

Robert Thomas Leaf, PhD

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Department of Coastal Sciences
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Education

Virginia Polytechnic Institute and State University
Blacksburg, VA
Doctor of Philosophy in Fisheries and Wildlife Science, 2010

Moss Landing Marine Laboratories
Moss Landing, CA
Master of Science in Marine Sciences, 2005

University of California at Santa Cruz
Santa Cruz, CA
Bachelor of Arts in Biology, 1997

Professional Positions Held

2012 to present

- Assistant Professor, Division of Coastal Sciences, University of Southern Mississippi, Ocean Springs, Mississippi.

2011 to 2012

- Post-doctoral Researcher, National Oceanographic and Atmospheric Administration, Northeast Fishery Science Center, Narragansett, Rhode Island.

2010

- Research Assistant, Natural Resources Group, City of New York Department of Parks Recreation, New York, New York.

2005

- Environmental Consultant, Garcia and Associates, San Anselmo, California.

Papers in Refereed Journals (* denotes students funded and mentored by Leaf)

Schueller, A., Leaf, R.T., Mroch, R., and G. Nessler. **In Press.** Response to Turner 2017. *Geo: Geography and Environment*.

Leaf, R.T., Trushenski, J., Andres, M.J., N. Brown-Peterson. **In Review.** Temporal dynamics of lipid and fatty acid characteristics of Gulf Menhaden, *Brevoortia patronus*, in the northern Gulf of Mexico. *Journal of Regional Marine Science*.

Papers in Refereed Journals (continued, * denotes students funded and mentored by Leaf)

Kuykendall, K., Powell, E.N., Klinck, J.M., Moreno, P.T., and R.T. Leaf. **In Review**. The effect of abundance changes on a management strategy evaluation for the Atlantic surfclam (*Spisula solidissima*) using a spatially explicit, vessel-based fisheries model. Journal of Environmental Management.

Published:

Adams*, G.A., Leaf, R.T., Wu, W., and F. Hernandez. Environmentally-driven fluctuations in condition factor of adult gulf menhaden (*Brevoortia patronus*) in the northern Gulf of Mexico. 2018. ICES Journal of Marine Science. [Available Online, doi:10.1093/icesjms/fsy002].

Adams*, G.D., Leaf, R.T., Ballenger, J.C., Arnott, S.A., and C.J. McDonough. 2018. Spatial variability in the growth of Sheepshead (*Archosargus probatocephalus*) in the Southeast US: Implications for assessment and management. Fisheries Research 206: 35-43.

Chiaverano, L., Decker, M., Ruzicka, J., Brodeur, R., Tam, J., Leaf, R.T., Uye, S., Hernandez, F., Mianzan, H., Aleska, K., Quinones, J., Acha, M., Graham, W.M., and K. Robinson. 2018. Evaluating the role of large jellyfish and forage fishes as energy pathways, and their interplay with fisheries, in the Northern Humboldt Current System. Progress in Oceanography 164: 28-36.

Oshima*, M. and R.T. Leaf. 2018. Understanding the structure and resilience of trophic dynamics in the northern Gulf of Mexico using network analysis. Bulletin of Marine Science 94(1): 21–46.

Bird, C., Veríssimo, A., Magozzi, S., Abrantes, K., Aguilar, A., Al-Reasi, H., Barnett, A., Bethea, D., Biais, G., Borrell, A., Bouchoucha, M., Boyle, M., Brooks, E., Brunnschweiler, J., Bustamante, P., Carlisle, A., Catarino, D., Caut, S., Cherel, Y., Chouvelon, T., Churchill, D., Ciancio, J., Claes, J., Colaço, A., Courtney, D., Cresson, P., Daly, R., de Necker, L., Endo, T., Figueiredo, I., Frisch, A., Hansen, J., Heithaus, M., Hussey, N., Iitembu, J., Juanes, F., Kinney, M., Kiszka, J., Klarian, S., Kopp, D., Leaf, R., Li, Y., Lorrain, A., Madigan, D., Maljković, A., Malpica-Cruz, M., Matich, P., Meekan, M., Menard, F., Menezes, G., Munroe, S., Newman, M., Papastamatiou, Y., Pethybridge, H., Plumlee, J., Polo-Silva, C., Quaeck-Davies, K., Raoult, V., Reum, J., Torres-Rojas, Y., Shiffman, D., Shipley, O., Speed, C., Staudinger, M., Teffer, A., Tilley, A., Valls, M., Vaudo, J., Wai, T-C., Wells, R.J.D, Wyatt, A., Yool, A., and C. Trueman. 2018. A global perspective on the trophic geography of sharks. Nature Ecology and Evolution 2: 299–305.

Dippold*, D.A., R.T. Leaf, J. Franks, and R. Hendon. 2017. Growth, Mortality, and Movement of Cobia (*Rachycentron canadum*). Fishery Bulletin: 115:460-472.

Vaudo, J.J., Wetherbee, B.M., Harvey, G.C., Harvey, J.C., Prebble, A.J., Corcoran, M.J., Potenski, M.D., Bruni, K.A., Leaf, R.T., Henningsen, A.D. and Collie, J.S. 2017. Characterization and monitoring of one of the world's most valuable ecotourism animals, the southern stingray at Stingray City, Grand Cayman. Marine and Freshwater Research 69(1): 144-154.

Papers in Refereed Journals (continued, * denotes students funded and mentored by Leaf)

Published (continued):

Kuykendall, K.M., E.N. Powell, J.M. Klinck, P.T. Moreno, and R.T. Leaf. 2017. Management strategy evaluation for the Atlantic surfclam (*Spisula solidissima*) using a spatially explicit, vessel-based fisheries model. *Fishery Bulletin*: 115(3): 300-325.

Corey*, M.M., R.T. Leaf, N.J. Brown-Peterson, M.S. Peterson, S.D. Clardy, and D.A. Dippold. 2017. Growth and Spawning Dynamics of Southern Flounder in the North-Central Gulf of Mexico. *Marine and Coastal Fisheries*: 9(1):231–243.

Leaf, R.T. 2017. Environmental determinants of Gulf Menhaden (*Brevoortia patronus*) oil content in the northern Gulf of Mexico. *Ecological Indicators* 82: 551–557.

Brown-Peterson, N. J., R. T. Leaf, A. M. Schueller, and M. J. Andres. 2017. Reproductive dynamics of gulf menhaden (*Brevoortia patronus*) in the northern Gulf of Mexico: Effects on stock assessments. *Fishery Bulletin* 115(3): 284–299.

Blancher, E. C., R. A. Park, J. S. Clough, S. P. Milroy, W. M. Graham, C. F. Rakocinski, J. R. Hendon, J. D. Wiggert, and R. Leaf. 2017. Establishing nearshore marine secondary productivity baseline estimates for multiple habitats in coastal Mississippi and Alabama using AQUATOX 3.1 NME for use in the Deepwater Horizon natural resource damage assessment. *Ecological Modelling* 359: 49-68.

Friedland, K.D., N.R. Record, R.G. Asch, T. Kristiansen, V.S. Saba, K. Drinkwater, S. Henson, R.T. Leaf, R.E. Morse, D.G. Johns, S.I. Large, S.S. Hjøllø, J.A. Nye, M.A. Alexander, and J. Rubao. 2016. Seasonal Plankton Blooms in the North Atlantic Linked to the Distribution of Copepods that Diapause Zooplankton. *Elementa: Science of the Anthropocene* 4: 1-19.

Dippold*, D.A., R.T. Leaf and M.S. Peterson. 2016. Evaluating management regimes using per recruit models and relative stock density for Mississippi's Spotted Seatrout. *North American Journal of Fisheries Management*: 36(5): 1178-1189.

Dippold*, D.A., R.T. Leaf, J.R. Hendon, and J. Franks. 2016. Estimation of the length-at-age relationship of Mississippi's Spotted Seatrout. *Transactions of the American Fisheries Society* 145(2): 295-304.

Friedland, K.D., R.T. Leaf, T. Kristiansen, and S.I. Large. 2015. Layered Effects of Parental Condition and Larval Survival on the Recruitment of Neighboring Haddock Stocks. *Canadian Journal of Fisheries and Aquatic Sciences*. 72(11), 1672-1681.

