MATTHEW K. STREICH

Center for Sportfish Science and Conservation
Harte Research Institute for Gulf of Mexico Studies
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EDUCATION

<u>Year</u>	<u>Degree</u>	<u>Field of Study</u>	<u>Institution</u>
2016	Ph.D.	Marine Biology	Texas A&M University
2012	M.S.	Fisheries Science	University of Georgia
2010	B.S.F.R.	Fisheries and Aquaculture	University of Georgia

CURRENT POSITIONS

2021 – present	Associate Research Scientist, Center for Sportfish Science and Conservation, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi.
2021 – present	Assistant Director, Center for Sportfish Science and Conservation, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi.
2019 – present	Adjunct Graduate Faculty, Texas A&M University-Corpus Christi.

PROFESSIONAL EXPERIENCE

2017 – 2021	Assistant Research Scientist, Center for Sportfish Science and Conservation, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi.
2019	Chief Scientist, R/V Pelican Cruise - The Great Red Snapper Count: Direct Count Surveys on the North TX Shelf. August 1-14, 2019.
2016 – 2017	Postdoctoral Research Associate, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi.
2013 – 2016	Graduate Research Assistant, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University-Corpus Christi. Dissertation Title: Ecology of Red Snapper in the western Gulf of Mexico: Comparisons among artificial and natural habitats Advisor: Dr. Greg Stunz

2012 – 2013	Graduate Teaching Assistant, Texas A&M University-Corpus Christi. Biology I Lab (2 sec.), Biology II Lab (1 sec.), Professional Skills (1 sec.).
2010 – 2012	Graduate Research Assistant, Warnell School of Forestry and Natural Resources, University of Georgia. Thesis Title: Estuarine residence, habitat use, and movements of Tripletail (Lobotes surinamensis) in the Ossabaw Sound Estuary, Georgia Advisor: Dr. Doug Peterson
2010 – 2011	Graduate Teaching Assistant, Warnell School of Forestry and Natural Resources, University of Georgia. Fisheries Management Lab (1 sec.).
2008 – 2009	Fisheries Research Technician, Sturgeon Population Dynamics and Ecology Project, Warnell School of Forestry and Natural Resources, University of Georgia.

RESEARCH GRANTS

Cumulative Total: \$	\$15.7M (\$2.8M as PI/Co-PI)
2022 – 2024	Shining light on harvest and effort for the recreational flounder gig fishery in Texas. National Oceanic and Atmospheric Administration — Texas Sea Grant . G. Stunz (PI), M. Streich (Co-PI), K. Banks (Co-PI) - \$445,382
2021 – 2023	Greater Amberjack (<i>Seriola dumerili</i>) abundance, distribution, and movement in U.S. waters in the South Atlantic and Gulf of Mexico. National Oceanic and Atmospheric Administration – Mississippi-Alabama Sea Grant Consortium. S. Powers (PI), J. Hoenig (Co-PI), G. Chiu (Co-PI), J. Buckel (Co-PI), T. Switzer (Co-PI), J. Rooker (Co-PI), G. Stunz (Co-PI), M. Dance (Co-PI), M. Catalano (Co-PI), S. Murawski (Co-PI), M. Drymon (Co-PI), M. Streich (Co-PI), and 10 others - \$11,700,000
2021 – 2023	Colorado River Delta Ecosystem Assessment: Gathering key baseline data to guide future habitat restoration in Matagorda Bay. Matagorda Bay Mitigation Trust . G. Stunz (PI), M. Streich (Co-PI) - \$495,991
2021 – 2022	Center for Sportfish Science and Conservation Angler Engagement Program. George and Mary Josephine Hamman Foundation . G. Stunz (PI), M. Streich (Co-PI) - \$25,000
2021 – 2022	Seasonal movements of Cobia in Texas and the western Gulf of Mexico. TPWD – Coastal Fisheries State Wildlife Grant . M. Streich (PI), G. Stunz (Co-PI), J. Curtis (Co-PI) - \$100,000
2020 – 2021	An assessment of Tarpon recruitment patterns, movements, and habitat use in the Texas Coastal Bend. Harvey Weil Sportsman Conservationist Trust . M. Streich (PI), G. Stunz (Co-PI) - \$10,000

