, J. Zacharias. 2017. Passive acoustic telemetry reveals seasonal long distance migrations in the winter skate (*Leucoraja ocellata*) . Joint meeting of Ichthyologists and Herpetologists, Austin, TX July 12-16.
29. **Lavelle, S*** and **K.J. Dunton**. 2017. Assessing the health of *Fundulus Majalis* populations in selected New Jersey Estuaries. Mid-Atlantic Ecological Society of America, Galloway NJ, April 22.
28. **Webb, J.A.***, M.G. Frisk, D.A. Fox, and **K.J. Dunton**. 2016. Determining the Presence of the Endangered Atlantic Sturgeon (*Acipenser oxyrinchus*) in Sandy Hook Bay. Mid-Atlantic Chapter American Fisheries Society, Bordentown, NJ October 27-28th, 2016
27. **DeTorre, M.C.***, M.G. Frisk, R.M. Cerrato, and **K.J. Dunton**. 2016. Diet of Atlantic Sturgeon, (*Acipenser oxyrinchus*) in a Coastal Marine Aggregation. Mid-Atlantic Chapter American Fisheries Society, Bordentown, NJ October 27-28th, 2016
26. **Lavelle, S*** and **K.J. Dunton**. Assessing the health of *Fundulus Majalis* populations in selected New Jersey Estuaries. ICFNJ Undergraduate Research Symposium March 6th 2016.
25. **Dunton, K.J.**, M.C. Melynychuk, A. Jordaan, K.A. McKown, and M.G. Frisk. 2016. Coastal movements of Atlantic Sturgeon within the Mid-Atlantic Bight. National Marine Fisheries Service (NMFS) workshop “Atlantic and Shortnose Research and Management: Past, Present, and Future” held at National Conservation Training Center (NCTC) in Shepherdstown, WV May 16 - 18, 2016.
24. Breece, M.W. , D.A. Fox, **K.J. Dunton**, M.G. Frisk, A. Jordaan and M.J. Oliver. 2016. Satellite Derived Seascapes Predict Occurrence of an Endangered Species in the Coastal Ocean. National Marine Fisheries Service (NMFS) workshop “Atlantic and Shortnose Research and Management: Past, Present, and Future” held at National Conservation Training Center (NCTC) in Shepherdstown, WV May 16 - 18, 2016.

23. Fox, D.A., A.M. Comer, B.D. Jenkins, M.W. Breece, L.M. Brown, D.C. Kazyak, A.L. Higgs, J. Madsen, **K.J. Dunton**, and K.W. Wark. 2016. Estimating Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*) Spawning Runs in the Delaware and Hudson Rivers. National Marine Fisheries Service (NMFS) workshop “Atlantic and Shortnose Research and Management: Past, Present, and Future” held at National Conservation Training Center (NCTC) in Shepherdstown, WV May 16 - 18, 2016.
22. **Dunton, K.J.**, L.A. Bonacci, M.G. Frisk, K.W. Wark, and D.A. Fox. 2015. Use of fine scale positioning system to assess Atlantic Sturgeon behavior in proximity to large mesh sink gillnets in marine waters. Mid-Atlantic Chapter American Fisheries Society, Cape May, NJ October 28-29th, 2015.
21. Breece, M.W. , D.A. Fox, **K.J. Dunton**, M.G. Frisk, A. Jordaan and M.J. Oliver. 2015. Dynamic Seascapes Predict the Marine Occurrence of an Endangered Species: Atlantic Sturgeon *Acipenser oxyrinchus oxyrinchus*. Mid-Atlantic Chapter American Fisheries Society, Cape May, NJ October 28-29th, 2015.
20. Hager, C., C. Watterson, **K.J. Dunton**, D. Fox, M. Breece, M. Balazik, and D. MacDuffee. 2014. The U. S. Navy’s efforts to track Atlantic sturgeon movements in the Chesapeake Bay. Tidewater Chapter of the American Fisheries Society 28th Annual Meeting. March 21-23, Newport News, VA.
19. Breece, M.W., M.J. Oliver, **K.J. Dunton**, and D.A. Fox. 2014. Using satellites and AUVs in an integrated oceanobservatory to identify Atlantic sturgeon habitat. Ocean Sciences Meeting. February 23-28, Honolulu HA.
18. Breece, M.W., M.J. Oliver, **K.J. Dunton**, and D.A. Fox. 2013. Testing Atlantic sturgeon spring habitat selection with an autonomous underwater vehicle. Mid-Atlantic American Fisheries Society Meeting. November 14-15, Tuckerton, NJ.
17. **Dunton, K.J.**, A. Jordaan, K.A. McKown, and M.G. Frisk*. 2013. Utilizing acoustic telemetry to develop spatial and temporal protection of the endangered Atlantic sturgeon. ICES Annual Science Conference. September 23-27, Reykjavik, Iceland.
16. **Dunton, K.J.**, A. Jordaan, D.A. Fox, K.A. McKown, and M.G. Frisk. 2013. Coast-wide Movements of the endangered Atlantic Sturgeon indicate need for spatial and temporal protection. 7th International Symposium on Sturgeon. July 21-25, Nanaimo, BC, Canada.
15. Breece, M.W., M.J. Oliver, **K.J. Dunton**, and D.A. Fox. 2013. Dynamic environments, dynamic sampling: using gliders, satellites and transmitters to determine Atlantic Sturgeon habitat selection in the mid-Atlantic Bight. 7th International Symposium on Sturgeon. July 21-25, Nanaimo, BC, Canada.
14. **Dunton, K.J.** Movements of Atlantic sturgeon, *Acipenser oxyrinchus*, in relation to an aggregation area. 2012. Annual Progress in Marine and Atmospheric Sciences Graduate Student Symposium. January 27, Stony Brook, NY.
13. **Dunton, K.J.**, A. Jordaan, K.A. McKown, and M.G. Frisk. 2011. Movements of Atlantic sturgeon, *Acipenser oxyrinchus*, in relation to an aggregation area. 141th Annual Meeting of the American Fisheries Society. September 4-8, Seattle, WA. (Poster).

