

**2017 Annual Meeting of the  
Texas Chapter  
American Fisheries Society**



**January 19<sup>th</sup> – 21<sup>st</sup>, 2017**

**Holiday Inn Downtown Marina**

**Corpus Christi, Texas**

# MEETING SCHEDULE

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## **Thursday, January 19<sup>th</sup>**

Registration (Foyer).....	1:00 pm to 5:00 pm
Continuing Education (Riviera 1-5) .....	2:00 pm to 4:00 pm
Student/Professional Mixer (Padre A-D) .....	5:00 pm to 6:30 pm

## **Friday, January 20<sup>th</sup>**

Registration (Foyer).....	7:00 am to 5:00 pm
Pre-session coffee service .....	7:30 am
Welcome and Keynote Addresses (Riviera 1-5).....	8:00 am to 10:00 am
Technical Session (Riviera 1-5) .....	10:00 am to 10:30 am
Break (Padre A-D).....	10:30 am to 10:45 am
Technical Session (Riviera 1-5) .....	10:45 am to 12:00 pm
Student/Mentor Lunch .....	12:00 pm to 1:00 pm
Lunch (on your own).....	12:00 pm to 1:00 pm
Technical Session (Riviera 1-5) .....	1:00 pm to 3:00 pm
Break (Padre A-D).....	3:00 pm to 3:15 pm
Technical Session (Riviera 1-5) .....	3:15 pm to 5:00 pm
Poster Session (Padre A-D) .....	5:00 pm to 6:00 pm
Host Bar (Padre A-D) .....	6:00 pm
Raffle/Auction Social (Riviera 1-5) .....	6:30 pm to 10:00 pm
Dinner and Awards Presentations	

## **Saturday, January 21<sup>st</sup>**

Past Presidents' Breakfast (Monty's Board Room) .....	7:00 am to 7:45 am
Pre-session coffee service .....	7:30 am
Technical Session (Riviera 1-5) .....	8:00 am to 10:00 am
Break (Padre A-D).....	10:00 am to 10:15 am
Technical Session (Riviera 1-5) .....	10:15 am to 11:30 am
Business Meeting (Riviera 1-5) .....	11:30 am to 1:00 pm
Adjourn.....	1:00 pm

# THURSDAY, JANUARY 19<sup>th</sup>

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## 2:00 pm – 4:00 pm - Continuing Education Workshops

2:00 pm – 4:00 pm *Riviera 1-5*

- **Remote sensing using acoustic techniques – applications for habitat & fisheries assessments** *Emma Clarkson, Bill Rodney, Zach Olsen, and Adam Reimer (TPWD Coastal Fisheries)*

2:00 pm – 4:00 pm *Marina View*

- **Otolith microchemistry 101: an introduction for fisheries scientists** *Benjamin Walther, PhD, Matthew Altenritter, PhD (TAMU – Corpus Christi), and John Mohan, PhD (TAMU-Galveston)*

## 5:00 pm - 6:30 pm Student / Professional Mixer

# FRIDAY, JANUARY 20<sup>th</sup>

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## 8:00 am Welcome – Randy Rushin, TCAFS President-Elect

## 8:10 am – 10:00 am Keynote Addresses

- **The 50-year water plan – how will Texas meet its future water needs?**  
*Dr. Robert Mace, Texas Water Development Board*
- **Ensuring adequate water resources to sustain healthy aquatic ecosystems**  
*Cindy Loeffler, Texas Parks and Wildlife Department*
- **Balancing the municipal, industrial, agricultural and ecological water demands in the Trinity River basin**  
*Glenn Clingenpeel, Trinity River Authority*

## 10:00 am – 10:30 am Technical Session

10:00 am **Reproductive life history and host fish selection in *Fusconaia mitchelli* (False Spike), *Quadrula aurea* (Golden Orb), and *Quadrula petrina* (Texas Pimpleback)**