Friedland, K.D., R.T. Leaf, J. Kane, D. Tommasi, R.G. Asch, N. Rebuck, R. Ji, S. I. Large, C. Stock, and V.S. Saba. 2015. Spring bloom dynamics and zooplankton biomass response on the US Northeast Continental Shelf. *Continental Shelf Research* 102:47-61.

Papers in Refereed Journals (continued, * denotes students funded and mentored by Leaf)

Published (continued):

Grammer, P. O., P.F. Mickle, M.S. Peterson, J. Havrylkoff, W.T. Slack, and R.T. Leaf. 2014. Activity patterns of Gulf Sturgeon (*Acipenser oxyrinchus desotoi*) in the staging area of the Pascagoula River during fall outmigration. *Ecology of Freshwater Fish* 24: 553-561. doi: 10.1111/eff.12168 [Leaf contribution 10%, Impact Factor = 1.59, Rejection rate = NA]

Clardy, S., N. Brown-Peterson, M. Peterson, and R.T. Leaf. 2014. Age, growth and reproduction of the southern kingfish, *Menticirrhus americanus*: Multivariate comparison to the life-history patterns in other sciaenids. *Fishery Bulletin* 112: 178–197. doi:10.7755/FB.112.2-3.6 [Leaf contribution 10%, Impact Factor = 1.437, Rejection rate = NA]

Leaf, R.T. and K.D. Friedland. 2014. Autumn bloom phenology and magnitude influence haddock recruitment on Georges Bank. *ICES Journal of Marine Science* 71 (8): 2017–2025. doi:10.1093/icesjms/fsu076 [Leaf contribution 50%, Impact Factor = 2.525, Rejection rate = 40%]

Andrews, A.A., R.T. Leaf, L. Rogers-Bennett, M. Neuman, H. Hawk, and G.M. Cailliet. 2013. Bomb radiocarbon dating of the endangered white abalone (*Haliotis sorenseni*): investigations of age, growth and lifespan. *Marine and Freshwater Research*, 2013, 64, 1–11. doi: 10.1071/MF13007 [Leaf contribution 25%, Impact Factor = 2.250, Rejection rate = NA]

Friedland, K.D., C. Stock, K.F. Drinkwater, J.S. Link, R.T. Leaf, B.V. Shank, J.M. Rose, C.H. Pilskaln and M.J. Fogarty. 2012. Pathways between Primary Production and Fisheries Yields of Large Marine Ecosystems. *PloS One* 7(1): e28945. doi:10.1371/journal.pone.0028945 [Leaf contribution 15%, Impact Factor = 3.534, Rejection rate = 31%]

Leaf, R.T., Y. Jiao, B. Murphy, J. Kramer, and K. Sorensen. 2011. Life-history and husbandry characteristics of Japanese medaka (*Oryzias latipes*). *Copeia* 4:559-565. doi: <http://dx.doi.org/10.1643/CI-09-190> [Leaf contribution 60%, Impact Factor = 0.901, Rejection rate = NA]

Henningsen, A.D and R.T. Leaf. 2010 Observations on the captive biology of the southern stingray, *Dasyatis americana*. *Transactions of the American Fisheries Society* 139:783-791. doi: 10.1577/T09-124.1 [Leaf contribution 50%, Impact Factor = 1.310, Rejection rate = NA]

Leaf, R.T., A.H. Andrews, G.M. Cailliet, and T.A. Brown. 2008. Bomb radiocarbon support for an age-at-length relationship for red abalone, *Haliotis rufescens* Swainson, in Northern California. *Journal of Shellfish Research* 27:1177-1182. [Leaf contribution 60%, Impact Factor = 1.097, Rejection rate = NA]

Leaf, R.T., L. Rogers-Bennett, and Y. Jiao. 2008. Exploring the use of a size-based egg-per-recruit model for the Red Abalone fishery in California. *North American Journal of Fisheries Management* 28:1638-1647. doi:10.2983/0730-8000-27.5.1177

Papers in Refereed Journals (continued)

Published (continued):

Leaf, R.T., L. Rogers-Bennett, and P. Haaker. 2007, Spatial, temporal, and size-specific variation in mortality estimates of red abalone, *Haliotis rufescens*, from mark-recapture data in California. Fisheries Research 83: 341-350. doi:10.1016/j.fishres.2006.10.017 [Leaf contribution 60%, Impact Factor = 1.843, Rejection rate = NA]

Rogers-Bennett, L. and R.T. Leaf. 2006. Elasticity analysis of size-based red and white abalone matrix models: Management and conservation. Ecological Applications 16: 213-224. doi: 10.1890/04-1688 [Leaf contribution 40%, Impact Factor = 4.126, Rejection rate = NA]

Publications (Editor Reviewed Reports)

R. Leaf et al. 2017. Update Stock Assessment of Mississippi's Speckled Sea Trout Stock. 47 p. [Editor reviewed, Governmental Agency Publication]

R. Leaf et al. 2017. Stock Assessment of Mississippi's Sheepshead stock. 113 p. [Editor reviewed, Governmental Agency Publication]

R. Leaf et al. 2016. Benchmark Stock Assessment of Mississippi's Speckled Sea Trout Stock. 116 p. [Editor reviewed, Governmental Agency Publication]

R. Leaf et al. 2015. Stock Assessment of Mississippi's Red Drum Stock. 36 p. [Editor reviewed, Governmental Agency Publication]

VanderKooy, S. 2013. GDAR01 Stock Assessment Report for Gulf of Mexico Blue Crabs. Contributed Sections 6.2.2 to 6.2.2.8 (pages 132 to 136), Section 7 (pages 141 to 150), Section 9 and 10 (pages 208 to 231) and Appendix B.1 and B.2 (pages 270 to 273). Edited by Gulf States Marine Fisheries Commission Staff. [Editor reviewed, Governmental Agency Publication]

SEDAR. 2013. SEDAR 32A: Gulf of Mexico Menhaden Stock Assessment Report. Southeast Data, Assessment, and Review, North Charleston SC. 422 pp. R.T. Leaf Contributed to sections 6, 7, 8 and Appendix B.1. Edited by GSMFC Staff. [Editor reviewed, Governmental Agency Publication]

Stock Assessment Report for Gulf of Mexico Menhaden 2013. (SEDAR32A) and Adoption of Reference Points. Contributed Section 7 and 8. Edited by GSMFC Staff. [Editor reviewed, Governmental Agency Publication]

Pedagogical Contribution (Editor Reviewed Reports)

Leaf, R.T. and B. Murphy. 2009. Age and growth of Hawaiian Islands reef fish: a case study using Excel "Solver" for non-linear curve fitting. Published online at: The National Center for Case Study Teaching in Science Case Collection, University of Buffalo. Web link: www.sciencecases.org. [Contributed, editor-reviewed]

Grant Funding Pending

NSF Research Experience for Undergraduates through NSF IUCRC. “Development of a machine learning algorithm for automatic determination of age of Gulf Menhaden”. PI: Leaf. \$8,000. Award period January 2018 to December 2019.

National Marine Fisheries Service and Sea Grant. “University of Southern Mississippi and Gulf Coast Research Laboratory's Undergraduate Population and Ecosystem Dynamics Workshop”. PI: Leaf. \$139,994. Award period October 2018 to September 2019.

National Marine Fisheries Service and Sea Grant Graduate Population Dynamics Fellowship. “Evaluation of management strategies for Vermilion Snapper in the northern Gulf of Mexico”. \$73,032. PI: R. Leaf. Award period June 2018 to May 2020.

Mississippi Department of Marine Resources Tidelands Fund. “Stakeholder perceptions of status and state of MS fisheries”. PI: R. Leaf. \$284,577. Award period January 2019 to December 2021.

Mississippi Department of Marine Resources Tidelands Fund. “Assessment and monitoring of Mississippi's fishery resources”. PI: R. Leaf. \$194,637. Award period January 2019 to December 2021.

Mississippi Department of Marine Resources Tidelands Fund. “Determination and quality of nursery habitat for fish populations”. PI: K. Darnell (USM), co-PI: R. Leaf. \$123,383. Award period January 2019 to December 2021.