12. **Dunton, K.J.** Population dynamics of Atlantic sturgeon, *Acipenser oxyrinchus*, within the Atlantic Ocean. 2011. Annual Progress in Marine and Atmospheric Sciences Graduate Student Symposium. January 28, Stony Brook, NY. (Poster).
11. **Dunton, K.J.**, D. Chapman, A. Jordaan, S. O'Leary, K.A. McKown, and M.G. Frisk. 2010. Genetic analysis of sub-adult Atlantic sturgeon, *Acipenser oxyrinchus*, in the New York Bight. 140th Annual Meeting of the American Fisheries Society. September 12-16, Pittsburgh, PA.
10. Fast, M.D., **K.J. Dunton**, A. Brown, P.R. Bowser, A.D. Dove, B. Allam, M.S. Sokolowski. 2010. Altered physiology of Atlantic sturgeon (*Acipenser oxyrinchus*) under parasitic copepod (*Dichelesthium oblongum*) infection. 8th International Sea Lice Conference. May 9-12, Victoria, BC, Canada.
9. Fast, M.D., **K.J. Dunton**, A. Brown, E. Kurtz, M. Clark, P.R. Bowser, A.D. Dove, B. Allam, M.S. Sokolowski. 2009. Host-pathogen interactions of Atlantic sturgeon (*Acipenser oxyrinchus*) and the parasitic copepod *Dichelesthium oblongum*. Proceedings of the 3rd Bilateral Conference between the United States and Russia on Aquatic Animal Health. July 11-20, Shepherdstown, WV.
8. Sokolowski, M.S., B. Allam, **K.J. Dunton**, and M.D. Fast. 2009. Spatio-temporal differences in humoral and cellular components of Atlantic sturgeon, *Acipenser oxyrinchus*, blood and their relationship to parasitic copepod infection. 34th annual Eastern Fish Health Workshop. April 27–May 1, Lake Placid, NY.
7. Sokolowski, M.S., **K.J. Dunton**, P.R. Bowser, and M.D. Fast. 2008. *Dichelesthium oblongum* (Copepoda: Dichelethiidae) infection in wild caught Atlantic sturgeon, *Acipenser oxyrinchus*. Theme Session D: New trends in diseases of marine organisms: causes and effects. ICES Annual Science Conference. September 22–26, Halifax, NS, Canada.
6. **Dunton, K.J.**, A. Jordaan, M.G. Frisk, and D.O. Conover. 2008. Use of fishery independent surveys to determine abundance, habitat, distribution and age class structure of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) within the Atlantic Ocean. Symposium: “Sustainable sturgeon: guiding the conservation of sturgeon populations in the face of increasing resource demands and climatic change”. 138th Annual Meeting of the American Fisheries Society. August 17-21, Ottawa, OT, Canada.
5. Sokolowski, M.S., **K.J. Dunton**, P.R. Bowser, and M.D. Fast. 2008. Preliminary histological and serum chemistry analysis of the Atlantic sturgeon, *Acipenser oxyrinchus*, infected with the copepod *Dichelesthium oblongum*. 33rd Eastern Fish Health Workshop. March 31-April 4, Atlantic Beach, NC.
4. **Dunton, K.J.**, A. Jordaan, M.G. Frisk, and D.O. Conover. 2008. Oceanic distribution, abundance, and habitat concentration of sub-adult Atlantic sturgeon within the New York Bight. 64th Annual Northeast Fish and Wildlife Conference. April 27-30, Galloway, NJ.
3. **Dunton, K.J.**, A. Jordaan, M.G. Frisk, and D.O. Conover. 2007. Oceanic distribution, abundance, and habitat concentration of sub-adult Atlantic sturgeon, *Acipenser oxyrinchus*, within the New York Bight. Symposium: Bridging the Gap: Addressing