2020 – 2021	A scientific assessment of the ecological performance and habitat value of standing vs. reefed oil and gas platforms. Gulf Offshore Research Institute . G. Stunz (PI), M. Streich (Co-PI), D. Coffey (Co-PI) - \$20,000
2020 – 2021	Vessel electronics and research support. George and Mary Josephine Hamman Foundation . G. Stunz (PI), M. Streich (Co-PI) - \$20,000
2019 – 2022	A multi-disciplinary ecosystem assessment of West Matagorda Bay to inform conservation of threatened and endangered species: Addressing potential habitat alterations caused by flooding events and sea rise with respect to shorebirds, colonial waterbirds, rails, and sea turtles. Texas Comptroller of Public Accounts . G. Stunz (PI), J. Gibeaut (Co-PI), E. Oborny (Co-PI), P. Plotkin (Co-PI), J. Pollack (Co-PI), J. Rooker (Co-PI), D. Wells (Co-PI), M. Wetz (Co-PI), M. Streich (Co-I) - \$3,443,377 *role included proposal preparation, macrofauna sampling design and collection, and reporting
2019 – 2021	Habitat use and movement of Tarpon along the Texas Coast. Bonefish and Tarpon Trust . J. Rooker (PI), G. Stunz (Co-PI), M. Dance (Co-PI), D. Wells (Co-PI), M. Streich (Co-PI), R. Kline (Co-PI) - \$82,060
2019 – 2020	Movement patterns and discard mortality of Cobia in the Gulf of Mexico. Gulf of Mexico Fishery Management Council . M. Streich (PI), G. Stunz (Co-PI), J. Curtis (Co-PI) - \$92,500
2019 – 2020	Post-release mortality and behavior of sharks in shore-based recreational fisheries using citizen scientists and low-cost tags. National Oceanic and Atmospheric Administration – Cooperative Research Program . J. Mohan (PI), M. Streich (Co-PI), D. Wells (Co-PI), M. Drymon (Co-PI), G. Stunz (Co-PI) - \$240,892
2018 – 2020	Evaluating the relative habitat value of intertidal and subtidal oyster reefs to improve restoration methods. National Oceanic and Atmospheric Administration – Texas Sea Grant . J. Pollack (PI), M. Streich (Co-PI), G. Stunz (Co-PI), J. Curtis (Co-PI) - \$336,794
2018 – 2020	Fisheries impact of Rio Grande Valley Reef. Valley Crossing Pipeline Community Investment. G. Stunz (PI), M. Streich (Co-PI) - \$350,000
2018 – 2019	Recovering the acoustic array at the Corpus Christi Nearshore Reef in the aftermath of Hurricane Harvey. National Academies of Sciences, Engineering, and Medicine – Gulf Research Program . J. Curtis (PI), M. Streich (Co-PI) - \$49,657
2018 – 2019	Impacts of Hurricane Harvey on Cedar Bayou: A post-disturbance assessment of sportfish use of essential fish habitat. Harvey Weil Sportsman Conservationist Trust . J. Curtis (PI), M. Streich (Co-PI), G. Stunz (Co-PI) - \$6000
2017 – 2020	Estimating the absolute abundance of Age 2+ Red Snapper in the U.S. Gulf of Mexico. National Oceanic and Atmospheric Administration –

	Mississippi-Alabama Sea Grant Consortium. G. Stunz (PI), W. Patterson (Co-PI), S. Powers (Co-PI), J. Rooker (Co-PI), J. Hoenig (Co-PI), R. Ahrens (Co-PI), M. Streich (Co-I), and 17 others - \$12,000,024 *role included proposal preparation and field sampling with ROV and hydroacoustics in western Gulf of Mexico
2014 – 2015	Assessing the impact of a newly constructed artificial reef off Port Aransas, Texas: What are we missing? Texas Sea Grant Grants-in-Aid of Graduate Research . M. Streich (PI) - \$2000
2013 – 2014	Artificial reef structure and function: Effects on Red Snapper recruitment in the western Gulf of Mexico. Texas Sea Grant Grants-in-Aid of Graduate Research . M. Streich (PI) - \$2000

PUBLICATIONS

Peer-reviewed Articles

- 11. Gibson, K. J., M. K. **Streich**, T. S. Topping, and G. W. Stunz. 2021. New insights into the seasonal movement patterns of Shortfin Mako sharks in the Gulf of Mexico. Frontiers in Marine Science 8:623104. DOI: 10.3389/fmars.2021.623104.
- 10. Brewton, R. A., C. H. Downey, M. K. **Streich**, J. J. Wetz, M. J. Ajemian, and G. W. Stunz. 2020. Trophic ecology of red snapper *Lutjanus campechanus* on natural and artificial reefs: Interactions between annual variability, habitat, and ontogeny. Marine Ecology Progress Series 635:105-122. DOI: 10.3354/meps13210.
- 9. Gibson, K., M. K. **Streich**, T. Topping, and G. Stunz. 2019. Utility of citizen science data: A case study in land-based shark fishing. PLoS One 14:e0226782.

