



President's message

by Randy Rushin

As we rapidly approach the end of year, many of your fellow chapter members are burning the midnight oil to prepare for the TCAFS meeting being held at the Hilton College Station on January 25 – 27, 2018. And speaking of volunteers, we NEED volunteers at the convention. We will need assistance with everything from working the registration table, to selling raffle tickets, to judging posters and presentations. If you can spare a few hours, please let us know, and we will put you to work!

This is YOUR organization, and it takes everyone to make TCAFS successful. As a member of TCAFS, you are part of a team – and every person on our team plays an important role. And I'm truthful when I say this – every contribution helps – regardless of how little you think it is.

Finally, if you haven't registered or booked your hotel room, do it TODAY! Here's the link to the meeting home page: <https://units.fisheries.org/tx/tc-meetings/2018-meeting-home-page/>



Disaster Relief Aid

Since Hurricane Harvey affected much of the Texas coast, I have been in regular communication with the President of the Southern Division AFS, Wes Porak. In response to those affected by this destructive hurricane season, the Southern Division AFS will be offering disaster relief aid that will focus on the professional needs of members; including, but not limited to meeting travel, membership support, or assistance with replacement costs for equipment or libraries. We are in the process of finalizing the details on eligibility and resources, so if you are interested applying for these funds, please contact our Secretary-Treasurer, Niki Ragan Niki.Ragan@tpwd.texas.gov

If you would like to donate to the AFS Disaster Relief Fund, please do so at the American Fisheries Society link below or email kdunn@fisheries.org for additional information.
https://secure.fisheries.org/MemberResponsive/Donations/Donate_to_AFS.aspx?New_ContentCollectionOrganizerCommon=2#New_ContentCollectionOrganizerCommon

Southern Division

Puerto Rico was first impacted by Hurricane Irma, and soon afterward, devastated by Hurricane Maria. Progress to restore the island back to any sense of normalcy has been arduous and slow. However, the Southern Division meeting is still being held as scheduled on March 7 - 11th. All members are encouraged to attend the meeting to help Puerto Rico get back on its feet at a time when help is needed most. One thing the island desperately needs is business and tourism travel. Every person who attends the meeting will be contributing to Puerto Rico's economic recovery by supporting local businesses and providing tax revenue to the government that can be used to restore the island's infrastructure. For more information about the Southern Division meeting, visit: <https://sd.fisheries.org/puerto-rico-2018-meeting/>

And speaking of the Southern Division meetings, are you aware that the Texas Chapter is hosting the convention in 2019? That's right, it is being held on February 24 – 27th at the recently renovated Moody Gardens. I attended a convention there a few months ago and was extremely impressed by the recent renovations to their facilities. You'll be hearing much more about Southern Division in the coming months, but let me tell you, our incredible group of dedicated TCAFS members have been diligently planning the meeting for well over a year now. These folks are thinking of everything. You'll want to make sure to attend – it's going to be special. And just in case you were unsure, yes, we need volunteers! Lots and lots of volunteers for this meeting...

Final Thoughts

As I've repeatedly said, the one thing that has kept me involved in TCAFS for the past two decades is that our chapter has a unique culture that supports the growth and development of our student and professional members. We are dedicated to helping the next generation be successful contributors to the field of fisheries science. Our chapter is a forward-looking organization that is on a path of constant improvement - including meetings, presentations, collaborations, and fisheries science. This is my last newsletter as your TCAFS President, so I want to take this opportunity to tell you that I sincerely appreciate your support and confidence in my ability to lead this outstanding organization over the past year. It has been a true pleasure and privilege to serve you in this capacity.