- critical uncertainties in North American sturgeon conservation and recovery. 137th Annual Meeting of the American Fisheries Society. September 2-6, San Francisco, CA.
2. Jordaan, A., **K.J. Dunton**, D.O. Conover, and K.A. McKown. 2007. Trends in the community structure of young-of-year fishes determined from a long-term survey in the Hudson River. 31st Larval Fish Conference. July 9-12, St Johns, NL, Canada.
 1. **Dunton, K.J.** and D.O. Conover. 2006. Growth of the bluefish *Pomatomus saltatrix* under common garden conditions: comparing the spring and summer spawned cohorts for evidence of countergradient growth variation. 136th Annual Meeting of the American Fisheries Society. September 10-14, Lake Placid, NY.

Invited presentations

9. **Dunton, K.J.** 2022. Coastal Shark acoustic telemetry and PSAT tagging as tools for understanding migration within the Mid-Atlantic. New York Bight Shark Science Meeting April 13th 2022; Kings Park, NY. (Invited speaker/panelist).
8. Ingram, E., **K.J. Dunton**, and M.G. Frisk. 2018. State of the Science Workshop on Wildlife and Offshore Energy Development, November 13-14 2018
7. **Dunton, K.J.**, A. Jordaan, K.A. McKown, and M.G. Frisk (presenting author). 2014. Utilizing acoustic telemetry to develop spatial and temporal protection of the endangered Atlantic sturgeon. Symposium: Spatial ecology of open systems. 144th Annual Meeting of the American Fisheries Society. August 17-21, Quebec, QC, Canada.
6. Watterson, C., C. Hager, **K. Dunton**, D. Fox, M. Breece, M. Balazik, and D. MacDuffee. 2014. Stewards of the Sea: The U.S. Navy's efforts to track Atlantic sturgeon movements in the Chesapeake Bay. Symposium: Telemetry on the Atlantic Coast: Tagging locally and observing globally. 144th Annual Meeting of the American Fisheries Society. August 17-21, Quebec, QC, Canada.
5. Breece, M.W., D.A. Fox, **K.J. Dunton**, and M.J. Oliver. 2014. Identifying marine habitat preferences for Atlantic sturgeon using AUVs, satellites, and telemetry. Symposium: Practical applications of sturgeon research. 144th Annual Meeting of the American Fisheries Society. August 17-21, Quebec, QC, Canada.
4. **Dunton, K.J.**, A. Jordaan, D.A. Fox, K.A. McKown, and M.G. Frisk. 2014. Coast-wide movements of the endangered Atlantic sturgeon indicate need for spatial and temporal protection. Symposium: Atlantic and Gulf Coast Sturgeon Conservation. Southern Division of the American Fisheries Society. January 22-26, Charleston, SC.
3. **Dunton, K.J.**, A. Jordaan, D.A. Fox, K.A. McKown, and M.G. Frisk. 2013. Coastal movements of sub-adult Atlantic sturgeon: Implications for limiting negative interactions of human activities to assist in species recovery. Symposium: Northeast Sturgeon Research Exchange: We Have More in Common Than You Think. 69th Annual Northeast Fish & Wildlife Conference. April 7-9, Saratoga Springs, NY.
2. **Dunton, K.J.**, A. Jordaan, D.A. Fox, M.W. Breece, K.A. McKown, and M.G. Frisk. 2012. Seasonal movements and aggregations of sub-adult Atlantic sturgeon: Implications for limiting the interactions of human activities to assist in species recovery. Symposium: Collaboration Through Fisheries Networks: Restoration of Sturgeon and Paddlefish

Populations. 142nd Annual Meeting of the American Fisheries Society, August 19-23, Minneapolis, MN.