Mississippi Department of Marine Resources Tidelands Funds. I.N.S.P.I.R.E. – Life History of Sheepshead. PI: S. Clardy (GCRL), co-PI: R. Leaf. \$145,470. August 2018 to July 2020.

Grant Funding Received

NSF Science Center for Marine Fisheries. “Characterization of age and length of Atlantic Chub Mackerel harvest in the mid-Atlantic for 2018”. PI: R. Leaf. \$16,180. Award period May 2018 to April 2019.

NSF Science Center for Marine Fisheries. “Evaluation of sampling adequacy for the Gulf of Mexico commercial menhaden reduction fishery”. PI: R. Leaf, co-PI G. Nessler (UMCBL). \$24,505. Award period May 2018 to April 2019.

Mississippi Department of Marine Resources Tidelands Funds. “Mississippi Stock Assessment Panel”. PI: R. Leaf, co-PI J. Hendon (GCRL CFRD). \$150,000. Award period March 2018 to March 2019.

Mississippi Department of Marine Resources Tidelands Funds. “Mississippi Stock Assessment Panel”. PI: R. Leaf, co-PI J. Hendon (GCRL CFRD). \$62,000. Award period March 2018 to March 2019.

Grant Funding Received (continued)

Mississippi Alabama Sea Grant. “Methods for the Determination of High Precision Estimates of Red Snapper Abundance in the Gulf of Mexico – Phase 2”. Subaward to co-PIs: R. Leaf and E. Saillant (USM). \$150,000. Award period October 2017 to July 2019.

NSF Science Center for Marine Fisheries. “Biostatistical and Fishery-dependent Sampling of Atlantic Chub Mackerel, Round Herring, and Spanish Sardine”. PI: R. Leaf. \$37,867. Award period March 2016 to February 2017.

Mississippi Alabama Sea Grant. “Methods for the Determination of High Precision Estimates of Red Snapper Abundance in the Gulf of Mexico”. PI: R. Leaf, co-PIs: E. Saillant, F. Hernandez, J. Hendon, R. Hendon, and W. Wu (USM). \$87,852. Award period September 2016 to March 2017.

NSF Research Experience for Undergraduates through NSF IUCRC. “Ecosystem Indicators in the Gulf of Mexico”. PI: Leaf. \$8,000. Award period December 2016 to March 2018.

USM Center for Undergraduate Research. Eagle SPUR award. “Undergraduate project for Ms. Beckah Campbell (USM Biology): Ecology of Red Drum in the northern Gulf of Mexico”. PI R. Leaf. \$1,000. Award period January 2016 to December 2017.

Mississippi Alabama Sea Grant. “Improving Assessment of a Keystone Species in the Gulf of Mexico: Examination of Age Composition of *Brevoortia patronus* in Fishery Independent Sampling”. PI: R. Leaf, co-PI: A. Schueller (NOAA). \$197,882. Award period February 2016 to January 2019.

Mississippi Department of Marine Resources Tidelands Funds. “I.N.S.P.I.R.E. – Life History of Red Drum, *Sciaenops ocellatus*”. PI: S. Clardy (GCRL), co-PI: R. Leaf. \$46,500. Award period April 2016 to March 2017.

NSF Science Center for Marine Fisheries. “Understanding impacts of fishing forage fish”. PI: O. Jensen (Rutgers), co-PI: R. Leaf. \$23,540. Award period December, 2016 to November, 2017.

Mississippi Department of Marine Resources, Tidelands Program. “Stock Assessment Panel FY 2016 to 2017”, PI R. Hendon (GCRL), co-PI R. Leaf, \$200,000. Award period January 2016 to December 2018.

Mississippi Department of Marine Resources Tidelands Funds. “Mississippi Stock Assessment Panel – GCRL Portion”. PI: Leaf Co-PI: J. Hendon (GCRL). \$150,000. March 2016 to February 2018.

Mississippi Department of Marine Resources, Tidelands Program. “Mississippi Stock Assessment Panel”, PI R. Leaf and co-PI Read Hendon (GCRL). \$104,817. Award period July 2015 to June 2016.

Grant Funding Received (continued)

NOAA Cooperative Research Program. "Characterization of Reproductive Biology and Somatic Relationships of Gulf Menhaden through an Academic, Government, and Industry Partnership". PI: N. Brown-Peterson (GCRL), co-PI: R. Leaf, \$101,285. Award period August 2014 to August 2015.

NSF Research Experience for Undergraduates through NSF IUCRC. "Sampling strategies for clustered organisms". PI: Leaf. \$8,000. December 2014 to March 2015.

Mississippi Department of Marine Resources, Tidelands Program. "Stock Assessment of Red Drum", PI R. Leaf. \$35,000. Award period June 2014 to May 2015.

NSF Science Center for Marine Fisheries. "Northeast Scup Stock Assessment Panel", subcontract to R. Leaf. \$6,666. Award period October 2014 to October 2015.

Mississippi Department of Environmental Quality. "Refinement and Application of Modeling to Understand Impacts of MC252 on Mississippi Coastal Natural Resources", PI M. Graham (USM), co-PI J. Wiggert, S. Milroy, C. Rakocinski, R. Hendon, and R. Leaf, \$689,642. Award period October 2013 to June 2015.

NSF Science Center for Marine Fisheries. "Construction of a Black Sea Bass fishery-independent sampling design using a simulation model and survey data". PI: R. Leaf. \$20,400. Award Period April 2013 to March 2014.

Grant Funding Declined

NOAA's FY18 Cooperative Research Program. "Quantifying By-catch in Commercial Shrimp Fishery in the Northern Gulf of Mexico". PI: R. Leaf. \$249,988. Award period April 2018 to March 2019.

Mid-Atlantic States Marine Fisheries Commission. "Trophic role of Atlantic Chub Mackerel and other forage fishes in the diets of recreationally important highly migratory species in the mid-Atlantic region". PI: R. Leaf. \$137,989. Award period June 2018 to May 2020.

National Marine Fisheries Service, Saltonstall-Kennedy Program. "Climate Driven Shifts in Growth Rates and Size-at-Maturity in Commercially Harvested Crustaceans in the Gulf of Mexico: Implications for Stock Assessment and Management". PI: Z. Darnell (USM), co-PI: R. Leaf. \$279,571. Award period September 2018 to August 2020.

National Marine Fisheries Service, Saltonstall-Kennedy Program, "Pre-proposal: The Atlantic Chub Mackerel Fishery, Challenges to Effective Assessment and Management". PI: R. Leaf. \$234,531. Award period September 2018 to August 2020.

NOAA RESTORE Act Science Program. "Trophic role of Gulf Menhaden in the northern Gulf of Mexico". PI: R. Leaf. \$1,275,909. Award period March 2018 to February 2020.

Grant Funding Declined (continued)

Mid Atlantic Fishery Management Council. “Data-limited stock assessment of Atlantic chub mackerel (*Scomber colias*)”, PI: O. Jensen (Rutgers), co-PI: Leaf, \$46,480. Award period April 2018 to March 2019.

Gulf Research Program. “Developing cost-effective remote monitoring approaches and a decision support tool that evaluates coastal restoration outcomes in terms of ecosystem services”. PI: W. Wu (USM), co-PI: R. Leaf et al. Award Period March 2018 to February 2021.

Mississippi Department of Marine Resources Tidelands Funds. “Evaluation of fishery provisioning by the habitats of the Grand Bay NERR”. PI: Rakocinski, co-PI: Leaf. \$94,613. May 2018 to April 2020.

Mississippi Department of Marine Resources Tidelands 2016 Fund. “Evaluation of economic and ecosystem characteristics of MS oysters”. PI: R. Leaf. \$84,000. Award period January 2017 to May 2019.

USM Center for Undergraduate Research. Eagle SPUR award. “Ecology of Sheepshead”. PI R. Leaf. \$1,000. January 2016 to December 2017.

National Marine Fisheries Service/Sea Grant Graduate Population Dynamics Fellowship. “Evaluation of management strategies for Vermilion Snapper in the northern Gulf of Mexico”. \$96,032. PI: R. Leaf, co-PI: C. Porch (NOAA). Award period June 2017 to May 2020.

