July 2017

KESLEY JAE GIBSON CUMULATIVE VITAE

ADDRESS

Center for Sportfish Science and Conservation 314 Harte Research Institute 6300 Ocean Drive Texas A&M University- Corpus Christi Corpus Christi, TX 78412-5869 Kesley.Gibson@tamucc.edu Office: 361-825-3071

CAREER INTERESTS

Marine Biology with emphasis in Ecology of Marine Fishes (esp. Elasmobranchs, Marine Conservation Ecology, Marine Fisheries)

EDUCATION

Ph.D. (Expected 2019) Department of Marine Biology, Harte Research Institute-Marine Biology

Concentration

Texas A&M University- Corpus Christi

Dissertation: Importance of Artificial Reefs as Fish Habitat in the Northwestern Gulf

of Mexico

M.S. (2015) Department of Environmental and Biological Sciences- Environmental Science

Concentration Troy University

Thesis: Acute Toxicity Testing on Freshwater Mussels (Bivalvia: Unionidae) and

Freshwater Snails (Gastropoda: Caenogastropoda)

B.S. (2012) Department of Biological Sciences- Concentration of Organismal Biology

University of Tennessee at Martin

Minor: Geology Magnum Cum Laud

Summer 2011 Gulf Coast Research Lab, Ocean Springs, MS – Marine Invertebrates

RESEARCH AND FIELD EXPERIENCES

Shark Tagging (Texas A&M University-Corpus Christi, Center for Sportfish Science and Conservation, Dr. Greg Stunz, 2015-Present)

- Satellite and acoustic telemetry
- ARGOS
- Recreational Angler outreach and tagging initiative

Artificial Reef Monitoring (Texas A&M University-Corpus Christi, Center for Sportfish Science and Conservation, Dr. Greg Stunz, 2015-Present)

- Vertical Longline surveys
- Remotely Operated Vehicle surveys
- SCUBA fish surveys
- AAUS certified diver
- Processing of fish samples (otolith, stomach and gonad removal, tissue sample collection)
- Acoustic telemetry (VEMCO)
- Creel Surveys

Crayfish Life History Study on *Procambarus (Pennides) versutus* (Troy University, Dr. Paul Stewart; Auburn University, Dr. Jim Stoeckel, 2014-2016)

- Collections by backpack electroshocking, hand, and dip-net
- Sampling method analysis
- Reproductive period and cycle determined

Acute Toxicity Testing on Freshwater Mussels (Bivalvia: Unionidae) and Freshwater Snails (Gastropoda: Caenogastropoda) (Troy University, Dr. Paul Stewart, 2013-2015)

- Evaluating United States Environmental Protection Agency Water Quality Criteria
- Five toxicants (2 without USEPA WQC)
- Four federally petitioned or listed and one stable freshwater mollusk species

Freshwater Mussel Survey (Deep South Environmental Services, 2014)

- Surveying for freshwater mussels
- Relocation of mussels
- Hand collection method and SCUBA method

GIS Mapping of Mobile Bay, Alabama (UT Martin, Dr. Ben Hooks, 2013)

- QGIS program
- Use of DEM data to create an elevation may
- Use of digital data to place raster and vector layers to the base map

Identification and Characterization of Microorganisms on Halite Hand Sample (UT Martin, Dr. Matthew Pritchett, 2013-2014)

- Isolation of unknown microbes
- Biochemical testing of microbes
- Polymerase Chain Reaction
- DNA Sequencing

Evolutionary Relationships within the Millipede Suborder Spirobolidea (UT Martin, Dr. Kevin Pitz, 2010-2013)

- DNA Extraction
- Polymerase Chain Reaction
- DNA Sequencing
- Phylogenetic tree construction

Extension Study of the Dauphin Island Sea Lab *Littorina littorea* and Gulf Coast Research Lab *Littorina irroata* (UT Marin, Dr. Kevin Pitz, 2012)

- DNA comparison between the *L. littorea* and *L. irroata*

UT Martin Travel Studies- Paleontological Excavations in Kansas

- Excavation of Cretaceous Marine Reptiles for Triebold Paleontology, Inc. and Discovery Park of America

UT Martin Travel Studies - Geology of Belize, Central America and Southern Mexico

- SCUBA- Blue Hole, Belize; Bacalar Stromatolites
- Study of Chixulub Impact Crater Ejecta-Belize, CA