1. **Dunton, K.J.** 2007. Habitat use of Atlantic sturgeon, *Acipenser oxyrinchus*, New York marine waters. Gateway National Recreation Area, National Parks Service, NY.
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PARTICIPATION IN RESEARCH MEETINGS AND WORKSHOPS

Invited Participant

New York Bight Shark Science Workshop. 2022. April 13th, Kings Park, NY. Workshop and meeting to bring together regional shark biologists together to update and discuss research and discuss collaborative opportunities.

Invited Participant

Environmental Effects of Gated Storm Surge Barrier in the Hudson River. 2019.

Workshop and meeting to discuss and provide science based inputs to (1) past experiences with gated surge barrier systems or similar estuary flow obstructions, (2) the turbulence and water speed effects of open flow gates on migrating organisms, and (3) how these barriers can effect tidal wetlands and their sedimentary systems.

Invited Participant

New York Bight Shark Science Workshop. 2018. March 5, 2018 New York Aquarium, Coney Island, NY. Workshop and meeting to bring together regional shark biologists together to update and discuss research and discuss collaborative opportunities.

Co-Host

2nd Northeast Fisheries Observer Seminar Day: Current Research and Management of Atlantic Sturgeon in the Northeast. 2017. January 6th, Monmouth University, West Long Branch, NJ. Workshop and meeting to bring fisheries observers, fishermen, and invited state and federal governmental employees together to show how observer data was being utilized in the current research and management of Atlantic Sturgeon.

Invited Participant

Atlantic and Shortnose Research and Management: Past, Present, and Future. National Conservation Training Center (NCTC) in Shepherdstown, WV May 16 - 18, 2016

Workshop to bring researchers, government agencies, and industry together to discuss the current status and concerns for research with Atlantic and Shortnose sturgeon.

Invited Participant

The Present and Future of Collaboration in Acoustic Telemetry Research on the Atlantic and Gulf Coasts. 2013. January 24, 2013, Charleston, SC. Workshop to bring researchers together from acoustic telemetry networks to enhance cooperative efforts, establish new or strengthen current collaborations, explore potential future funding opportunities, discuss data management and analysis, and solidify the logistics of data exchange between organizations.

Invited Participant

Atlantic States Marine Fisheries Commission Atlantic Sturgeon Technical Committee data workshop. August 19-22, 2013, Providence, RI. *Invited participant.* Gave presentations on

Atlantic sturgeon coastal abundance, age structure, growth models, and genetic structure for the NYDEC and NJDEP.

Invited Participant

Sturgeon Workshop hosted by NOAA's National Marine Fisheries Service Northeast and Southeast Regional Offices. February 8-10, 2011, Alexandria, VA. Sturgeon workshop of invited experts to exchange of information on Atlantic and shortnose sturgeon including ongoing and future threats to both species. The goal of this workshop was to assist NOAA information gathering, whereby individual expert opinion, data, ideas, comments, or recommendations would be used to help inform future recovery and conservation efforts.

Invited Participant

NY Department of Environmental Conservation Lower Hudson/Long Island Bays and Atlantic Ocean Watershed Team Meeting. July 23, 2008, New York, NY. *Invited Participant.* Purpose of this meeting was to conduct priority assessments of "Species of Greatest Conservation Need" within the NY Atlantic Ocean, lower Hudson River, and Long Island bays and estuaries.

Invited Participant

New York Watershed Biodiversity Summit. June 12, 2007, New York, NY. *Invited Participant.* Purpose of the conference is to initiate the drafting of a five year action plan for "Species of Greatest Conservation Need" as identified in the State's Comprehensive Wildlife Conservation Strategy.