 DOI: 10.1371/journal.pone.0226782.
- 8. Topping, T. S., M. K. **Streich**, M. R. Fisher, and G. W. Stunz. 2019. A comparison of private recreational fishing harvest and effort for Gulf of Mexico Red Snapper during derby and extended federal seasons and implications for future management. North American Journal of Fisheries Management 39:1311-1320. DOI: 10.1002/nafm.10368.
- 7. Downey, C. H., M. K. **Streich**, R. A. Brewton, M. J. Ajemian, J. J. Wetz, and G. W. Stunz. 2018. Habitat-specific reproductive potential of Red Snapper: A comparison of artificial and natural reefs in the western Gulf of Mexico. Transactions of the American Fisheries Society 147:1030-1041. DOI: 10.1002/tafs.10104.
 - *Featured Paper 2018 Transactions of the American Fisheries Society
- 6. **Streich**, M. K., M. J. Ajemian, J. J. Wetz, and G. W. Stunz. 2018. Habitat-specific performance of vertical line gear in the western Gulf of Mexico: A comparison between artificial and natural habitats using a paired video approach. Fisheries Research 204:16–25. DOI: 10.1016/j.fishres.2018.01.018.
- 5. **Streich**, M. K., M. J. Ajemian, J. J. Wetz, J. D. Shively, J. B. Shipley, and G. W. Stunz. 2017. Effects of a new artificial reef complex on Red Snapper and the associated fish

- community: An evaluation using a before-after control-impact approach. Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science 9:404–418. DOI: 10.1080/19425120.2017.1347116.
- 4. **Streich**, M. K., M. J. Ajemian, J. J. Wetz, J. A. Williams, J. B. Shipley, G. W. Stunz. 2017. A comparison of size structure, age, and growth of Red Snapper from artificial and natural habitats in the western Gulf of Mexico. Transactions of the American Fisheries Society 146:762–777. DOI: 10.1080/00028487.2017.1308884.
- 3. **Streich**, M. K., M. J. Ajemian, J. J. Wetz, and G. W. Stunz. 2017. A comparison of fish community structure at mesophotic artificial reefs and natural banks in the western Gulf of Mexico. Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science 9:170–189. DOI: 10.1080/19425120.2017.1282897.
- Streich, M. K., C. A. Kalinowsky, and D. L. Peterson. 2013. Residence, habitat use, and movement patterns of Atlantic Tripletail in the Ossabaw Sound Estuary, Georgia. Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science 5:291–302. DOI: 10.1080/19425120.2013.829144.
- 1. **Streich**, M. K., and D. L. Peterson. 2011. Evidence of a Bull Shark nursery in the Altamaha River Estuary, Georgia. Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies 65:92–97.

Technical Reports

- 3. **Streich**, M. K., J. M. Curtis, and G. W. Stunz. 2021. Movement patterns and discard mortality of Cobia in the Gulf of Mexico. Gulf of Mexico Fishery Management Council NA15NMF4410011 Final Report. 19 pp.
- 2. Stunz, G. W., J. M. Curtis, M. K. **Streich**, and J. J. Wetz. 2019. A post-reefing assessment of the Port O'Connor Nearshore Reef. Texas Parks and Wildlife Foundation Project End Report. 15 pp.
- 1. Stunz, G. W., M. J. Ajemian, M. K. **Streich**, R. Brewton, C. Downey, and Q. Hall. 2016. Investigation of the relative habitat value of oil/gas platforms and natural banks in enhancing stock building of reef fish in the western Gulf of Mexico. NOAA Marine Fisheries Initiative NA14NMF4330219 Final Report. 108 pp.