Extension of the Dauphin Island Study: Littorina irroata (Gulf Coast Research Lab, Dr. Richard Heard, 2011)

- Population sampling and fungal farming recognition

Tagging of Sharks for annual shark survey (2010, 2013)

- Tagging shark for Dauphin Island Sea Lab
- Gulf of Mexico and Mississippi Sound
- Undergraduate aid (Dr. Sean Powers's Lab for graduate student Andrea Kroetz and Post-Doc Dr. Marcus Drymon)

Population Density of *Littorina littorea* and Fungal Farming (Dauphin Island Sea Lab, Greg Graeber (M.S.), 2007)

- Population sampling and fungal farming recognition

Westview High School Exchange Program to Hirosaki, Japan (2004)

- 2 weeks observing classes

GRANTS

2017 - Texas Sea Grant's Grants-in-Aid of Graduate Research Award (\$2,000)

2011 - College of Engineering and Natural Science (CENS) - Evolutionary relationships within the millipede suborder Spirobolidea (\$1,500)

PROFESSIONAL EXPERIENCE

2016-Present Marine Biology Ph.D. program Research Assistantship – Harte Research Fellow (Texas

A&M University-Corpus Christi)

2016-Present Divemaster (PADI # 290493) (Texas A&M University-Corpus Christi)

| Graduate Teaching Assistant (Texas A&M University- Corpus Christi) |
|---|
| Fall 2015 – Anatomy and Physiology I & II |
| ALFA Graduate Research Fellow (Troy University) |
| Graduate Teaching Assistant (Troy University) |
| Fall 2013 – Principles of Biology 1100L |
| Spring 2014 – Principles of Biology 1100L |
| Summer Camp Counselor at Dauphin Island Sea Lab, Discovery Hall Program |
| Adjunct Faculty Lab Instructor (University of Tennessee at Martin) |
| Fall 2012 - Biology 140, Microbiology 251 |
| Spring 2013 – Biology 140, Microbiology 251 |
| Campus Recreation (University of Tennessee at Martin) |
| Supervisor (2010-2012) |
| Lifeguard (2008-2012) |
| Water Safety Instructor (2008-2012) |
| Divemaster (PADI # 290493) (Aqua Zone SCUBA) |
| Summer Camp Counselor at Dauphin Island Sea Lab, Discovery Hall Program |
| |

AWARDS AND SCHOLARSHIPS

American Fisheries Society Texas Chapter Student Scholarship Award (2017)

Marine Biology Research Assistantship (2016-Present)

ALFA Graduate Research Fellow (2014-2015)

Who's Who Among American Colleges and Universities (2012)

Chancellor's Award (2008-2012)

Dean's List (2008-2012)

Hope Lottery Scholarship (2008-2012) UT Martin Honors Program (2008-2012)

Phi Eta Sigma (2009-Present)

PROFESSIONAL ACTIVITIES

| January 2017 Texas Parks and Wildlife Department Artificial Reef Program 4 th Annual Science and | |
|--|-----|
| Research Consortium (Corpus Christi, TX) | |
| January 2017 Texas Chapter American Fisheries Society (Corpus Christi, TX) | |
| January 2017 Marine Biology Interdisciplinary Program Retreat (Galveston, TX) | |
| December 2016 C-IMAGE-II All Hands Meeting (St. Pete, FL) | |
| February 2016 Texas Parks and Wildlife Department Artificial Reef Program 3 rd Annual Science and | |
| Research Consortium (Corpus Christi, TX) | |
| January 2016 Marine Biology Interdisciplinary Program Retreat (Corpus Christi, TX) | |
| April 2015 Association of Southeastern Biologists (Chattanooga, TN) | |
| January 2015 Alabama Department of Conservation and Natural Resources 16th Annual Mollusk and | |
| Crayfish Meeting (Spanish Fort, AL) | |
| October 2014 Geological Society of America Annual Meeting (Vancouver, Canada) | |
| October 2014 7 th Annual Mattie Kelly Environmental Symposium (Niceville, FL) | |
| November 2013 Society of Environmental Toxicology and Chemistry North American 34th Annual Meet | ing |
| (Nashville, TN) | |
| October 2013 Domin Graduate Conference (Columbus, GA) | |
| July 2013 National Marine Educators Association (Mobile, AL) | |
| April 2012 Association of Southeastern Biologists (Athens, GA) | |
| April 2008 Tennessee Junior Academy of Science (Nashville, TN) | |