Mississippi Alabama Sea Grant 2016 to 2018. “A bioeconomic model to evaluate the feasibility of oyster reef restoration and expansion of aquaculture in Mississippi Sound and Mobile Bay”. PI: R. Leaf. \$147,566. February 2016 to January 2018.

Mississippi’s Department of Marine Resources, Tidelands Program, “Use of vessel monitoring systems to determine spatial patterns of fishing in Mississippi Sound.”, PI: R. Leaf, co-PI: W. Wu (USM), \$250,000. Award period January 2016 to December 2018.

Mississippi Department of Marine Resources Tidelands 2016 Fund. “Trophic relationships and ecosystem services of Mississippi’s oyster reefs”. PI Rakocinski (USM) and Co-PI: R. Leaf. \$159,987. Award period June 2017 to May 2020.

Mississippi Department of Marine Resources Tidelands 2016 Fund. “Parasites as indicators of Mississippi reef habitat productivity”. PI R. Leaf and Co-PI: S. Curran (USM). \$178,853. Award period June 2017 to May 2019.

Mississippi Department of Marine Resources Tidelands 2016 Fund. “Assessment and monitoring of Mississippi’s fishery resources”. PI R. Leaf and Co-PI: J. Hendon, R. Hendon, and E. Saillant. \$884,058. Award period June 2017 to May 2019.

Grant Funding Declined (continued)

Mississippi Department of Marine Resources Tidelands Funds. "An ecosystem approach to evaluate the beneficial use of dredged materials". PI: P. Biber and co-PIs: R. Leaf and W. Wu. \$155,869. January 2017 to December 2018.

National Fish and Wildlife Federation. "Electronic monitoring using VMS in the north-central Gulf of Mexico: Improving estimates in recreational fisheries". PI: R. Leaf, co-PI W. Wu (USM). \$233,391. Award period September 2016 to August 2018.

Mississippi-Alabama Sea Grant Consortium. "Effects of trophic relationships on oyster reef restoration success in the Mississippi Sound." PI: Rakocinski (USM) and co-PI R. Leaf. \$225,000. Award period January 2016 to December 2018.

National Marine Fisheries Service, Saltonstall-Kennedy Program," Biostatistical and fishery characteristics of three poorly known forage fish stocks from the New England and Mid-Atlantic regions". PI: R. Leaf, co-PI: E. Powell (USM). \$257,302. Award period June 2016 to May 2018.

NSF Biological Oceanography. Collaborative research: Fish parasites as indicators of food web complexity on artificial and natural reefs in the northern Gulf of Mexico. PI: R. Leaf, co-PI S. Curran. \$429,604. Award Period April 2016 to March 2018.

NSF Fundamental Research Program. "A management strategy evaluation and assessment for protogynous fish stocks in U.S. federal waters". PI: R. Leaf, co-PI: E. Powell (USM). \$158,853. Award period July 2015 to June 2016.

National Fish and Wildlife Federation. "Use of vessel monitoring systems to determine spatial patterns of fishing in Louisiana, Mississippi, and Alabama's coastal waters". PI: R. Leaf, co-PI W. Wu (USM). \$233,391. Award period June 2015 to August 2017.

National Fish and Wildlife Federation Electronic Monitoring and Reporting Grant Program. "Improved monitoring of harvest of living marine resources in the north-central Gulf of Mexico by the charter fleet". PI: R. Leaf, co-PI W. Wu (USM). \$482,561. Award period June 2015 to May 2017.

NOAA CRCP Domestic Coral Reef Conservation Grant Program. "An assessment of fishery impacts on habitat dependent reef fishes using size-based indicators at the Flower Garden Banks National Marine Sanctuary". PI: R. Leaf. \$48,755. Award period July 2013 to December 2014.

Gulf Research Program. "Gulf Research Program Early-Career Research Fellowship". PI: R. Leaf. \$75,000. September 2015 to August 2017.

Grant Funding Declined (continued)

NOAA Climate Program Office, "Development and evaluation of a zooplankton index for the Gulf of Mexico LME", PI F. Hernandez, co-PI R. Leaf, \$120,614. Award period: January 2015 to December 2016.

NOAA FY2015 Regional Coastal Resilience Grants Program. "Gulf Coast Resilience to Sea Level Rise: Building the Resilience of Coastal Communities". PI: P. Biber, co-PI: W. Wu, R. Leaf, et al. \$1,000,000. Award period September 2015 to August 2017.

An Ecosystem Based Management Approach for Developing an Integrated Ecological-Sociological Framework to Evaluate Coastal Habitat and Fisheries Restoration under Anticipated Climate Change and Sea Level Rise Impacts". \$396,524. PI P. Biber, co-PI: W. Wu, R. Leaf, D. Redalje, D. Holt, C. Bright. Award period September 2015 to August 2017.

Mississippi Alabama Sea Grant. "Determination of productivity and ecosystem health indices for the Gulf of Mexico using historical biological data". PI: R. Leaf. \$107,447. February 2014 to January 2016.

National Marine Fisheries Service, Saltonstall-Kennedy Program, "An ecosystem-based examination of the invasive potential of lionfish in the northern Gulf of Mexico based on field, lab and modeling approaches.", PI F. Hernandez, co-PI A. Evans, M. Peterson, and R. Leaf, \$248,178. Award period January 2014 to December 2014.

NOAA Sea Grant National Aquaculture Research Program 2014, "A decision-making tool for evaluating the efficacy, risks, and benefits of stock enhancement", PI R. Leaf, co-PI E. Saillant and M. Freeman (Mississippi State Univ.), \$175,109. Award period August 2014 to July 2016.

NSF I/UCRC Fundamental Research Project, "Development of an Adaptive Survey Design to Improve Abundance Estimates of Patchily Distributed Finfish Species". PI R. Leaf, co-PI E. Powell, J. Kastler, and J. Hendon (USM and GCRL), \$171,009. Award period July 2014 to June 2015.

USM Project Development Grant. "Determination of productivity and ecosystem health indices for the Gulf of Mexico using historical biological data". PI: Robert Leaf, \$1,000. Award period January 2014 to December 2014.

NOAA OAR Climate Program Office. "Understanding climate impacts of fish stocks and fisheries to inform sustainable management". PI: F. Hernandez and co-PI: R. Leaf. \$50,000. November 2013 to October 2014.

Coral Reef Conservation Program (Domestic Coral Reef). "An assessment of fishery impacts on habitat dependent reef fishes using size-based indicators at the Flower Garden Banks National Marine Sanctuary". PI: R. Leaf. \$48,755. 7/2013 to 12/2014.

Grant Funding Declined (continued)

USM RESTORE Project concept proposal (pre-proposal). “A management strategy evaluation for assessing coastal habitats and ecosystem services in the northern Gulf of Mexico”. Submitted June 2013.

USM RESTORE Project concept proposal (pre-proposal). “Analysis of the productivity dynamics and ecosystem health of the Gulf of Mexico using the sentinel species Gulf menhaden”. Submitted June 2013.

USM RESTORE Project concept proposal (pre-proposal). “Improving fish stock assessment and management in the Northern Gulf of Mexico using food web dynamics”. Submitted June 2013.

USM RESTORE Project concept proposal (pre-proposal). “Genetic assessment of the stock structure of Gulf Menhaden (*Brevoortia patronus*)”. Submitted June 2013.