In Preparation

- Hall, Q. A., D. M. Coffey, M. K. **Streich**, M. R. Fisher, and G. W. Stunz. Shining light on the impact of guided-gigging charters on Texas' southern flounder fishery using social media photo archives: A stab in the dark. Target Journal: PLoS ONE. *In Preparation (99% complete)*.
- Banks, K. G., J. M. Curtis, M. K. **Streich**, and G. W. Stunz. Influence of hurricane activity on Red Snapper (*Lutjanus campechanus*) movements around artificial reefs. Target Journal: Transactions of the American Fisheries Society. *In Preparation (95% complete)*.

- **Streich**, M. K., M. J. Ajemian, J. J. Wetz, and G. W. Stunz. Colonization of the Corpus Christi Nearshore Reef: A comparison of underwater video and traditional sampling gears for monitoring reef fish presence and abundance. Target Journal: Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science. *In Preparation (75% complete)*.
- Dutton, J., K. G. Banks, M. K. **Streich**, and G. W. Stunz. Bioaccumulation of heavy metals in trophy Atlantic Bluefin Tuna (*Thunnus thynnus*). Target Journal: Environmental Toxicology. *In Preparation (50% complete)*.
- Streich, M. K., B. Ahr, E. Reyier, J. Franks, D. McDowell, S. VanderKooy, and C. Kalinowsky. Seasonal migration of tripletail (*Lobotes surinamensis*) along the southeastern United States revealed by acoustic and conventional tagging. Target Journal: Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science. *In Preparation (50% complete)*.
- Banks, K. G., M. K. **Streich**, and G. W. Stunz. Age and Growth of King Mackerel (*Scomberomorus cavalla*) in the western Gulf of Mexico. Target Journal: Marine and Coastal Fisheries:

 Dynamics, Management, and Ecosystem Science. *In Preparation (25% complete)*.

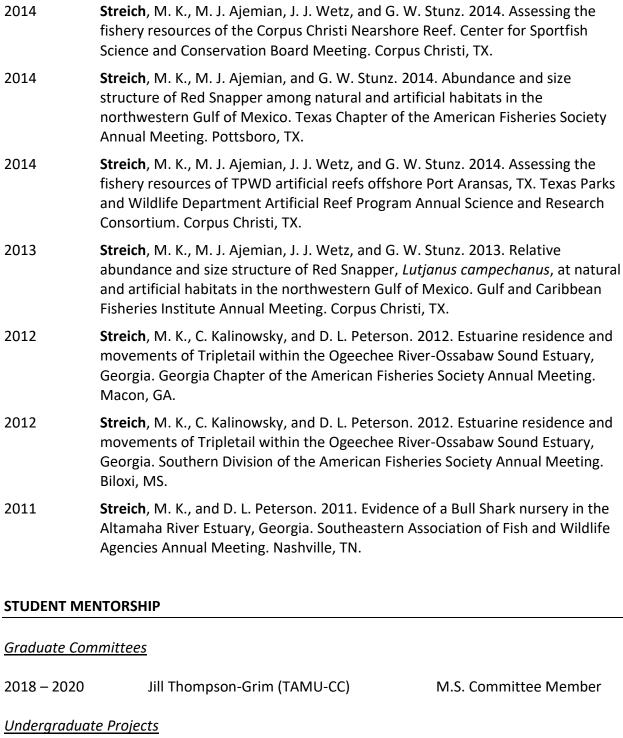
PRESENTATIONS

- * Student supervised by Streich Δ Invited speaker
- 2021 Δ**Streich**, Matthew. 2021. Movement patterns and discard mortality of Cobia in the Gulf of Mexico. Gulf of Mexico Fishery Management Council August Meeting. San Antonio, TX.
- 2020 Ajemian, M. J., M. P. McCallister, K. Gibson, M. K. **Streich**, and G. W. Stunz. 2020. Understanding artificial reef use by highly migratory species. Florida Artificial Reef Summit. Virtual Meeting.
- 2020 Δ**Streich**, M. K. 2020. Matagorda Bay Ecosystem Assessment. Texas Seagrass Workgroup Meeting. Port Aransas, TX.
- Ajemian, M. J., M. P. McCallister, J. J. Wetz, M. K. **Streich**, and G. W. Stunz. 2020. Challenges and prospects for scientific monitoring of artificial reefs: Lessons learned from Texas to Florida. Florida Artificial Reef Summit. Melbourne Beach, FL.
- **Streich**, M. K., M. J. Ajemian, J. J. Wetz, and G. W. Stunz. 2019. Effects of a new artificial reef complex on Red Snapper and the associated fish community: An evaluation using a before-after control-impact approach. 2019 Texas Sea Grant Research Symposium. College Station, TX.