PUBLIC APPEARANCES

Invited Speaker

July 18, 2017 "Careers in Marine Biology" (Dauphin Island Sea Lab Discovery Hall Program, Dauphin Island, AL)

| | May 16, 2017 | "Red Snapper Research at the Corpus Christi Nearshore Reef' (Coastal Conservation Association - Brush Country Chapter General Meeting, Riveria, TX) |
|-------|-------------------|---|
| | May 15, 2017 | "Sharks with Spectators: Real-time Tracking of Texas' Marine Apex Predators" (Ray High School, Corpus Christi, TX) |
| | April 18, 2017 | "Importance of Artificial Reefs in the Western Gulf of Mexico" (S-Stem: UTM S-STEM Scholars, NSF Grant #1458504, University of Tennessee of Martin, Martin, TN) |
| | March 27, 2017 | "Sharks with Teen STEM Café: Real-time Tracking of Texas' Marine Apex Predators" (Texas State Aquarium, Corpus Christi, TX) |
| | March 3, 2017 | "Sharks with Spectators: Real-time Tracking of Texas' Marine Apex Predators" (Moody High School, Corpus Christi, TX) |
| | November 16, 2016 | "Sharks with Spectators: Real-time Tracking of Texas' Marine Apex Predators" (The Aquarium at Rockport Harbor, Rockport, TX) |
| | August 8, 2016 | Fisheries Research in Your Backyard: What's Happening at TAMUCC (Texas State Aquarium Sea Camp, Corpus Christi, TX) |
| | August 1, 2016 | CSSC Project Overview: Women in Careers (YWCA, Corpus Christi, TX) |
| | April 28, 2016 | Skype Phone Call on "Social Choices and Science" (Pinkerton Elementary School, Coppell, TX) |
| | March 23, 2016 | "Sharks with Spectators: Real-time Tracking of Texas' Marine Apex Predators" (Ray High School, Corpus Christi, TX) |
| | February 2015 | Guest Lecturer in Principles of Biology Class, Bio 1100 (Troy University, AL) |
| | February 2015 | Guest Lecturer in Microbiology Class and Laboratory, Bio 372 and Bio L372 (Troy University, AL) |
| | April 2013 | Guest Lecturer in International Food and Fiber Class, AG 295 (UT Martin) |
| Panel | _ | |
| | June 29, 2016 | Shark Week episode "Return of Monster Mako" Panel (Harte Research Institute, Corpus Christi, TX) |

SOCIETY MEMBERSHIPS

Professional

American Academy of Underwater Sciences (2016-Present)

American Fisheries Society (2015-Present)

American Elasmobranch Society (2015-Present)

Association for Women Geoscientists (2014-Present)

American Institute of Professional Geologists (2014-Present)

Geological Society of America (#9190816) (2014-2016)

Society of Environmental Toxicology and Chemistry (2013-2016)

PADI (# 290493) (2013-Present)

DAN (#2448321) (2013-Present)

Marine Technology Society (2012-Present)

Association of Southeastern Biologists (2012-Present)

Academic

Phi Kappa Phi (2017-Present)

American Fisheries Society – TAMUCC Subunit (2016-Present)

Marine Sciences Graduate Student Organization (2015-Present)

Troy University Environmental Club (2013-2015)

Marine Technology Society (2012-Present)

Eta Alpha Chapter of Sigma Gamma Epsilon (Earth Science Honors Society; 2011-2013)

UT Martin Undergraduate Alumni Council (2010-2012)

Phi Eta Sigma National Honor Society (2009-2012)

TriBeta (Biological Honors Society) (2008-2009)

Social

Gills Club (2015-Present)

-Science Team Member

Coastal Conservation Association (2015-Present)

- -Secretary of the Executive Board Corpus Christi Chapter (2016-Present)
- -Member of Board of Directors Corpus Christi Chapter (2016-Present)
- -Babes on Baffin Fishing Tournament Planning Committee (2016)

Kappa Alpha Order Southern Belle (UT Martin – 2008-2012)

COMMUNITY SERVICE

Heros on the Water – Coastal Bend Chapter, Corpus Christi, Texas (2015-Present)