Continuing Education

Stock Assessment, Data Collection, Analysis and Management of Sturgeon. 7th International Symposium on Sturgeon. July 21-25 2013, Nanaimo, BC. Workshop to examine stock assessment techniques for sturgeon species.

Introduction to Sturgeon Techniques. 138th AFS Annual Meeting. September 17, 2008, Ottawa, ON. Workshop on learning and understanding approved research techniques sturgeon from invited professionals.

Shannon J. O’Leary, PhD

Assistant Professor

Saint Anselm College

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Professional Appointments

- 2020 - current **Assistant Professor**, *Department of Biology, St. Anselm College*
- 2019 **Postdoctoral Research Associate**, *Meek Laboratory, Michigan State University*
- 2015 **Postdoctoral Research Associate**, *Marine Genomics Laboratory, Texas A&M Corpus Christi*
- 2013 **Lecturer**, *Department of Biological Sciences, Towson University*

Education

- 2013 **PhD Marine and Atmospheric Sciences**, *Stony Brook University, Stony Brook, NY*
Focus: Molecular Ecology/Conservation Genetics
Thesis: The Genetic Diversity of Endangered Fishes in the Northwest Atlantic
Advisor: Demian D. Chapman, PhD
- 2009 **Bachelor of Biological Sciences**, *University of Constance, Germany*
Focus: Ecology/Limnology, Molecular/Cellular Biology
Thesis: Benthic Invertebrates in the Eulittoral Interstitial of Lake Constance
Advisor: Dr. Karl M. Wantzen, PD

Peer-reviewed Publications

- O’Leary SJ**, Thompson TQ, Meek MH. In Review. *Every cog and wheel: Unraveling biocomplexity at the genomic and phenotypic level in a population complex of Chinook salmon*. Conservation Science and Practice.
- Swift D, **O’Leary SJ**, Grubbs R, Frazier B, Gardiner J, Drymon M, Bethea D, Wiley T, Portnoy DS. In Review. *Philopatry influences the genetic population structure of the blacktip shark (Carcharhinus limbatus) at multiple scales*. Molecular Ecology.
- O’Leary SJ**, Hollenbeck CM, Vega RR, Fincannon AN, Portnoy DS. 2022. *Effects of spawning success and rearing-environment on genome-wide variation of red drum in a large stock-enhancement program*. Aquaculture. 738539
- O’Leary SJ**, Hollenbeck CM, Vega RR, Gold JR, Portnoy DS. 2021. *Disentangling complex genomic signals to understand population structure of an exploited, estuarine-dependent flatfish*. Ecology and Evolution. 11 (19) 13415-13429
- Quinlan JR, **O’Leary, SJ**, Fields AT, Benavides M, Stumpf E, Carcamo R, Cruz J, Lewis D, Wade B, Amato G, Kolokotronis SO, Clement GM, Chapman, DD. 2021. *Using fisher-contributed secondary fins to fill critical shark fisheries data gaps*. Conservation Biology. doi:10.1111/cobi.13688
- TinHan TC, **O’Leary SJ**, Portnoy DS, Rooker JR, Gelpy C, Wells RJD. 2020. *Natural tags identify origin of coastal elasmobranch: Carcharhinus leucas*. Journal of Applied Ecology.

Anderson JA, **O'Leary SJ**, Cooper, P. 2019. *Population Structure of Atlantic Croaker (Micropogonias undulatus) from the Gulf of Mexico: Evaluating a Single Stock Hypothesis Using a Genomic Approach*. Marine and Coastal Fisheries. 11(1) 3 – 16.

O'Leary, SJ, Puritz JB, Willis SC, Hollenbeck CM, Gold JR, Portnoy DS. 2018. *These are not the loci you're looking for: Principles of effective SNP filtering for molecular ecologists*. Molecular Ecology. 27(16), 3193-3206.

O'Leary, SJ, Hollenbeck CM, Vega RR, Gold JR, Portnoy DS. 2018. *Comparative genomics as a tool for restoration and commercial aquaculture of southern flounder, Paralichthys lethostigma*. BMC Genomics. 19:163.

O'Leary SJ, Martinez CM, Baumann H, Abercrombie DL, Poulakis GR, Murray CH, Feldheim KA, Chapman DD. 2016. *Population genetics and geometric morphometrics of the key silverside, Menidia conchorum, a marine fish in a highly-fragmented, inland habitat*. Bulletin of Marine Science.