*Dudding\*\*, J., and C. Randklev*

10:15 am **Rapid quantitative assessment to identify imperiled fishes**

*Hahn\*\*, N., C. A. Craig, and T. H. Bonner*

## 10:30 am – 10:45 am Break

**10:45 am – 12:00 pm TECHNICAL SESSION**

- 10:45 am **Movements and demographics of Blue Sucker in the lower Colorado River, Texas**  
*Acre\*\**, M. R., T. B. Grabowski, D. Geeslin, A. Pease, and N. G. Smith
- 11:00 am **Comparison of two biometric methods for determining sex of Alligator Gar**  
*McDonald\**, D., J. W. Schlechte, and D. J. Daugherty
- 11:15 am **Residency and movement of Spotted Seatrout *Cynoscion nebulosus* on a restored oyster reef**  
*TinHan\*\**, T. C., J. A. Mohan, J. Sullivan, M. J. Dumesnil, C. F. Ruiz, and R. J. D. Wells
- 11:30 am **Modeling the responses of Alligator Gar populations to harvest: implications for conservation and management**  
*Smith\**, N. G., D. J. Daugherty, J. W. Schlechte, and D. L. Buckmeier
- 11:45 am **Effects of stocking density and feed rate on the growth of hatchery-reared juvenile Spotted Seatrout, *Cynoscion nebulosus***  
*Fincannon\**, A. N., R. R. Vega, D. M. Gatlin III, J. M. Fox, and B. D. Sterba-Boatwright

**12:00 am - 1:00 pm STUDENT/MENTOR LUNCH or LUNCH (on your own).**

- 1:00 pm **Parasite pressure or just plain bad luck: fitness costs of larval trematodes in two closely related Poeciliids with different reproductive strategies**  
*Quintero\*\**, E.
- 1:15 pm **Enhanced production of Red Snapper (*Lutjanus campechanus*) at a newly constructed artificial reef in the western Gulf of Mexico**  
*Streich\*\**, M. K., M. J. Ajemian, J. J. Wetz, and G. W. Stunz
- 1:30 pm **GoMexSI: Progress toward a valuable resource for fisheries managers, marine ecologists, and educators in Texas**  
*Simons\**, J.
- 1:45 pm **Managing commercial harvest of Eastern Oysters (*Crassostrea virginica*) in Texas – applying a 2-metric stoplight approach in Copano Bay, Texas**  
*Mace\**, C. E.
- 2:00 pm **Distribution, abundance, and life history of the Prairie Chub**  
*Ruppel\*\**, D. S., and T. H. Bonner
- 2:15 pm **The Medina Roundnose Minnow (*Dionda nigrotaeniata*): an assessment of its rangewide status and initial study of its ecology in a hill country stream**  
*Smith\**, R.

2:30 pm **Morphometrics as a descriptor of potential hybridization between the Prairie Chub (*Macrohybopsis australis*) and Shoal Chub (*M. hyostoma*)**  
*Sotola\*\**, A., D. Ruppel, T. H. Bonner, and N. Martin

2:45 pm **Capture stress and post-release survival of Blacktip Sharks (*Carcharhinus limbatus*) in the Gulf of Mexico recreational fishery**  
*Mohan\**, J., J. Hendon, E. Jones, B. Falterman, K. Boswell, and R. J. D. Wells

**3:00 pm – 3:15 pm Break**

**3:15 pm – 5:00 pm TECHNICAL SESSION**

3:15 pm **Hydroelectric dams in the tropics: impending threats to biodiversity and fisheries**  
*Winemiller\**, K. O.