President-elect's message

by Michael Homer

I am shocked how quickly 2017 is coming to a close, and we are nearly a month away from the 42nd Annual Meeting at the Hilton College Station & Conference Center. Planning for the 2018 has been a positive learning experience, and I am grateful for the numerous TCAFS members that have been diligent in assisting with the meeting preparation efforts. For the upcoming meeting, we have tried to explore ways to improve the registration and abstract process by adopting an online submission system. These changes should facilitate these processes for chapter members as well as give the chapter a trial-run of an online system before we host SDAFS 2019 in Galveston. Additionally, the chapter was awarded \$1,000 from Bryan College Station Convention and Visitors Bureau (BCSCVB; www.experiencebcs.com) from their HOT Grant Program that is intended to support events and tourism in the area. With the kind support from the BCSCVB HOT Grant, TCAFS will be purchasing improved lanyards as well as a commemorative gift for meeting attendees. While most time will be spent in the hotel, there will be an opportunity to explore Bryan-College Station following the student-professional mixer, and the BCSCVB will be providing discount cards to local restaurants that will be given to meeting attendees at the registration table. The meeting has also received generous sponsorships from Water Monitoring Solutions, Bass Pro Shops, HydroGlow Dock Lighting Systems, Xylem YSI and Fishiding.com.

Our meeting will kick off with two continuing education sessions: one on genomics for fisheries research by Dr. David Portnoy (Texas A&M University – Corpus Christi) as well as a session on freshwater mussel conservation in Texas by Dr. Charles Randklev (Texas A&M University) and Clint Robertson (Texas Parks and Wildlife

Department). I am pleased to announce that this year's keynote speaker will be Mr. Mike Montagne, the Project Leader for the U.S. Fish and Wildlife Service's Texas Fish and Wildlife Conservation Office (TXFWCO). Mr. Montagne has been with the USFWS for 24 years and has been the Project Leader of TXFWCO for 10 years, and he and his team have been responsible for the conservation of aquatic species, recovery efforts of listed and candidate species, and conservation, restoration and enhancement of aquatic habitats in Texas. Mr. Montagne plans to discuss the importance of watershed management for fisheries conservation by highlighting current projects in multiple river systems in Texas, specifically the Big Cypress Bayou and the Big Bend section of the Rio Grande.

Ultimately, I believe we are headed in a positive direction to have a successful meeting. For next month, I will be working to take care of the last odds and ends with planning efforts with the hotel, particularly the specific food and drink options for meeting breaks, social, and meals for the student-mentor lunch and banquet. The hotel has been gracious enough to assist in accommodating our members with gluten-sensitivity/allergy and vegetarian needs. We have requested that members with these concerns address this on their online registration. Also, be sure to reserve your room at the hotel prior to January 10th under the room block "TCAFS 2018" to ensure you get the best rate. If you have any questions about our upcoming meeting, please feel free to contact me at Michael.homer@tpwd.texas.gov. I look forward to seeing you next month in College Station! Happy holidays!

2018 Annual Meeting - Key details

Registration

Early registration will be **\$125** for professionals and **\$65** for students. Registration covers continuing education workshops, Thursday night's Student/Professional Mixer, presentations, Banquet, awards ceremony and auction. Registration also includes annual membership in the chapter.

You can either register online (using Google Docs) <https://docs.google.com/forms/d/e/1FAIpQLSfcRWDzwKFF-m9aRE9j7u6JSfqdKOjLSPjCtyCYM2Ku8dweuA/viewform?c=0&w=1>

or you can download a paper registration form in Word <https://units.fisheries.org/tx/wp-content/uploads/sites/19/2017/10/2018-TCAFS-Meeting-Registration-form.docx>

The deadline for early registration is December 31, 2017

Late registration will be **\$140** for professionals and **\$75** for students. Extra banquet tickets will be **\$35**.

Hotel

The Hilton College Station & Conference Center is located at 801 University Dr., College Station, TX 77840. <http://www3.hilton.com/en/hotels/texas/hilton-college-station-and-conference-center-CLLCHHF/index.html>

Pre-tax room rates;

- Single - \$107 (1 person; 1 king or double bed)
- Double - \$107 (2 people; 2 double beds)
- Triple - \$127 (3 people; 2 double beds)
- Quad - \$137 (4 people; 2 double beds)

Hotel Reservation # (979) 693-7500

Rates for Room Block "TCAFS 2018" expire on 1/10/2018

Continuing Education Workshops

Thursday, Jan. 25, 2018, 1 – 4 pm

Presenters:

- Dr. David Portnoy, Texas A&M – Corpus Christi – **“Introduction to genomics for fisheries research”**
- Dr. Charles Randklev, Texas A&M and Clint Robertson, TPWD – **“Freshwater Mussel Conservation in Texas”**



Tentative schedule

Thursday, January 25, 2018:

12:00pm - 5:00pm	Registration and exhibitors (<i>Promenade & Pre-function area</i>)
1:00pm - 4:00pm	Continuing Education workshops (<i>Bluebonnet Ballrooms 4-7</i>)
5:00pm - 6:30pm	Student-Professional mixer (<i>Oakwood Ballroom</i>)
6:30pm - ???	Dinner and libations in Bryan-College Station (<i>on your own</i>)

Friday, January 26, 2018:

7:00am - 5:00pm	Registration and exhibitors (<i>Promenade & Pre-function area</i>)
8:00am - 9:00am	Welcome and keynote speaker (<i>Bluebonnet Ballrooms 4-7</i>)
9:00am - 12:00pm	Technical session (<i>Bluebonnet Ballrooms 4-7</i>)
12:00pm - 1:00pm	Technical session (<i>Bluebonnet Ballrooms 4-7</i>)
5:00pm - 6:00pm	Poster presentations (<i>Mockingbird Rooms</i>)
6:30pm	Host Bar (<i>Bluebonnet Ballrooms 1-4</i>)
6:30pm-10:00pm	Awards banquet, auctions, and raffles (<i>Bluebonnet Ballrooms 1-4</i>)

Saturday, January 27, 2018:

7:00am - 7:45am	Past President's breakfast (<i>North & South 40</i>)
7:30am	Pre-session coffee service (<i>Pre-function area</i>)
8:00am - 11:30am	Technical session (<i>Bluebonnet Ballrooms 4-7</i>)
11:30am - 2:00pm	Chapter business meeting (<i>Bluebonnet Ballrooms 4-7</i>)
2:00pm	Meeting adjourns (<i>See you in Galveston, TX in 2019!</i>)

****THIS IS NOT THE FINAL AGENDA, AND IT IS SUBJECT TO CHANGE****

2018 Meeting home page: <https://units.fisheries.org/tx/tc-meetings/2018-meeting-home-page/>



Texas Chapter of the American Fisheries Society is headed to College Station!



**Come join TCAFS at our 2018 Annual Meeting!
January 25-27, 2018
Hilton College Station & Conference Center**



Lodging information

Address: 801 University Dr., College Station, TX 77840

Phone: (979) 693-7500 Fax: (979) 260-1931

Room Block: "TCAFS 2018"

Rates: Single-\$110; Double-\$110; Triple-\$130; Quad-\$140

****Please email michael.homer@tpwd.texas.gov for more information****

A SPECIAL THANKS TO OUR CURRENT SPONSORS!!!

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Special Thanks to our Student Scholarship Sponsors!

The Patsy B. Hollandsworth Family Foundation
The Sportsmen's Club of Fort Worth
San Antonio River Authority

WE ARE STILL LOOKING FOR MORE GREAT SPONSORS!



2nd CALL FOR PAPERS

2018 Annual Meeting
Texas Chapter
American Fisheries Society

January 25 – 27, 2017
College Station, Texas

Abstracts for oral and poster presentations are requested for the 2018 annual meeting of the Texas Chapter of the American Fisheries Society. The meeting will be held Thursday through Saturday, January 25 – 27, 2018, at the Hilton Hotel and Conference Center, College Station, Texas. Please submit your presentation abstract online using Google Docs at the hyperlink below:

https://docs.google.com/forms/d/e/1FAIpQLSd14tj0zQ9l_YTN0ZO9GY18uM5FlifePd7HOPWVo2kW17dxOQ/vi/ewform?c=0&w=1

Oral presentations should be prepared as a 15-minute presentation (12 minutes for presentation, 3 minutes for questions) using MS PowerPoint®. Poster presentations should be formatted to include a title, abstract, introduction, methods, results, discussion/conclusion, and literature cited. Posters must not exceed 48" in any dimension.