'Rigs-to-reefs' programs. Invited Seminar, University of Alicante. Alicante, Spain.



2017	Jasmine Rodriguez (Red Snapper age structure at artificial reefs, LSAMP)
2015	Lily Walker (Reef fish relative abundance at a new artificial reef, TBEM)
2014	Jesse Smith (Red Snapper age and growth habitat comparisons, SURF)
2013	Ruben Palacios (Red Snapper age and growth, SACNAS)

PROFESSIONAL ORGANIZATIONS, ACTIVITIES, AND SERVICE

2021 – present	Texas Tarpon Collaborative, Advisory Board Member
2021	SEDAR 74 GoM Red Snapper Stock ID, Life History Working Group
2020 – present	iTAG, Florida Fish and Wildlife Conservation Commission
2019 – present	CBBEP Water and Sediment Quality Implementation Team
2019	TPWD Species of Greatest Conservation Need Working Group
2011 – present	American Fisheries Society (national and state chapters)

University Organizations, Activities, and Service

2020	Guest Lecturer, Coastal Management and Ocean Law, 29 Oct. 2019. "Federal fisheries management: A case study of Gulf of Mexico Red Snapper." Corpus Christi, TX.
2019	Guest Lecturer, Coastal Management and Ocean Law, 7 Nov. 2019. "Federal fisheries management in the Gulf of Mexico: A case study of Red Snapper." Corpus Christi, TX.
2019	Science Judge, Marine Science Graduate Student Organization Annual Research Forum, Corpus Christi, TX.
2016	Science Judge, Marine Science Graduate Student Organization Annual Research Forum, Corpus Christi, TX.
2013	Student Coordinator, Gulf and Caribbean Fisheries Institute Poster Session, Corpus Christi, TX.
2012 – 2016	Member, Marine Science Graduate Student Organization, Texas A&M-Corpus Christi.
2011 – 2012	<i>Treasurer</i> , Student Chapter of the American Fisheries Society, University of Georgia.
2009 – 2010	Student Ambassador, Warnell School of Forestry and Natural Resources Student Ambassadors, University of Georgia.
2009 – 2010	Associate Forester, Xi Sigma Pi, University of Georgia.
2007 – 2012	<i>Member</i> , Student Chapter of the American Fisheries Society, University of Georgia.

Other Organizations

2014 – present	Ducks Unlimited
2012 – present	Coastal Conservation Association

JOURNAL REVIEWER

AFS Symposium Series Bulletin of Marine Science Diversity

Fisheries Research

Frontiers in Marine Science

Gulf of Mexico Science

ICES Journal of Marine Science

Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science

North American Journal of Fisheries Management

Scientific Reports

Southeastern Naturalist

WORKSHOPS & CONTINUING EDUCATION

2019	VideoRay Mission Defender ROV Training. VideoRay, LLC., Corpus Christi, Texas.
2018	Echoview Software Training. Echoview Software Pty. Ltd., Halifax, Nova Scotia, Canada.
2017	Advanced GIS for Fisheries Scientists. American Fisheries Society, Tampa, Florida.
2017	Otolith Microchemistry 101: An Introduction for Fisheries Scientists. Texas Chapter of the American Fisheries Society, Corpus Christi, Texas.
2016	Data Wrangling in R and R Studio. Southern Division of the American Fisheries Society, Wheeling, West Virginia.
2016	Data Visualization in R using ggplot2. Southern Division of the American Fisheries Society, Wheeling, West Virginia.
2016	Advanced Workshop (Conversion of PRIMER 6 to PRIMER 7) on Multivariate Analysis in Ecology and Other Sciences using PRIMER v7. PRIMER-E, Corpus Christi, Texas.
2015	Age and Growth Analysis with R. American Fisheries Society, Portland, Oregon.

COLLABORATORS

M. Ajemian (FAU-HBOI), J. Curtis (TAMU-CC), M. Dance (LSU), J. M. Drymon (MSU), J. Dutton (TSU), M. Fisher (TPWD), C. Kalinowsky (GADNR-CRD), J. Mohan (UNE), E. Oborny (BIOWEST), J.