3:30 pm **Reducing discard mortality in the northwestern Gulf of Mexico Red Snapper fishery**  
*Tompkins\*\**, A. K., J. M. Curtis, and G. W. Stunz

3:45 pm **Uses of American Water-willow (*Justicia americana*) by reservoir fishes and invertebrates in Lake Conroe, Texas**  
*O'Hanlon\*\**, R., F. Gelwick, and M. Webb

4:00 pm **Determining thermal tolerances of freshwater mussels in Texas**  
*Morton\*\**, J. N., and C. R. Randklev

4:15 pm **Tracking Atlantic Tarpon with scale chemistry**  
*Walther\**, B. D., and M. E. Seeley

4:30 pm **Relationships between climate, growth, and fisheries production in a commercially exploited marine fish from the Gulf of California**  
*Reed\*\**, E., B. Black, M. J. Román, I. Mascareñas, C. Lopez-Sagastegui, O. Aburto-Oropeza, K. Rowell, and B. Erisman

4:45 pm **TPWD's East Bay oyster restoration project: results and lessons learned**  
*Rodney\**, W.

**5:00 pm – 6:00 pm Poster Session**

**6:00 pm - Host Bar**

**6:30 pm – 10:00 pm Awards Banquet & Raffle/Auction**

# SATURDAY, JANUARY 21<sup>st</sup>

Holiday Inn Downtown Marina

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**7:00 am to 7:45 am Past Presidents' Breakfast**

**7:30 am - Pre-session coffee service**

**8:00 am – 10:00 am TECHNICAL SESSION**

8:00 am **Is low-profile worthwhile? Investigating the effect of low-profile artificial reef patch size on juvenile fish recruitment**

*Alder\*\**, D. A., and R. J. Kline

8:15 am **Retention of visual implant elastomer (VIE) tags in two species of Great Plains minnows**

*Weiberg\*\**, G. P., and G. R. Wilde

8:30 am **Effectiveness of removals of the invasive Lionfish: how many dives are needed to deplete a reef?**

*Selwyn\*\**, J. D., P. Usseglio, A. M. Downey-Wall, and J. D. Hogan

8:45 am **Upstream passage plan for American Eel *Anguilla rostrata* at Toledo Bend Hydropower Dam, Texas-Louisiana, Sabine River, Gulf of Mexico**

*Mayes\**, K., and A. Vale III

9:00 am **Giant Reed extract suppresses golden alga growth – a potential strategy involving the processing of one harmful invasive to control the growth of another**

*Patiño\**, R., R. H. Rashel, A. Rubio, and S. Longing

9:15 am **Phylogenetic relationships between the members of the genus *Notropis* (Family Cyprinidae)**

*Vasquez\*\**, R., L. Densmore, and G. Wilde

9:30 am **Utilizing accelerometer telemetry tags to compare Red Snapper (*Lutjanus campechanus*) behavior on artificial and natural reefs**

*Getz\*\**, E. T., and R. J. Kline

9:45 am **Effects of environmental hypoxia on physiological, molecular, and epigenomic responses in a marine fish, Atlantic Croaker**

*Rahman\**, M. S., and P. Thomas

**10:00 am – 10:15 am Break**

**10:15 am – 11:30 am TECHNICAL SESSION**

- 10:15 am **Are Age Estimates from Longnose Gar and Spotted Gar Sagittal Otoliths, Pectoral Fin Rays, and Branchiostegal Rays Accurate?**  
*Buckmeier\**, *D. L.*, *R. Snow*, *N. Smith*, and *C. Porter*
- 10:30 am **Influence of water temperature on feeding competition of spring-associated and riverine-associated fishes of the Edwards Plateau**  
*Maikoetter\*\**, *J. D.*, *C. A. Craig*, and *T. H. Bonner*
- 10:45 am **Degradation and temporal effectiveness of Ashe Juniper (*Juniperus ashei*) used as fish habitat in a Texas reservoir**  
*Pavliska\*\**, *C.*, and *M. J. De Jesus*
- 11:00 am **Population characterization of *Balistes capriscus* on northwestern Gulf of Mexico artificial reefs**  
*Lee\*\**, *A. M.*, *C. E. Cintra-Buenrostro*, and *J. D. Shively*
- 11:15 am **Evaluation of fish and invertebrate assemblages associated with Torpedograss (*Panicum repens*) in Lake Conroe, Texas**  
*Mynatt\*\**, *C.*, *F. Gelwick*, and *M. Webb*
- 11:30 am **Native fish conservation areas in the Chihuahuan Desert of Texas**  
*Garrett\**, *G. P.*, *T. Birdsong*, *B. Labay*, and *M. Bean*
- 11:45 am **Fish assemblage structure and associations on a spring flow gradient within the upper Nueces drainage basin**  
*Craig\*\**, *C. A.*, and *T. H. Bonner*