REVISED DEADLINE FOR ABSTRACT SUBMISSIONS: 31 DECEMBER 2017

We look forward to seeing you at the meeting!



Coming in January!

Wiley will become the new publisher of AFS journals in January 2018. AFS members will enjoy free online access to all AFS journals as part of their membership.

Calling All Artists - We know you're out there!!

Are you a painter, jeweler, potter or craftsman of some sort? Not only are our members passionate about all things fisheries-related, but many of you are some of the most artistically talented people. We are seeking donations for our raffle and auction to support our student scholarship program and related meeting expenses. Unique artwork has been some of our most coveted items when it comes to the raffle and auction. Please consider sharing your works of art with the Chapter as a tax-deductible donation for our annual fund-raising event.

Through the generosity of many of our members and endowed donors, we were able to award over \$15,000 in student scholarships to ten well-deserving students in 2017. Let's keep this tradition going by supporting the future of fisheries conservation and management in the great state of Texas!

If you would like to donate an item to the Chapter or know someone who would, please contact Stephanie George (sgeorge@tamu.edu) or Stephen Curtis (stephen.curtis@tpwd.texas.gov) to coordinate your donation. We have attached a donor form to be included with your contribution along with a letter explaining the ways in which you can help us support the work being conducted in fisheries conservation and management.

We look forward to seeing everyone in College Station!

Stephanie & Stephen

We want to give a huge **THANK YOU** to the many organizations and individuals who have already donated items to support this year's raffle and auction:





A Special Thanks to all of our individual donors:



*Matt Acre
Susan Amoroso
Preston Bean
Emma Clarkson
Taylor Cabbage
David De Leon*

*Bobby Farquhar
Dakus Geeslin
Kevin Mayes
Christine Kolbe
Todd Robinson
Wichita Falls District Team*



Keep an eye on the TCAFS Facebook Page for a sneak peak of what to expect!

2018 Candidates for President-Elect

by Dan Bennett, Nominating Committee chair

The Nominating Committee presents two candidates, Dan Daugherty and Kirk Winemiller, for consideration for the post of TCAFS President-Elect. Voting will be available soon via email and members can also vote in person at the registration desk and during the poster session at the 2018 annual meeting. Voting will close at the end of the poster session and the selected candidate will be announced at the business meeting on Saturday, January 27, 2018. No voter identification is required, but you must be an active member to vote. Active members have current membership in TCAFS and AFS.

Dan Daugherty

Dan is a fisheries research team leader for TPWD's Inland Fisheries Division at the Heart of the Hills Fisheries Science Center. Dan has a BS in aquatic ecology from Northern Michigan University, and an MS and PhD in fisheries and aquatic sciences from Purdue University. Striving to improve fisheries management and conservation, Dan's work focuses on using innovative approaches to understand fish life history, spatial ecology, and population dynamics. He has collaborated on 30 peer-reviewed publications and more than 70 scientific presentations on a wide variety of fish and fisheries.

Dan has been active in the American Fisheries Society since becoming a member in 2001. He served 8 years as an associate editor for *North American Journal of Fisheries Management* prior to being promoted to co-Editor-in-Chief in 2014. Dan completed terms of service as both a member and chair of the John E. Skinner memorial award committee, as well as service on the AFS undergraduate travel award committee. He served on meeting planning committees in the Indiana state chapter, and as secretary and fundraising and education committee chairs in the Purdue University Student Subunit as a graduate student. Since moving to Texas in 2006, he has served as the fisheries technical session co-chair for the 2008 SEAFWA meeting, and is a member of the Southern Division's Alligator Gar technical committee. In the Texas chapter, Dan has served as the editorial committee chair since 2007, as a student lunch mentor, and presentation judge. Most recently, Dan agreed to serve as the general meeting chair for the 2019 Southern Division annual meeting, which will be hosted by the Texas Chapter on Galveston Island.