Pollack (TAMU-CC), J. Rooker (TAMUG), B. Shipley (TPWD), D. Shively (TPWD), G. Stunz (TAMU-CC; Ph.D. advisor), S. VanderKooy (GSMFC), D. Wells (TAMUG), M. Wetz (TAMU-CC)

AWARDS & HONORS

2016	Coastal Conservation Association Texas Graduate Scholarship
2010	Coastal Conservation Association Texas Graduate Scholarship
2015	Carl R. Beaver Memorial Scholarship
2014	Carl R. Beaver Memorial Scholarship
2013 – 2016	Texas A&M UnivCorpus Christi Graduate Research Assistantship
2012 – 2013	Texas A&M UnivCorpus Christi Graduate Teaching Assistantship
2010 – 2012	Warnell School Graduate Student Assistantship
2010	Magna cum laude, University of Georgia
2009	Gordie J. Yancey Scholarship
2009	Xi Sigma Pi, elected to membership
2008	Trout Unlimited Scholarship
2008 – 2009	Presidential Scholar, University of Georgia
2007 – 2010	Dean's List, University of Georgia

SKILLS AND CERTIFICATIONS

- DAN first aid, O₂, CPR, AED
- DAN Diving Emergency Management Provider
- Boating safety (USCG approved), operation (up to 36'), trailering, and basic maintenance
- Field sampling: gill nets, trammel nets, drift nets, angling, seines, small trawls, cast nets, epibenthic sled, remotely operated vehicle (ROV), fisheries acoustics, vertical line, fish traps, visual census, acoustic telemetry (passive and active), radio telemetry, satellite telemetry, stream habitat assessment
- SCUBA (AAUS scientific diver; 120 dives)
- Microsoft Office (Word, Excel, Powerpoint, Access)
- Data management
- Statistical software: R, SAS, MARK, PRIMER
- GIS: ArcMap, ArcScene

MEDIA COVERAGE

Print News

- 14. Hall, Quentin. "Lone star ling." Texas Saltwater Fishing Magazine. October 2021.
- 13. Uzzle, Chuck. "Creating a brighter future." Texas Saltwater Fishing Magazine. August 2021.

- 12. Márquez, Melissa. "Mako-ing history: Uncovering Mako shark movements in the Gulf of Mexico." Forbes Magazine. March 17, 2021.
- 11. Streich, Matt. "Cracking the code on Cobia." Tide Magazine. January/February 2021.
- 10. Sams, Lili. "Spearheading cobia research in the Gulf." Lone Star Outdoor News. August 14, 2020.
- 9. Wyatt, Matt. "Researchers aim to learn more about post-release shark survival." Houston Chronicle. February 15, 2020.
- 8. Buskey, Nikki. "HRI research cruise surveys Texas reefs for red snapper count." TAMUCC News. September 12, 2019. http://www.tamucc.edu/news/2019/09/091219-hri-redsnapper-research-cruise-august-2019.html#.XYGbWGZ7mUl.
- 7. Priest, Jessica. "Fish caught locally with plastic in gut is sign of global problem." Victoria Advocate. August 25, 2019.
- 6. Buskey, Nikki. "Oases of life." ECO Magazine. September 2017.
- 5. Priest, Jessica. "Long lines help monitor fish at newest Texas artificial reef." The Washington *Times*. June 26, 2017.
- 4. Freeman, Suzanne. "Corpus Christi scientist supports Rigs-to-Reefs." Corpus Christi Business News. June 22, 2017.
- 3. "Artificial reefs crucial to keeping Gulf healthy." Victoria Advocate. June 17, 2017.
- 2. Van Dyke Walden, Janice. "New life for old structures: Scientists are finding a surprising diversity of life on Texas artificial reefs." Gulf Coast Mariner. July/August 2016.
- 1. Burke, John. "Burke: Getting to know more about tripletails." Savannah Morning News. August 12, 2010.

TV Newscasts, Radio, and Podcasts

- 2. KBSO 94.7. "Lago in the Morning." Center for Sportfish Science and Conservation's Ling Tagging Project. September 30, 2021.
 - https://radio.securenetsystems.net/cwa/index.cfm?stationCallSign=KBSO
- 1. KBSO 94.7. "Lago in the Morning." Center for Sportfish Science and Conservation's iSnapper App and Cobia Migration Study. June 22, 2021.
 - https://radio.securenetsystems.net/cwa/index.cfm?stationCallSign=KBSO