**11:45 am – 12:00 pm Informal break**

**12:00 pm to 1:00 pm Business Meeting**

**1:00 pm - Adjourn**

\* *Professional presenter*

\*\* *Student presenter*

# POSTER PRESENTATIONS

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**The ratio of organic to inorganic nitrogen affects the growth of ichthyotoxic golden alga**  
*Rashel\*\**, R. H., L. D. Williams, and R Patiño

**Current status of Bluehead Shiner (*Pteronotropis hubssi*) in Texas**  
*Thorn\*\**, C., K. Gary, J. McWilliams, and C. Hargrave

**An assessment of fish vulnerability to climate change**  
*Craig*, C. A., D. S. Ruppel\*\*, and T. H. Bonner

**Validation of environmental flow standards**  
*Beckman\*\**, A. M., C. A. Craig, D. S. Ruppel, and T. H. Bonner

**Validation of daily growth increments in otoliths of young-of-year Guadalupe Bass**  
*Williams\*\**, H., T. Grabowski, S. Hill, and R. Verble-Pearson

**Morphological variation among reproductive tactics in the Comanche Springs pupfish, *Cyprinodon elegans***  
*McCann\*\**, K., and J. Gumm

**Drainage basin keys for inland fishes of Texas**  
*Craig\*\**, C. A., N. M. Hahn, and T. H. Bonner

**Identifying the most efficient host fish for the Texas Fatmucket (*Lampsilis bracteata*) for captive breeding**  
*Seagroves\*\**, L. A., and A. N. Schwalb

**Quantifying Alligator Gar (*Atractosteus spatula*) spawning habitat on the lower Trinity River, Texas**  
*Sterling\*\**, K., and J. Jensen

**Potential effects of climate change on fish-mediated nutrient dynamics in a small coastal plains stream**  
*McWilliams\*\**, J. L., and C. W. Hargrave

**Comparing the ichthyoplanktonic food web near three coastal inlets in the Texas Coastal Bend**  
*Bromschwig\*\**, M., and S. Geist

**Shared morphologies of spring-associated fishes of the Edwards Plateau**  
*Sotola\*\**, V. A. \*\*, C. A. Craig\*\*, and T. H. Bonner

**Comparative effects of high & low quality allochthonous input on stream food webs**  
*Sadeghian\*\**, C., and C. W. Hargrave

**Investigating sister species pairs in two fish genera as they relate to the biogeography of the northern Gulf of Mexico**  
*Hunt\*\**, E. P., S. C. Willis, K. W. Conway, and D. S. Portnoy



**Dynamics of an artisanal fishery in Río Dulce National Park, Guatemala**

*Quintana\*\**, Y., and C. Barrientos

**Diversity of benthic macroinvertebrate communities at tributary confluences of the Pecos River**

*Delaune\*\**, K. D., S. Longing, and A. A. Pease

**Aging swordfish using otolith chemistry**

*Russell\*\**, Z. R.