Dan's interests in serving as President of the Texas Chapter are multi-fold. First, he supports ongoing efforts of the AFS to enhance membership and leadership diversity. As a result, he would strive to promote diversity and inclusion in the Texas chapter, particularly among students and young professionals. Dan also wishes to expand efforts to increase the operational efficiency of the chapter, such as the editorial committee's efforts to develop online registration and abstract submission forms for the 2018 meeting. Lastly, his term as President-Elect during 2018 would coincide with his responsibilities for planning the 2019 Southern Division meeting.

Dan, his wife Carolina, and two daughters, Andrea (5) and Camila (2), make their home in Kerrville, Texas. In his free time, Dan enjoys western big game hunting, DIY home improvements, and crafting lamps and chandeliers from shed antlers.

Kirk Winemiller

Kirk is Regents Professor in the Department of Wildlife and Fisheries Sciences at Texas A&M University, and has been an AFS member (lifetime) since 1991, Southern Division member since 1991, International Fisheries Section member since 1992, and Texas Chapter member since 1992. He served as associate editor for Transactions of the American Fisheries Society (AFS), Journal of Fish Biology (Fisheries Soc. British Isles), Copeia (Amer. Soc. Ichthyol. Herpetol.), and Ecology and Ecological Monographs (Ecological Soc. Amer.), and serves on editorial boards for other scientific journals. AFS service includes committees for Skinner student travel awards, publications awards, and education excellence; TCAFS service includes the awards committee, Clark Hubbs student research award committee, and judging student posters and presentations.



Winemiller's research addresses fish population and community ecology, life history strategies, and food web ecology with emphasis on rivers, streams and estuaries. Winemiller and his collaborators have conducted field research at locations throughout Texas as well as tropical regions of the world. He collaborates with many international researchers and students, with some visiting his lab at Texas A&M. Winemiller has served on numerous scientific committees and panels reviewing science and policy issues associated with management of fish and other freshwater resources in Texas and other regions.

Winemiller obtained BA and MSc degrees from Miami University of Ohio and a PhD from the University of Texas at Austin with Dr. Clark Hubbs as his advisor. Prior to joining the faculty at Texas A&M, he was a research associate with the Oak Ridge National Laboratory in Tennessee. Winemiller teaches graduate courses in population dynamics and community ecology, and undergraduate courses in ecology. He has advised 45 PhD and MSc students during 26 years at Texas A&M.

Time for a Makeover

by Dave Buzan, TCAFS Past President

Six long years have elapsed since our Chapter's bylaws and procedures have been revised. During the months following the annual business meeting, your Executive Committee has been soliciting and receiving suggestions on changes to those documents.

The following steps are required to change the bylaws:

- At least 30 days before the business meeting, Chapter members are notified in writing of possible changes to the bylaws.
- A change to the bylaws requires a vote of 2/3's of **active** members
- If 2/3's of **active** members vote to change the bylaws, the proposed change is reviewed by the AFS Constitutional Consultant for conformity with the Society's constitution, rules and procedures. If acceptable, the proposed change is then presented to the Society's Governing Board.
- The bylaws changes take effect when/and if the Governing Board approves them.

Your Executive Committee plans to send you draft revised bylaws and procedures on or before December 27 (30 days before the January 27, 2018 annual business meeting).

A major topic/clarification we will discuss is the **active** member. According to AFS constitution and rules, an **active** member is not one that does a lot of work and is constantly on the move. An **active** member is one who is a member of the Chapter and the Society. Those of us who pay Chapter dues without paying for a membership in the Society are not considered active members. This is important because according to Society rules, only active members can serve as officers (president, president-elect, or secretary-treasurer) and have voting privileges, i.e. can vote for changes in the bylaws and for Chapter officers. Most other proposed modifications of the bylaws and procedures are relatively minor.

It is appropriate to keep in mind the immortal words of Captain Hector Barbossa when accused of violating the pirates' code. He told the accuser, "First, you have to be a pirate for the code to apply."