-Taking veterans fishing and teaching them the basics of fishing monthly

Reels for Heels (September 5, 2015; August 20, 2016)

-Weighmaster for fishing tournament to raise money for domestic abuse victims

Destination Imagination - Coastal Bend Chapter, Corpus Christi, Texas (February 27, 2016)

-Change of Pace Event Judge – Participants made vehicles that changed movement and propulsion techniques while carrying a rider the competition distance (Grades 3-12)

CERTIFICATIONS

SCUBA Diving

Divemaster (2011, PADI # 290493 – Authorized to teach)

Advanced Open Water (2008)

DrySuit (2008)

Nitrox (2009)

Rescue (2010)

Night Diver (2012)

Full Face (2012)

Deep Diver (2015)

Boat Diver (2015)

DAN DFA Pro (#2448321) (2015-Present)

American Heart Association CPR/AED/First Aid (#TN20588) (2015-Present)

Boating License (2007: TN-154802482; 2015: TX-1393026)

PROFESSIONAL SKILLS

Microsoft Office

ArcGIS

R statistical program

SAS statistical program

ToxStat

ABSTRACTS AND PRESENTATIONS

- **Gibson, K.J.**, Ferguson, A.B., Ajemian, M.J., Stunz, G.W., 2017. Recreational Anglers as Citizen Scientists: Tournaments Promote a Better Understanding of Texas Coastal Shark Populations. Texas Bays and Estuaries Meeting. Port Aransas, Texas, 12-13 April 2017. (Won 3rd place)
- **Gibson, K.J.**, Williams, J.A., Curtis, J.M., Wetz, J.J., Stunz, G.W., 2017. Fine-Scale Movements of Juvenile Red Snapper at the Corpus Christi Nearshore Reef, Texas. Texas Parks and Wildlife Department Artificial Reef Program 4th Annual Science and Research Consortium. Corpus Christi, Texas, 26-27 January 2017.
- **Gibson, K.J.**, Topping, T.S., Wetz, J.J., Ajemian, M.J., Stunz, G.W., 2016. The Use of Migratory Shark Data as a Proxy for the Potential Impact of an Oil Spill in the Northern Gulf of Mexico. Marine Biology Interdisciplinary Program Retreat. Galveston, Texas, 13-14 January 2017.
- **Gibson, K.J.**, Topping, T.S., Wetz, J.J., Ajemian, M.J., Stunz, G.W., 2016. The Use of Migratory Shark Data as a Proxy for the Potential Impact of an Oil Spill in the Northern Gulf of Mexico. C-IMAGE All Hands Meeting: Part II. St. Pete, Florida, 7-9 December 2016.
- Ajemian, M.J., **Gibson, K.J.**, Stunz, G.W., 2016. Movement patterns of large sharks in the northwestern Gulf of Mexico. 69th Annual Meeting of the Gulf and Caribbean Fisheries Institute. Grand Cayman, Cayman Islands, 7-11 November 2016.

- Stewart, P.M., **Gibson, K.J.**, Miller, J.M., Johnson, P.D., 2015. Acute Toxicity of Mobile River Basin Endemic Freshwater Mollusks. Alabama Water Resources Conference, Orange Beach, Alabama, 10-11 September 2015.
- **Gibson, K.J.**, Miller, J.M., Johnson, P.D., Stewart, P.M., 2015. Acute Toxicity Freshwater Mussel Species (Bivalvia: Unionidae) and Freshwater Snail Species (Gastropoda: Caenogastropoda). Association of Southeastern Biologists, Chattanooga, Tennessee, 1-4 April 2015.
- Stoeckel, J., Helms, B., Catalano, M., Miller, J., **Gibson, K.**, Stewart, P., 2015. Evaluation of a Low-Cost Sampling Protocol for a Coordinated, Crayfish Life-History Sampling Effort. Southern Division of American Fisheries Society, Savannah, Georgia, 28 January-1 February 2015.
- **Gibson, K.J.**, Miller, J.M., Johnson, P.D., Stewart, P.M., 2015. Acute Toxicity on Three Freshwater Mussel Species (Bivalvia: Unionidae) and Two Freshwater Snail Species (Gastropoda: Caenogastropoda). Alabama Department of Conservation and Natural Resources 16th Annual Mollusk and Crayfish Meeting, Spanish Fort, Alabama. 21-22 January 2015.
- **Gibson, K.J.**, Gibson, M.A., Pritchett, M.A., 2014. How Safe is the Taste Test for Halite? 2014. Geological Society of America 2014 Abstracts of Annual Meeting, Vancouver, Canada. 18-22 October 2014. 46(6).
- **Gibson, K.J.**, Miller, J.M., Niraula, B.B., Murray, J.M., Fobein, T., Johnson, P.D., Stewart, P.M., 2014. Acute Toxicity Testing on *Villosa nebulosa* (Bivalvia: Unionidae) using Five Toxicants (SDS, Cl, K, Ni, Zn). 7th Annual Mattie Kelly Environmental Symposium, Niceville, Florida. 10 October 2014.
- Stewart, P.M., **Gibson, K.J.**, 2014. The Sixth Great Extinction Event and the Coastal Plain Biodiversity Research. 7th Annual Mattie Kelly Environmental Symposium, Niceville, Florida. 10 October 2014.
- **Gibson, K.J.**, Gibson, M.A., Pritchett, M.A., 2014. How Safe is the Taste Test for Halite?. Geological Society of America 2014 Abstracts of Annual Meeting, Vancouver, Canada. 18-22 October 2014. 46(6).
- **Gibson, K.J.**, 2008. The Effects of Fungal Farming on the Population Density of *Littorina littorea* at Dauphin Island. Tennessee Junior Academy of Science, Nashville, Tennessee. 18 April 2008.