Platform Presentations at regional, national, and international conferences (* denotes students funded and mentored by Leaf)

Oshima*, M.C. and R.T. Leaf. Testing robustness of the northern Gulf of Mexico trophic dynamics using social network analysis. 2017 Mississippi-Alabama Joint Chapter Meeting of the American Fisheries Society. Biloxi, Mississippi. February 23, 2017. [Contributed Oral presentation]

Oshima*, M.C. and R.T. Leaf. Testing robustness of the northern Gulf of Mexico trophic dynamics using social network analysis. Benthic Ecology Meeting. Myrtle Beach, South Carolina. April 13, 2017. [Contributed Oral presentation]

Oshima*, M.C. and R.T. Leaf. Testing robustness of the northern Gulf of Mexico trophic dynamics using social network analysis. 2017 Annual Meeting of the American Fisheries Society. Tampa, Florida. August 24, 2017. [Contributed Oral presentation]

Adams*, G.A., Leaf, R.T., Ballenger, J., Arnott, S.A. and C. McDonough. Spatial Variability in the Individual Growth of Sheepshead (*Archosargus probatocephalus*) in the Gulf of Mexico and Atlantic: Implications for Assessment and Management. 2017 Annual Meeting of the American Fisheries Society. Tampa, Florida. August 24, 2017. [Contributed Oral presentation]

Hendon, J.M., Hoffmayer, E.R., Bethea, D.M., Sulikowski, J.A., Driggers, W.B., Leaf, R.T., and D.A. Stiller. Variability in the Life History of Finetooth Sharks, *Carcharhinus isodon*, from the Western North Atlantic. 2017 Annual Meeting of the American Fisheries Society. Tampa, Florida. August 24, 2017. [Contributed Oral presentation]

Swigris*, A.M., A.Woods*, R.T. Leaf, M.C. Oshima*, and T.T. Daley*. Seasonal variation of dry energy density of Gulf Menhaden and blue crab from the Gulf of Mexico. SCoMFIS Fall 2017 IAB Meeting. Cape May, New Jersey. November 1, 2017. [Contributed Oral presentation]

Platform Presentations at regional, national, and international conferences (continued)
(* denotes students funded and mentored by Leaf)

Daley*, T.T., and R.T. Leaf. Growth and reproduction of Atlantic Chub Mackerel (*Scomber colias*) in the Northwest Atlantic. SCeMFIS Spring 2017 IAB Meeting. Ocean Springs, Mississippi. April 26, 2017. [Contributed Oral presentation]

Daley*, T.T., and R.T. Leaf. Growth and reproduction of Atlantic Chub Mackerel (*Scomber colias*) in the Northwest Atlantic. SCeMFIS Fall 2017 IAB Meeting. Cape May, New Jersey. November 1, 2017. [Contributed Oral presentation]

Dippold*, D. and R.T. Leaf. 2016. Using relative stock density as a management tool for Spotted Seatrout in Mississippi. Marine and Estuarine Graduate Student Symposium. Ocean Springs, Mississippi. March 5, 2016. [Contributed Oral presentation]

Adams*, G. and R.T. Leaf. 2016. Environmentally-driven fluctuations in condition factor of adult Gulf Menhaden (*Brevoortia patronus*) in the Northern Gulf of Mexico. Marine and Estuarine Graduate Student Symposium. Ocean Springs, Mississippi. March 5, 2016. [Contributed Oral presentation]

Corey*, M. and R.T. Leaf. 2016. Age validation and the length-at-age relationship of Mississippi's Southern Flounder stock. Marine and Estuarine Graduate Student Symposium. Ocean Springs, Mississippi. March 4, 2016. [Contributed Oral presentation]

Dippold*, D.A., R.T. Leaf et al. Using Relative Stock Density to Evaluate Alternative Management Regimes for Mississippi's Spotted Seatrout Stock. Southern Division-American Fisheries Society 2016 Meeting. Wheeling, WV, February 19. [Contributed Oral presentation]

Corey*, M., R.T. Leaf et al. Age and Growth of Southern Flounder in the North-Central Gulf of Mexico. Southern Division-American Fisheries Society 2016 Meeting. Wheeling, WV, February 19. [Contributed Oral presentation]

Dippold*, D.A., R.T. Leaf, and J.R. Hendon. Assessing the Mississippi Spotted Seatrout stock using a statistical-catch-at-age model. 2016 Annual Meeting of the Mississippi Chapter of the American Fisheries Society. Vicksburg, Mississippi. March 10, 2016 (2nd Place, Best Student Presentation). [Contributed Oral presentation]

Adams*, G. and R.T. Leaf. Environmentally-driven fluctuations in condition factor of adult Gulf Menhaden (*Brevoortia patronus*) in the Northern Gulf of Mexico. 2016 Annual Meeting of the Mississippi Chapter of the American Fisheries Society. Vicksburg, Mississippi. March 10, 2016. [Contributed Oral presentation]

Adams*, G. and R.T. Leaf. Environmentally-driven fluctuations in condition factor of adult Gulf Menhaden (*Brevoortia patronus*) in the Northern Gulf of Mexico. The University of Southern Mississippi Graduate Research Symposium, Hattiesburg, Mississippi. March 24, 2016. [Contributed Oral presentation]

Platform Presentations at regional, national, and international conferences (continued)
(* denotes students funded and mentored by Leaf)

Chiaverano, L., K.L. Robinson, J. Ruzicka, J. Quiñones, J. Tam, M. Acha, W.M. Graham, K. Aleksa, R. Brodeur, M.B. Decker, F. Hernandez, R.T. Leaf, H. Mianzan, and S. Uye. Evaluating energy flows through jellyfish and forage fish, and the effect of fishing on the Northern Humboldt Current ecosystem. 2016 Oceans Science Meeting. February 21-26, 2016 New Orleans, LA. [Contributed Oral presentation]

Park, R. et al. Using AQUATOX to establish nearshore marine baselines for natural resource damage assessment of the Deepwater Horizon Oil Spill. International Society of Ecological Modelling Global Conference. Baltimore, MD. May 10, 2016. [Contributed Oral presentation]

Chiaverano, L., K.L. Robinson, J. Ruzicka, J. Quiñones, J. Tam, M. Acha, W.M. Graham, K. Aleksa, R. Brodeur, M.B. Decker, F. Hernandez, R.T. Leaf, H. Mianzan, and S. Uye. Evaluating energy flows through large jellyfish and forage fish, and the effect of forage fish fishery in the Northern Humboldt Current. 5th International Jellyfish Blooms Meeting. May 2016 Barcelona, Spain. Contributed Oral Presentation. [Contributed Oral presentation]

R. Leaf, W. Wu, T. Hardy, G. Adams*, J. Hendon, R. Hendon, E. Saillant, F. Hernandez. Methods for the determination of high precision estimates of Red Snapper abundance in the Gulf of Mexico. Mississippi Alabama Sea Grant's Red Snapper Workshop. December 10, 2016. New Orleans, LA. [Contributed Oral presentation]

Leaf, R.T. and F. Hernandez. Environmental determinants of Gulf Menhaden condition. Annual meeting of the Mississippi Chapter of the American Fisheries Society. Vicksburg, Mississippi, March 26, 2015. [Contributed Oral presentation]

Dippold*, D.A., R.T. Leaf, J.R. Hendon. Exploring the use of age-based egg- and yield-per-recruit models for the Spotted Seatrout (*Cynoscion nebulosus*). Annual meeting of the Mississippi Chapter of the American Fisheries Society. Vicksburg, Mississippi, March 26, 2015. [Contributed Oral presentation]

Satterfield, E., R.T. Leaf, and J.R. Hendon. Evaluation of potential bias caused by insufficient data for particular age classes of Red Drum, *Sciaenops ocellatus*, in Mississippi coastal waters and adjacent federal waters. Annual meeting of the Mississippi Chapter of the American Fisheries Society. Vicksburg, Mississippi, March 26, 2015. [Poster presentation]

Marks*, J., R.T. Leaf, and R. Mann. A simulation model evaluating the efficiency of adaptive cluster sampling. Bays and Bayous Symposium. Monterey Bay, California, March 22, 2015. [Contributed Oral presentation]

Dippold*, D.A. and R.T. Leaf. Estimation of the length-at-age relationship of Mississippi's Spotted Seatrout. Graduate Student Symposium. Dauphin Island Sea Lab, Dauphin Island, AL, March 14, 2015. [Contributed Oral presentation]

Platform Presentations at regional, national, and international conferences (continued)
(* denotes students funded and mentored by Leaf)

Leaf, R.T. and F. Hernandez. Environmental determinants of Gulf Menhaden condition. 145th Annual Meeting of the American Fisheries Society. Portland, Oregon. [Contributed Oral presentation]

Robinson, K.R., W. Graham, R.D. Brodeur, J.J. Ruzicka, F.J. Hernandez, M. Decker, R. Leaf, L. Chiaverano, M. Acha, K. Aleska, S. Dorji, H.W. Mianzan, J. Quiñones, and S. Uye. Potential Impact of Jellyfish Blooms on Forage Fishes from Diverse Ecosystems. 145th Annual Meeting of the American Fisheries Society. Portland, Oregon. [Contributed Oral presentation]