Let's all be good pirates and renew our Society memberships for the upcoming year. AFS membership in 2018 is an incredibly good deal. With a new publisher all members get free electronic access to 7 journals, book discounts, access to a new webinar series, and a voice in Washington. AFS pushed House and Senate members to remove the proposed tax on graduate student tuition waivers from the tax package and it looks like our Society's efforts will be successful. This was going to cost every fisheries grad student about \$3,000 - \$5,000 in new taxes. Nobody else in the fisheries world was pushing for this except AFS.

If you have questions about the proposed changes in the bylaws and procedures, please contact David Buzan, 512.617.3164 or david.buzan@freese.com.

Consider Membership of AFS in 2018

As 2017 is ending, many of us are getting ready to celebrate the holidays, and identify our list of goals and resolutions for 2018. As we move into 2018, the Texas Chapter encourages its members to join the AFS or renew their membership. The Society is making some major improvements that will provide multiple benefits to the membership.

Starting in 2018, people who renew their membership or join the AFS will be entitled to two new benefits. First, AFS is now offering a new monthly webinar series that will discuss a variety of different topics that will allow for continuous learning for members. This past month, Dr. Scott Bonar (University of Arizona – Cooperative Fish & Wildlife Research Unit) presented on "*Verbal Judo!*". The presentation highlighted better communication and persuasive argument techniques with real-life examples. Next month's webinar on January 10 at 2:00PM (EST) will be a discussion on Bayesian clustering algorithms to assess fish population structures.

The second new benefit is online access to all six AFS journals. Prior to 2017, each journal required an individual subscription for a fee. The new inclusion of journal access with membership will allow for better communication of fisheries research and projects to students and professionals.

Society-level membership also provides other perks. Members receive a discount on AFS-published books, receive the monthly Fisheries magazine, as well as obtain discounted annual meeting registrations and application fees to professional certifications. Also, members stay up-to-date with AFS advocacy around fisheries policy.

Please note, that to vote on any chapter, division, of Society-level business or submit ballots in officer elections, you must be a member of AFS at the Society-level. Depending on where you are in your career, AFS offers a variety of different membership levels. To determine the appropriate membership level for you, please visit <https://fisheries.org/membership/types-of-membership/>



Texas A&M University - Corpus Christi (TAMUCC) updates

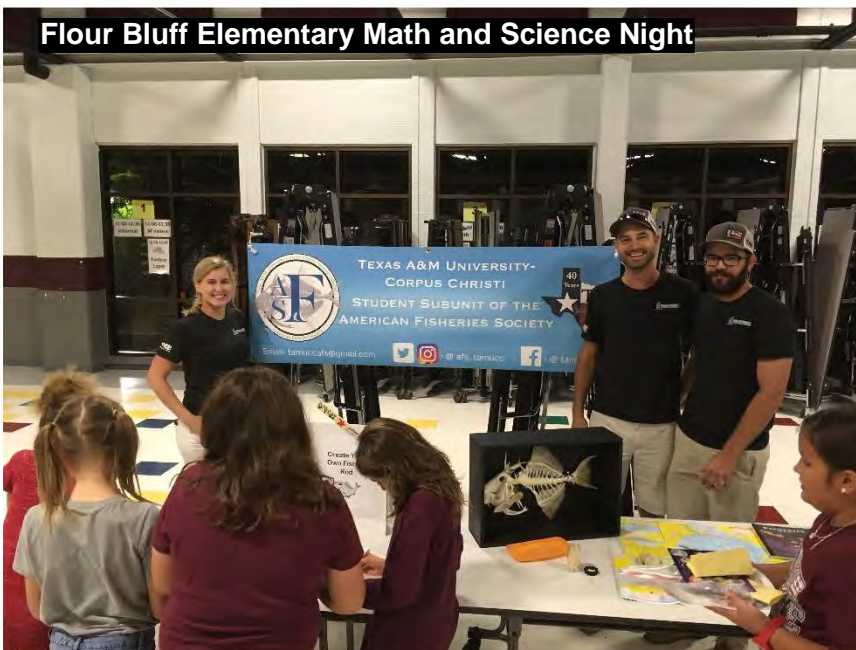
By Louisa Torrance

Fall 2017 TAMUCC Student Subunit



Outreach

Members organized a fantastic fisheries outreach table during Math and Science Night at Flour Bluff Elementary. Activities included Color Your Own Fishing Pole, fish ID flashcards, and fish skeleton exploration. We also collaborated with the CCA Marine Development Center at Flour Bluff, who hosted a touch tank of regional marine organisms. Roughly 80-100 students and parents attended the event.