O'Leary SJ, Feldheim KA, Field AT, Natanson L, Wintner S, Hussey N, Shivji M, Chapman DD. 2015. *Genetic diversity of white sharks, Carcharodon carcharias, in the Northwest Atlantic and southern Africa*. Journal of Heredity, 106(3)258-265. doi: 10.1093/jhered/esv001.

O'Leary SJ, Dunton KD, King T, Frisk MG, Chapman DD. 2014. *Genetic diversity and effective size of Atlantic sturgeon, Acipenser oxyrinchus oxyrinchus, river spawning populations estimated from the microsatellite genotypes of marine-captured juveniles*. Conservation Genetics. doi:10.1007/s10592-014-0609-9.

O'Leary SJ, Hice LA, Feldheim KA, Frisk MG, McElroy AE, Fast MD, Chapman DD. 2013. *Severe inbreeding and small effective number of breeders in a formerly abundant marine fish*. PloS one, 8(6), e66126.

O'Leary SJ, Feldheim KA, Chapman DD. 2013. *Novel microsatellite loci for white, Carcharodon carcharias and sandtiger sharks, Carcharias taurus (order Lamniformes)*. Conservation Genetics Resources. doi:10.1007/s12686-013-9866-z.

O'Leary SJ, Feldheim KA, Chapman DD. 2012. *Novel microsatellite loci for winter flounder (Pseudopleuronectes americanus)*. Conservation Genetics Resources. doi:10.1007/s12686-012-9854-8.

Dunton KJ, Chapman DD, Jordaan A, Feldheim KA, **O'Leary SJ**, McKnown KA, Frisk MG. 2012. *Genetic mixed-stock analysis of Atlantic sturgeon Acipenser oxyrinchus in a heavily exploited marine habitat indicates the need for routine genetic monitoring*. Journal of Fish Biology. 80:267-277.

O'Leary SJ & Wantzen KM. 2012. *Flood Pulse effects on benthic invertebrate assemblages in the hypolacustric interstitial of Lake Constance*. International Journal of Limnology. 48(3):267-277.

Technical Reports

O'Leary SJ, Portnoy DS. 2019. *Genotyping of red drum broodfish at TPWD hatcheries*. Texas Parks and Wildlife Department, Contract No. 485272

O'Leary SJ, Vega R, Gold JR, Portnoy, DS. 2018. *Population structure, connectivity, and genetic demographics of southern flounder (Paralichthys lethostigma) in Texas Bays and Estuaries*. State Wildlife Grant Program CFDA# 15.634.

TinHan, TC, **O'Leary SJ**, Portnoy DS, Rooker J, Gelpi C, Wells RJD. 2018. *Identification of shark nurseries along the Texas Coast*. 2018. State Wildlife Grant Program, Contract No. M1603449.

Selected conference talks & posters

*indicates student mentee

O'Leary SJ, Adolf J, Dunton K. 2022. *Integration of environmental DNA surveys in fisheries monitoring plans for offshore wind*. Annual meeting of the American Fisheries Society. *Oral presentation*

O'Leary, SJ, Hollenbeck, CM, Vega, RR, Gold, JR, Portnoy DS. 2019. *Disentangling demographic, spatial, and environmentally-driven signals in genomic data sets: An assessment of southern flounder, Paralichthys lethostigma*. Joint Meeting of Ichthyologists and Herpetologists. *Oral presentation*.

Hunt EP, *Hamilton, K, **O'Leary SJ**, Conway, K, Portnoy DS. 2019. *Molecular phylogenetics of the genus Erimzyon (Family Catastomidae) based on mitochondrial and nuclear markers*. Joint Meeting of Ichthyologists and Herpetologists. *Oral presentation*.

*Cooper P, **O'Leary SJ**, Portnoy DS, Nelson, RT, Powers, SP. 2019. *Does genotype correlate to patterns of salinity exposure? An assessment in a euryhaline fish*. Joint Meeting of Ichthyologists and Herpetologists. *Oral presentation*.

*Trejo A, **O'Leary SJ**, Cotton, C, Murawski S, Portnoy DS. 2019. *Population structure of king snake eels (Ophichthus rex) throughout the Gulf of Mexico*. Joint Meeting of Ichthyologists and Herpetologists. *Poster*.