Brown-Peterson, N.J., R.T. Leaf, M.J. Andres and J.T. Trushenski. Reproductive Biology and Lipid Characteristics of Gulf Menhaden, *Brevoortia patronus*. 145th Annual Meeting of the American Fisheries Society. Portland, Oregon. [Contributed Oral presentation]

Dippold*, D.A., R.T. Leaf, J.R. Hendon. Using Proportional Stock Density and Relative Stock Density as Management Tools for Spotted Seatrout in Mississippi. 145th Annual Meeting of the American Fisheries Society. Portland, Oregon. [Poster presentation]

Kuykendal, K., E. Powell, J. Klink, R. Leaf, and P. Moreno. Management Strategy Evaluation for the Atlantic Surfclam, *Spisula solidissima*, Using a Fisheries Economics Model. 145th Annual Meeting of the American Fisheries Society. Portland, Oregon. [Contributed Oral presentation]

Blancher, E.C., R. A. Park, J. Clough, S. Milroy, M. Graham, C. Rackocinski, R. Hendon, J. Wiggert and R. Leaf. Modifications of the AQUATOX Ecosystem Model for Improved Application in the Nearshore Marine Environment. Society of Environmental Toxicology and Chemistry Annual Meeting, Salt Lake City, Utah, November 1 to 5. [Contributed Oral presentation]

Marks*, J., R.T. Leaf, and R. Mann. A simulation model evaluating the efficiency of adaptive cluster sampling. Bays and Bayous Symposium. Mobile, Alabama, December 2, 2014. [Contributed oral presentation]

Taylor*, S.M., R.T. Leaf, F.J. Hernandez, J.S. Franks, and E.R. Hoffmayer. Ichthyoplankton community composition and patterns of the Loop Current. Bays and Bayous Symposium. December 2, 2014. [Contributed oral presentation]

Grammer, P. O., Mickle, P.F., Peterson, M.S., Havrylkoff, J., Slack, W.T. and R.T. Leaf. Activity patterns of Gulf Sturgeon (*Acipenser oxyrinchus desotoi*) in the staging area of the Pascagoula River during fall outmigration. Bays and Bayous. Mobile, Alabama, December 22, 2014. [Contributed oral presentation]

Leaf, R.T. An examination of inter-annual variability of Gulf Menhaden condition. Bays and Bayous Symposium. Mobile, Alabama, December 2, 2014. [Contributed oral presentation]

Platform Presentations at regional, national, and international conferences (continued)
(* denotes students funded and mentored by Leaf)

Grammer, P. O., Mickle, P.F., Peterson, M.S., Havrylkoff, J., Slack, W.T. and R.T. Leaf. Environmental cues affecting fall activity patterns of Pascagoula River Gulf sturgeon during outmigration. Gulf Sturgeon Annual Workshop. November 22 to 24, 2014. Live Oak, Florida. [Contributed oral presentation]

Taylor*, S.M., R.T. Leaf, F.J. Hernandez, J.S. Franks, and E.R. Hoffmayer. An examination of the diversity and abundance of in the Loop Current of the central Gulf of Mexico. 67th Annual Gulf and Caribbean Fisheries Institute Meeting, Christ Church, Barbados. November 3, 2014. [Contributed oral presentation]

Cooper, W., G. Sutton, J. West, R. Reidel, and R.T. Leaf. Catch-survey analysis of Gulf of Mexico Blue Crab. National Shellfisheries Association 106th Annual Meeting. Jacksonville, Florida, March 29 to April 2, 2014. [Contributed oral presentation, abstract published]

Andrews, A.H., R.T. Leaf, L. Rogers-Bennett, M. Neuman, H. Hawk, and G.M. Cailliet. Bomb radiocarbon dating of the endangered white abalone (*Haliotis sorenseni*): Investigations of age, growth, and lifespan. National Shellfisheries Association 106th Annual Meeting. Jacksonville, Florida, March 29 to April 2, 2014. [Contributed oral presentation, abstract published]

Leaf, R.T. Assessment of Mississippi's red drum (*Sciaenops ocellatus*) fishery. Joint Annual Meeting of the Mississippi and Tennessee Chapters of the American Fisheries Society. Counce, Tennessee, March 18 to 20, 2014. [Contributed oral presentation]

Taylor*, S.M. and R.T. Leaf. Examination at the ichthyoplankton community assemblage of the Loop Current and Sargassum habitats in the Gulf of Mexico. Joint Annual Meeting of the Mississippi and Tennessee Chapters of the American Fisheries Society. Counce, Tennessee, March 18 to 20, 2014. [Contributed oral presentation]

Taylor*, S.M. and R.T. Leaf. Multivariate analysis of the Loop Current ichthyoplankton assemblage in the Gulf of Mexico. Marine-Estuarine Graduate Student Symposium. Chauvin, Louisiana. February 21, 2014. [Contributed oral presentation]

Leaf, R.T. Bottom-up forcing and population dynamics of Mississippi's harvested marine resources. University of Southern Mississippi, Department of Biology's Seminar Series. Hattiesburg, Mississippi, January 31, 2014. [Invited oral presentation]

Leaf, R.T. and K.D. Friedland. Fall bloom phenology and magnitude influence haddock recruitment on Georges Bank. 143rd Annual Meeting of the American Fisheries Society. Little Rock, Arkansas. September 9, 2013. [Contributed Oral presentation]

Platform Presentations at regional, national, and international conferences (continued)
(* denotes students funded and mentored by Leaf)

Clardy, S.D., M.S. Peterson, R.T. Leaf, and N.J. Brown-Peterson. Age and Growth Of The Southern Kingfish, *Menticirrhus americanus*, In The North-Central Gulf of Mexico. 143rd Annual Meeting of the American Fisheries Society. Little Rock, AR. September 9, 2013. [Contributed Oral presentation]

Leaf, R.T. Bottom up to top down: Understanding the drivers of population dynamics of harvested species for management and conservation. USM Dept. of Marine Science Seminar Presentation. Stennis Space Center, MS. March 8, 2013. [Invited oral presentation]

Leaf, R.T. and K.D. Friedland. Fall bloom phenology and magnitude influence haddock recruitment on Georges Bank. Annual Meeting of the Mississippi Chapter of the American Fisheries Society. McComb, MS. February 21, 2013. [Contributed Oral presentation]

Taylor, S.M., E. Hoffmayer, J.S. Franks, and R. T. Leaf. A description of the ichthyofauna composition in the Loop Current in the Gulf of Mexico Annual Meeting of the Mississippi Chapter of the American Fisheries Society. McComb, MS. February 21, 2013. [Contributed Oral presentation]

Leaf, R.T. Modeling and data requirements for determination of Mississippi's Red Drum escapement rate. South Atlantic Fishery Management Council's Red Drum Working Group, September 24, 2014. [Invited oral presentation]

Leaf, R.T., S. Taylor*, and J. Hendon Optimization of Survey Methodology for Black Sea Bass. NSF Science Center, SCEMFIS Spring Meeting. Ocean Springs, MS, April 30, 2014. [Invited oral presentation]

Leaf, R.T. and S.M. Taylor. Construction of a Black Sea Bass fishery-independent sampling design using a simulation model and survey data. IAB Social for NSF Science Center, SCEMFIS. Ocean Springs, MS, April 30. [Invited Poster]

Leaf, R.T. The Status and Future of the Commercial Gulf Menhaden Fishery in the Northern Gulf of Mexico. Gulf Coast Research Lab/Mississippi Department of Marine Resources Marine Fisheries Workshop. April 23, 2014. Ocean Springs, MS. [Invited oral presentation]

Leaf, R.T. Status of Mississippi's Red Drum Stock. Department of Marine Resources Commission on Marine Resources, April 15, 2014. Biloxi, MS. [Invited oral presentation]

Leaf, R.T. Surplus Production Model Analysis of GOM Blue Crab. Gulf of Mexico Data Assessment and Review Workshop. Department of Marine Resources, Biloxi, MS. June 11, 2013. [Invited oral presentation]

Platform Presentations at regional, national, and international conferences (continued)
(* denotes students funded and mentored by Leaf)