We were invited by the TAMUCC Student Volunteer Organization to table on Campus Sustainability Day where we focused on marine debris and its effect on fisheries and encouraged students and faculty to attend future TAMUCC AFS meetings to learn more!

Service

Following Campus Sustainability Day, we hosted a Beach Clean Up where volunteers collected six bags of trash along University Beach. This area provides habitat for nesting shorebirds, as well as great fishing opportunities!



We also worked with a group of undergraduate students who wanted to host their own beach clean up this December -“it was a huge success in my opinion, we had more people attend than we could have hoped for which was largely due to the AFS helping spread the word.”

Looking Ahead

We are excited to join fellow Texas student subunit members at the 2018 Texas Chapter AFS (TCAFS) Annual meeting in College Station, TX!

Dr. Blair Sterba-Boatwright from TAMUCC will be hosting an AFS Continuing Education Webinar entitled “Using Bayesian Clustering Algorithms to Discover Population Genetic Structure” on January 10, 2018. To register, visit the AFS Continuing Education website: <https://fisheries.org/membership/continuing-education/continuing-educationwebinars/>

Connect with us; **Instagram:** @afs_tamucc, **Twitter:** @afs_tamucc, **Facebook:** <https://www.facebook.com/tamuccafs/>

Please visit our social media accounts to learn more about the Texas Gulf Coast and TAMUCC.

Mike Gonzalez Internship

by Dave Terre, Endowments chair

In 2013 we began a special relationship with the San Antonio River Authority (SARA) to honor a common friend in Fisheries, Mike Gonzales. Mike was an employee of SARA and a longtime member of our Chapter. Upon Mike's passing, in 2012, a memorial fund was set up in his name at SARA. Under a Memorandum of Agreement between the Chapter and SARA, the Chapter is provided the opportunity to provide a fisheries internship to one undergraduate student member each summer. This student can gain broad exposure to the fisheries field which will be helpful for choosing a career path or going on for an advanced degree. For those of you that knew Mike, this perfectly honors his legacy in mentorship and teaching in fisheries. This past year (2017) marked our 5th year in the program. Here is a list of the students who have received internships:

- Jacob Sengele (2013)
- Willow Howard (2014)
- Aline Trejo (2015)
- Chris Adkison (2016)
- Carly Rotzler (2017)

Carly Rotzler provided the following account of her experiences in summer 2017.

"The Michael Gonzales Internship with the San Antonio River Authority's Environmental Sciences Department (ESD) was my first choice of summer internships. Having grown up in San Antonio I have been walking and biking down the Riverwalk and Mission Reach for years. Watching the unfolding of the Mission Reach Ecosystem Restoration and Recreation project inspired me to major in Environmental Science. I was excited to get the opportunity to learn more about the river while obtaining practical skills.

What I got out of it was more than what I anticipated. I enjoyed traveling to all the different sampling sites and the hands-on approach of being able to see and wade through most of the creeks and streams throughout the watershed. I appreciated the opportunity to learn/perform every job in the field (observations, sample collections, measurements, calibrations, etc.).

I also welcomed the exposure to everything in ESD. I got to shadow the water quality scientists and see the various tests (nitrogen, phosphorous, chlorophyll, etc.). I spoke with the QA/QC specialist, GIS specialists, etc. and learned what their work entails. Sitting in on dept. meetings I learned of current research taking place within ESD and SARA's goals and aspirations.

This experience meant a great deal to me as it allowed me to improve upon my observation and practical skills while being exposed to different environmental careers. The Michael Gonzalez Memorial Internship was an invaluable stepping stone towards my future career. I thank SARA for providing this internship for me, and future students."



If you know an undergraduate student member who would value this experience, please give them a copy of the job announcement on page 17 of this newsletter. SARA will begin taking applications on January 16, 2018.