*Wallen, JN, **O'Leary SJ**, Portnoy DS. 2019. *Population structure of Bagre marinus in the Gulf of Mexico*. Joint Meeting of Ichthyologists and Herpetologists. *Poster*.

*Cooper P, **O'Leary SJ**, Portnoy DS, Powers SP. 2018. **Genomic Assessment of Population Structure in Sheepshead, Archosargus Probatocephalus** American Fisheries Society Meeting 2018. *Oral presentation*.

O'Leary SJ, Murphy AE*, Portnoy DS. 2018. *Integrating genomic data sets using comparative genomics: Female-specific highly-dense linkage map for golden tilefish*. Gulf of Mexico Oil spill & Ecosystem Conference 2018. *Oral presentation*.

O'Leary SJ, Snyder SM, Pulster EL, Murawski SA, Gold JR, Portnoy DS. 2017. *A comparison of gulf-wide population-level effects of oil exposure on the genetic diversity of a demersal, sedentary, deepwater-burrowing fish*. American Fisheries Society Meeting 2017. *Oral presentation*.

O'Leary SJ, Gold JR, Portnoy DS. 2017. *Population structure and patterns of connectivity of southern flounder, Paralichthys lethostigma, in the Gulf of Mexico and U.S South Atlantic*. American Fisheries Society Meeting 2017. *Oral presentation*.

O'Leary SJ, Gold JR, Portnoy DS. 2017. *Impacts of the Deepwater Horizon oil spill on the genetic diversity of a demersal, sedentary deepwater-burrowing fish*. Gulf of Mexico Oil spill & Ecosystem Conference 2017. *Oral presentation*.

O'Leary SJ, Hollenbeck CM, Gold JR, Portnoy DS. 2016. *Genomics as a tool for restoration enhancement of southern Flounder*. Joint Meeting of Ichthyologists and Herpetologists 2016. *Oral presentation*.

O'Leary SJ, Gold, JR, Portnoy, DS. 2016. *Potential genetic impacts of the Deepwater Horizon oil spill on a demersal, sedentary deepwater-burrowing species*. Gulf of Mexico Oil spill & Ecosystem Conference 2016. *Oral presentation*.

O'Leary SJ, Feldheim KA, Chapman DD. 2013. *Small effective population size and low genetic diversity of Northwest Atlantic white sharks*. Graduate Student Symposium 2013, School of Marine and Atmospheric Science. *Oral presentation*. Award for best presentation.

O'Leary SJ, Hice LA, McElroy AE, Chapman DD. 2012. *Evidence for inbreeding in a highly exploited marine fish*. 13th Flatfish Biology Conference. *Oral presentation*.

O'Leary SJ, Bauman H, Chapman DD. 2012. *Species delineation and population genetics of Menidia species in Southern Florida*. American Fisheries Society Meeting 2012. *Oral presentation*.

O'Leary SJ, Chapman DD. 2012. *Using anal fins as an assessment tool in a Caribbean shark fishery*. Graduate Student Symposium 2012, School of Marine and Atmospheric Science. *Oral presentation*. Award for best presentation.

Awarded Grants

Orsted Wind (2021-2027) – \$122,447. *Orsted wind farm pre-construction fisheries monitoring*. Subaward through Monmouth University.

Trout Unlimited (2021) – \$3,000 *Temperature monitoring in headwater streams around Franconia, NH*. Co-PI

NSF Convergence Accelerator Track E: (2021-2022) – \$58,885 *Empowering stakeholders from ship to shore – solving fishery management challenges with use-inspired genomic and artificial intelligence tools.* Co-PI.

Texas Comprehensive research fund postdoctoral support awards (2019) – \$30,000 *Characterizing sex-determining regions in southern flounder and other TPWD hatchery species.* In collaboration with D. Portnoy.

Synergistic Activities

Ongoing participation in EREN (Ecological Research as Education Network) workshops to develop a collaborative project among PUIs (primarily undergraduate institutions) focused on temperature effects on aquatic macroinvertebrates across broad geographic scales to involve undergraduate students in authentic scientific experiences while generating publication quality data.

Part of 2021-2022 cohort of ENCOUR (Ethics Network for Course-based Opportunities in Undergraduate Research) with goal to develop and test a responsible and ethical conduct of research resource in the context of a CURE (course-based undergraduate research experience).