Leaf, R.T. Surplus Production Model Indices for Gulf Menhaden. Southeast Data, Assessment, and Review Workshop. Southeast Fisher Science Center, Beaufort, NC. June 3, 2013. [Invited oral presentation]

Concise List of Platform Presentations as a student and post-doctoral researcher (2003 to 2012). Only those with Leaf as presenter are listed

2012

- ICES/PICES Young Scientist Meeting, Palma, Spain

2011

- Ecological Applications Group, NOAA Research Retreat, Newport, RI
- Fisheries and the Environment Annual Meeting, Portland, OR

2010

- Hudson River Foundation, New York, NY

2009

- American Fisheries Society Student Colloquium, Blacksburg, VA
- American Fisheries Society Meeting, Nashville, TN
- International Symposium on Fish Otolith Research and Application, Monterey, CA
- International Radiocarbon Conference, Big Island, HI [R. Leaf, second author]
- Virginia Chapter of the American Fisheries Society, Lexington, VA

2012

- American Fisheries Society Student Colloquium, Fall Creek Falls, TN
- National Stock Assessment Workshop, Port Townsend, WA [Contributed poster]
- NMFS/Sea Grant Annual Fellows Meeting, Honolulu, HI
- Virginia Chapter of the American Fisheries Society, Blacksburg, VA

2007

- NMFS/Sea Grant Annual Fellows Meeting, Miami, FL
- Benthic Ecology Meeting, Atlanta, GA

2006

- National Shellfisheries Association Annual Meeting, Monterey, CA

2005

- NMFS Southeast Fisheries Science Center, Beaufort, NC
- Department of Fisheries and Wildlife Sciences, Blacksburg, VA
- Western Society of Naturalists, Monterey, CA

2004

- Western Society of Naturalists, Rohnert Park, CA

2003

- California Cooperative Oceanic Fisheries Investigations Symposium, Asilomar, CA

Invited presentations to lay audiences

Bennetts, C.B., R.T. Leaf, N.J. Brown-Peterson, and K.S. Dillon. The “Reel” Life of Red Drum: Eating, Growing, Reproducing, and Dying. Eastern Shore Fly Fishers November Meeting. Spanish Fort, Alabama. November 9, 2017.

Invited presentations to lay audiences (continued)

Daley, T.T., and R.T. Leaf. How age and growth information is used in fisheries science. Ocean Springs Library Teen Science Café. Ocean Springs, Mississippi. December 7, 2017.

Bennetts, C.B. and R.T. Leaf. Estimating the mortality rate of Red Drum. Ocean Springs Library Teen Science Café. Ocean Springs, Mississippi. December 7, 2017.

Leaf, R.T. Invited panelist, Mississippi Department of Marine Resources State of the Coast "Moving Forward Together". Biloxi, MS, May 12, 2015.

Leaf, R.T. The Status and Future of the Commercial Gulf Menhaden Fishery in the Northern Gulf of Mexico. Gulf Coast Research Lab/Mississippi Department of Marine Resources Marine Fisheries Workshop. Ocean Springs, MS. April 23, 2014. [Invited oral presentation]

Grant Reviewer Activity

2018

- Member, Technical Review Panel, OAR HQ Sea Grant Aquaculture Competition.

2015

- Member, Technical Review Panel for Texas Sea Grant's Research Grant competition FY2016-2018

2014

- Reviewer for Virginia Sea Grant 2014-2016 Graduate Research Fellowship Program (Eight proposals reviewed, March 19, 2014)
- Reviewer for Austrian Science Fund's Grant Program

Reviewer Activity for Scientific Journals

- Estuaries and Coasts
- Animal Biology
- Environmental Biology of Fishes
- Environmental Conservation
- National Center for Case Study Teaching in Science
- Ecological Indicators
- Ocean & Coastal Management
- Marine and Freshwater Research
- Gulf and Caribbean Research
- Canadian Journal of Fisheries and Aquatic Sciences
- Fisheries Research
- Journal of Shellfish Research
- Coral Reefs
- Proceedings of the Southeastern Association of Fisheries and Wildlife Managers
- North American Journal of Fisheries Management
- Ecological Applications
- Journal of Shellfish Research
- ICES Journal of Marine Science

Fish Stock Assessment

Assessment Lead:

- 2018 State of Mississippi Black Drum Stock Assessment
- 2017 State of Mississippi Speckled Seatrout Stock Assessment
- 2016 State of Mississippi Speckled Seatrout Stock Assessment
- 2015 State of Mississippi Red Drum Stock Assessment

Fish Stock Assessment

Analytical Team Member:

- Technical Advisory Team member, Audubon Institute's G.U.L.F. RFM Certification program, 2014 to Present
- Technical Panel Member, 2018 SEDAR 62 Gulf Menhaden Benchmark Assessment Gulf Menhaden Stock Assessment
- Analyst, 2018 SEDAR 62 Gulf Menhaden Benchmark Assessment (co-Lead)
- Participant, 2016 Gulf of Mexico Fishery Management Council's Data Limited (multi-species) South East Data, Assessment, and Review (SEDAR) stock assessment
- Analyst, 2012 Gulf Data, Assessment, and Review Gulf of Mexico Blue Crab Stock Assessment

Participation Program Review Panels and Task Force Activity

- Reviewer, 2018 NOAA Sea Grant Aquaculture Grants Competition
- Reviewer, 2018 Stock Assessment of Blue Crab in the North Carolina
- Reviewer (desk review), 2018 Assessment of Striped Mullet *Mugil cephalus* in Louisiana Waters
- Reviewer (desk review), 2017 Assessment of Striped Mullet *Mugil cephalus* in Louisiana Waters
- Participant, Southeast States Otolith Processor Workshop and Working group, 2017
- Participant, Webinar, Mid-Atlantic Fishery Management Council, Chub Mackerel Fisheries Management Assessment Team 2017
- Participant, and Presenter, Mid-Atlantic Fishery Management Council, Scientific and Statistical Committee 2017
- Participant, Blue Crab Task Force Meeting, Gulf States Marine Fisheries Commission, 68th Annual Meeting, 2017
- Invited participant "2017 Recreational Released Catch Workshop"
- Member, technical advisory committee, Mississippi Sandhill Crane Recovery Team, November 2014 to Present
- Invited participant "Mississippi-Alabama Sea Grant Consortium Formative Review, 2017"
- Invited participant, South Atlantic Fishery Management Council's Red Drum Working Group, Tampa, FL, September 24, 2014
- Member, technical advisory committee, The Nature Conservancy's Coastal Streams and Habitat Initiative. December, 2014 to Present
- Participant Northeast Fishery Science Center Program Review, 2013. Woods Hole, MA
- Participant Atlantic States Marine Fisheries Commission, Black Sea Bass Ageing Workshop, 2013, Annisquam River Marine Fisheries Field Station, MA

Risk Assessment and Sustainability Certification Activity

- MSC Fisheries Peer Reviewer, Newfoundland Snow Crab Trap Fishery
- MSC Fisheries Peer Reviewer, U.S. Alaska Bering Sea and Aleutian Islands King, Tanner and Snow Crab Commercial Fisheries
- MSC Fisheries Peer Reviewer, Alaska Pacific Halibut Commercial Fishery (200 nm EEZ)
- MSC Fisheries Peer Reviewer, “US Acadian Redfish, Pollock, and Haddock Otter Trawl Fishery”
- MSC Fisheries Peer Reviewer, “Canada Scotian – Fundy Haddock Fishery”
- MSC Fisheries Peer Reviewer, “Pacific Sablefish (Black cod) Commercial Fishery (200nm EEZ)”