**Effects of the Rincon Bayou pipeline on salinity in the upper Nueces Delta**

*Del Rosario\*\**, E. A. and P. A. Montagna

**Is there a relationship between fish cannibalism and latitude or species richness?**

*Pereira*, L. S., F. W. Keppeler\*\*, A. A. Agostinho, and K. O. Winemiller

**The importance of low salinity habitats for Red Drum**

*Torrance*, L.\*\*

**Testing the effect of increasing crab trap escape ring size**

*Carrillo\**, N., and Glen Sutton

**Impacts of Deepwater Horizon crude oil exposure on the swimming performance of juvenile and young adult Mahi-Mahi (*Coryphaena hippurus*)**

*Mager\**, E. M., J. D. Stieglitz, D. Nelson, R. M. Heuer, G. K. Cox, D. D. Benetti, D. A. Crossley II, and M. Grosell

**An overview of biological monitoring on Texas artificial reefs**

*Shiple\**, B.

**Quantification of Alligator Gar recruitment dynamics using a river-stage specific floodplain inundation model**

*Hoeinghaus\**, D. J.

**Spatio-temporal trends of Alligator Gar *Atractosteus spatula* in Texas's bays and estuaries**

*Pettis\**, E. L.

**Freshwater fisheries in the Usumacinta River Basin**

*Rodiles-Hernández\**, R., C. Barrientos, A. Espinosa-Tenorio, Y. Quintana, and M. Mendoza-Carranza

**Introducing the Geist early life history lab at Texas A&M University, Corpus Christi**

*Geist\**, S. J., M. Bromschwig, P. Hajovsky, C. Camacho, and D. Hardin

**The effects of the Texas drought of record on Bonnethead Shark, *Sphyrna tiburo*, abundances**

*Macias\**, R. J.

***Elops saurus* abundance trends along the Texas Gulf Coast**

*Collins\**, C.

**Habitat associations of juvenile Rio Grande Blue Sucker in the Trans-Pecos region of the Rio Grande**

*Miyazono\*, S., S. Fritts, T. B. Grabowski, B. Grisham, K. Mayes, S. Magnelia, and P. Bean*

**Evaluating the factors associated with the spatial and seasonal distribution of spawning female Blue Crabs (*Callinectes sapidus* Rathburn) in the coastal waters of Texas**

*Anderson\*, J., C. Gelpi, Z. Olsen, G. Sutton, D. Topping, and T. Wagner*

**Population size and dispersion patterns of Bluehead Shiner within Iron Ore Lake and Pruitt Lake, Texas**

*Hargrave\*, C., K. Gary, C. Thorn, and J. McWilliams*

**Fish assemblages structure across a habitat gradient in the Big Cypress drainage, Texas**

*Gary\*, K., C. Thorn, J. McWilliams, and C. Hargrave*

**Monitoring biological response to *Arundo* (*Arundo donax*) management in the upper Pedernales watershed**

*Curtis\*, S., M. McGarrity, and A. Grubh*

**Influence of freshwater inflow on the distribution of Atlantic Rangia and Water Celery within the Trinity River delta, Galveston Bay**

*Guillen\*, G., J. Oakley, M. Gordon, C. Scanes, and N. Johns*

**Texas Blue Crab Fishery Management – Past, Present, and Future**

*Wagner\*, T.*

**A Multifaceted Approach to Combating Zebra Mussel Invasions in Texas**

*Arterburn\*, H. M., M. McGarrity, and C. Pavliska*

**Effects of pH and salinity on juvenile hatchery reared Red Drum (*Scianops ocellatus*)**

*Norris\*, B., F. Pezold, R. Vega, J. Fox, A. Siccardi, and D. Portnoy*

**Biological Profile for Tripletail in the Gulf of Mexico and the Western Central Atlantic**

*VanderKooy, S. P. Mickle, J. Harper\*, K. Shipley, K. Aplin, C. Kalinowsky, J. Adriance, C. Hebert, J. Franks, C. Adams, W. Mancini, and J. Rester*

**Reproductive isolation and hybridization between the Red River Pupfish and Sheepshead Minnow**

*Gumm\*, J., C. Becher, K. Ayers, and G. Wilde*

\* Professional presenter

\*\* Student presenter

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