PUBLICATIONS

- Miller, J.M., **Gibson, K.J.**, Stoeckel, J., Helms, B., Catalano, M., Stewart, P.M., In prep. Life History study of *Procambarus (Pennides) versutus*. Freshwater Crayfish.
- **Gibson, K.J.**, Miller, J.M., Johnson, P.D., Stewart, P.M., In prep. Acute Toxicity of Three Freshwater Mussel Species and Two Freshwater Snail Species using Chloride, Potassium, Nickel and Zinc.
- **Gibson, K.J.**, Gibson, M.A., Pritchett, M.A., In prep. Isolating Microbes from the Surface of an Introductory Laboratory Halite Hand-sample. Journal of Geoscience Education.
- **Gibson, K.J.**, Miller, J.M., Johnson, P.D., Stewart, P.M., 2016. Toxicity of Sodium Dodecyl Sulfate to Federally Threatened and Petitioned Freshwater Mollusk Species. Freshwater Mollusk Biology and Conservation 19: 29-35.
- Stoeckel, J., Helms, B., Catalano, M., Miller, J.M., **Gibson, K.J.**, Stewart, P.M., 2015. Field and Model-based Evaluation of a Low-cost Sampling Protocol for a Coordinated, Crayfish Life-history Sampling Effort. Freshwater Crayfish 21(1): 131-141. Doi:10.5869/fc.2015.v21-1.131.
- **Gibson, K.J.**, 2015. Acute Toxicity Testing on Freshwater Mussels (Bivalvia: Unionidae) and Freshwater Snails (Gastropoda: Caenogastropoda). MS Thesis. Troy University, Troy, AL.
- **Gibson, K.** 2008. The Effects of Fungal Farming on the Population Density of *Littorina littorea* at Dauphin Island. *Handbook and Proceedings of the Tennessee Junior Academy of Science*. 143-145.

MEDIA COVERAGE

TV Newscasts

KIII. "Discovery Channel's 'Shark Week' to feature TAMUCC researchers". July 24, 2017.

(http://www.kiiitv.com/news/local/discovery-channels-shark-week-to-feature-tamuccresearchers/459241070)

KENS5-TV. "Shark attacks along Texas coast". July 29, 2016.

(http://www.kens5.com/news/local/texas-am-team-studies-sharks-on-texas-coast/283730569)

TV Shows

Shark Week 2017 - Discovery Channel, "Lost Cage" This program following scientists as they seek to better understand artificial reef and fish aggregating devices in the Gulf of Mexico and how sharks use these structures. Produced by Gurney Productions, Filmed fall 2016 and spring 2017, will air July, 2017.

Print News

Gibson, Kesley. "Citizens Help Science". *Tide Magazine*. September/October 2016. **Gibson, Kesley**. "Harvey the Mako Shark". *ArgosFlash USA*. August 2016 (5). Misc.

3CS: Third Coast Science for You. Fishing Dow the Food Web Infographic. Spring 2017.