Synergistic Activities and Technical Advising

- Member, 2015 to Present, NOAA MAFAC task force on Climate and Marine Resources
- Panelist, Independent Review Panel “Characterization of relations between autumn outflow and survival, recruitment, and habitat quality for delta smelt (*Hypomesus transpacificus*)”
- Contributor to Gulf States Marine Fisheries Commission’s revision of the Age and Growth Manual 2018
- Member, Gulf of Mexico Fishery Management Council’s Red Drum Scientific and Statistical Committee for 2016 to 2018
- Member, Gulf of Mexico Fishery Management Council’s Data Collection Advisory Panel, term is April 2016 to March 2018
- Member (Fisheries Expert and Regional Expert), Ecosystem Metrics for Forage Fish Management Utilizing Jellyfish
- Comments provided to SAI Global Assurance Services LTD \ Global Trust Certification LTD regarding Blue Crab Stock Assessment for the northern Gulf of Mexico
- Member, technical advisory committee, The Nature Conservancy’s Coastal Streams and Habitat Initiative. 2014 to 2016
- Participant, “Strategies for Improving Fishery-dependent Data for Use in Data-limited Stock Assessments in the Wider Caribbean Region”, Nov. 2 to 3. Christchurch, Barbados
- Participant, Black Sea Bass Ageing workshop, July 22 to 23. Massachusetts Department of Marine Fisheries, Gloucester, MA
- Participant, NOAA Northeast Fishery Science Center Program Review, May 19 to 22. Woods Hole, MA

Professional memberships and affiliations

- American Fisheries Society (2007 to present)
- National Shellfisheries Association (2008 to present)
- American Society of Ichthyologists and Herpetologists (2010 to present)
- American Institute of Fishery Research Biologists (2012 to present)

Classroom Teaching Experience *(while a member of the USM faculty)*

2018

- Instructor, graduate-level class Special Problems in Management Strategy Evaluation

2017

- Instructor, graduate-level class Quantitative Fisheries Management
- Instructor, graduate-level class Biometry for the Coastal Sciences
- invited speaker for Dr. Wei Wu's Bayesian Statistics Course (USM)

2016

- Instructor, graduate-level class Quantitative Fisheries Management
- Instructor, graduate-level class Biometry for the Coastal Sciences
- Co-Instructor (50%) USM, graduate-level class Professional Skills
- Instructor and Developer, Summer short course "R programming" at GCRL

2015

- Instructor, USM graduate-level class Quantitative Fisheries Management
- Instructor, USM graduate-level class Biometry for the Coastal Sciences
- Co-Instructor (50%) USM, graduate-level class Professional Skills

2014

- Host and invited speaker for Dr. Noelle Wilson's Maritime History (Univ. of Miss.)
- Instructor, USM graduate-level class Quantitative Fisheries Management
- Co-Instructor (33%) USM, graduate-level class Professional Skills
- Instructor, USM graduate-level class Biometry for the Coastal Sciences
- Instructor, USM Special topics in Individual-Based Simulation Modeling

2013

- Instructor, USM graduate-level class Biometry for the Coastal Sciences
- Organizer, USM informal reading group "Structural Equation Modeling Techniques"

Teaching Experience *(prior to becoming a member of the USM faculty)*

2010 SAT Preparation, Kaplan, Inc., Instructor

2008 Marine Stock Assessment, University of Maryland Eastern Shore, Guest Lecturer

2007 Marine Stock Assessment, University of Maryland Eastern Shore, Guest Lecturer

2006 Wildlife Population Dynamics and Estimation, Virginia Tech, Teaching Assistant

2005 SAT, math, and science, Ivy West San Francisco Bay, Tutor

2003 Subtidal Ecology (Graduate), Moss Landing Marine Laboratories, Teaching Assistant

2002 Marine Ecology, Moss Landing Marine Laboratories, Teaching Assistant

Graduate Student Mentoring Activity *(While a faculty member at USM)*

Financially supported and advised graduate students

Stephanie Taylor (MS Degree Conferred Spring 2014)
David Dippold (MS Degree Conferred Spring 2015)
Morgan Corey (MS Degree Conferred Spring 2015)
Grant Adams (MS Degree Conferred Spring 2016)
Robert Trigg (MS Degree Conferred Spring 2016)
Corbin Bennetts (MS Degree Conferred Spring 2018)
Taylor Daley MS Degree Conferred Spring 2018)
Alex Benecke (In progress, MS)
Nathanial Jermain (In progress, MS)
Megumi Oshima (In progress, PhD)

Committee Membership (University of Southern Mississippi, Department of Coastal Sciences)

Jana Herrmann, MS
Kelsey Kuykendall, MS
Emily Satterfield, MS
Christopher Flemming, MS
Abigail Kuhn, MS
Tyler Hardy, MS
Trevor Moncrief (committee chair), MS
Virginia Fleer, PhD
Glenn Zapfe, PhD

Undergraduate and High School Student Mentoring Activity

Landon Chen, Undergraduate, University of Miami (2018 to present)
Beckah Campbell, Undergraduate, USM (2017 to present)
Alaina Woods, Undergraduate, Paul Smith's College (2017)
Anna Swirgris, Undergraduate, University of Florida (2017)
Claire Robinson, Undergraduate, Biology, University of North Carolina at Chapel Hill (2015)
Jesse Marks, Undergraduate, Department of Mathematics, Central Methodist University (2014)
Eric Tobin, Undergraduate, Department of Wildlife Sciences, Virginia Tech (2009)
Karl Sorensen, High School Student, Salem High School, Virginia (2008)
Jeff Kramer, Undergraduate, Department of Biology, Virginia Tech (2007)

Institutional Service

2016	Member, COA Graduate student handbook revision team
2015	Member, University of Southern Mississippi's Gulf Coast Faculty Council
2014	Committee member, "Development of Emphasis Area Program for COA" Committee member, "COA Departmental Assistantship administration"
2013	Affiliate of USM Center for Undergraduate Research
2008	Panelist, Graduate Honor Society at Virginia Tech
2006	Communication coordinator, Fisheries and Wildlife Graduate Student Association

Service to professional societies and the scientific community

2018

- Southern Division Representative, Marine Fisheries Section, American Fisheries Society
- Webmaster, Marine Fisheries Section, American Fisheries Society

2017

- Coordinator of student presentations Annual Meeting of the Mississippi Chapter of the American Fisheries Society
- Moderator, “Fishery Management”, August 19, 2017, national meeting of the American Fisheries Society, Tampa, Florida
- Southern Division Representative, Marine Fisheries Section, American Fisheries Society

2016

- Program Chair Mississippi Alabama Sea Grant “Bays and Bayous” Meeting, Biloxi, MS
- Coordinator of judging student presentations Annual Meeting of the Mississippi Chapter of the American Fisheries Society
- Southern Division Representative, Marine Fisheries Section, American Fisheries Society

2015

Moderator, “Fishery Management of Marine Molluscs”, August 19, 2015, national meeting of the American Fisheries Society, Portland, Oregon

- Judge of student travel award applications for the national meeting of the American Fisheries Society
- Judge of student presentations, Graduate Student Symposium. Dauphin Island Sea Lab, Dauphin Island, AL, March 14, 2015

2014

- Judge of student presentations, Joint Annual Meeting of the Mississippi and Tennessee Chapters of the American Fisheries Society, Counce, TN, March 18 to 20, 2014
- Judge of student presentations, Gulf and Caribbean Fisheries Research Institute, 67th Annual Meeting, Christ Church, Barbados. November 3 to 7, 2014

2007

- Communications Chair, Virginia Tech Chapter of the American Fisheries Society

2006

- Vice-president, Virginia Tech Chapter of the American Fisheries Society

Mentions in the popular press

2017 Biloxi Sun Herald “How many red snapper are actually in the Gulf? These scientists are going to find out”. <http://www.sunherald.com/sports/outdoors/article186103168.html>

2010 “The Concrete Jungle” by R. Sullivan. Published Sept. 2 in New York Magazine <http://nymag.com/news/features/68087/>

2005 Measuring Abalone and Sea Urchins. Bulletin of the Ecological Society of America 86: 278-281.

Awards and Scholarships Received

- 2009 Robert D. Ross Graduate Scholarship, Virginia Chapter of the American Fisheries Society,
A.B. Massey Award for “Outstanding Graduate Student” in the Virginia Tech Department
of Fisheries and Wildlife Sciences
- 2008 Virginia Tech Graduate Research and Development Project Grant, \$300
- 2007 Virginia Tech Graduate Research and Development Project Grant, \$300
- 2006 National Shellfisheries Association Travel Grant, \$300
- 2004 Myers Oceanographic Trust Award, \$1800
- 2003 American Museum of Natural History Grant, \$800
J.T. Harvey Scholarship, \$500
- 2002 PADI Project Aware Grant, \$1,500