We are doing important things for students in our Chapter. Thank you for your support.

The Hutton Junior Fisheries Biology Program Is seeking 2018 Summer Students and Mentors

The Hutton Junior Fisheries Biology Program continues its mission every summer to diversify the fisheries profession by engaging, inspiring, and enriching next generation fisheries professionals. The Program is a paid summer internship and mentoring program for current 11th and 12th grade high school students interested in pursuing the disciplines of fisheries science, marine biology, and STEM related fields, and is sponsored by AFS. From the beginning of the program in 2001 to 2015, the program has offered scholarships to 572 Hutton scholars with the help of 270 Mentors in 137 host and financially sponsoring institutions. The mission is to increase diversity within the fisheries professions. The principal goal of the Hutton Program is to stimulate interest in careers in fisheries science and management among groups underrepresented in the fisheries professions, including minorities and women. Selected students known as "Hutton Scholars," are matched and mentored by a fisheries professional to enjoy an 8-week hands-on fisheries science summer experience in a marine and/or freshwater setting.

- Receive a \$4,000 scholarship award paid in equal installments over the summer
- Learn about the importance of healthy aquatic systems
- Participate in resource conservation and management projects
- Gain hands-on work experience
- Learn about career opportunities in the field, and receive course study resources.



Share the mission and principal goal of increasing diversity within the fisheries field to your network of professionals. For details go to <http://hutton.fisheries.org/>

Hutton Student Application:

https://secure.fisheries.org/MemberResponsive/Apply_WFZ_HuttonStudentApplication0.aspx?WebsiteKey=52863560-9856-4519-9679-0423d43512c6

Mentors and their organizations not only can have a positive effect on the life of a high school student, but also receive assistance with important summer projects and may even discover a potential future employee! AFS simplifies the mentor's involvement by providing guidance and administrative support.

Apply to be a 2018 Hutton Mentor at: <https://hutton.fisheries.org/mentors/mentor-411/mentor-application/>

Application Deadline for Students and Mentors: **February 28, 2018**

For any questions, please contact AFS Educational Program Coordinator, Mohammed Hossain at mhossain@fisheries.org , 301.897.8616, ext 204



The Clark Hubbs Student Research Scholarship

The Texas Chapter of the American Fisheries Society (TCAFS) seeks deserving students enrolled in fisheries-related curricula who are interested in applying for the Clark Hubbs Student Research Scholarship.

More than one undergraduate or graduate student from the same university may apply. Previous TCAFS scholarship recipients are eligible to apply for the research scholarship, which were announced at the annual meeting held January 19-21, 2017 in Corpus Christi, Texas. This was the tenth year for this prestigious award, and it will be a distinct honor for the student recipient.

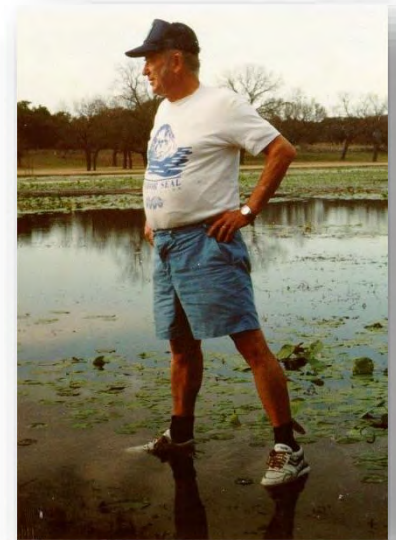
Each applicant must be a member of the TCAFS or pay their membership dues when the scholarship application is submitted. For information TCAFS membership: <https://units.fisheries.org/tx/tc-membership/>
Application for the Clark Hubbs Student Research Scholarship: <https://units.fisheries.org/tx/wp-content/uploads/sites/19/2017/11/CLARK-HUBBS-STUDENT-RESEARCH-SCHOLARSHIP-Application-2017.pdf>

EXTENDED APPLICATION DEADLINE: January 5, 2018

Applications and questions should be directed to the following address:

Kevin Mayes, Chair

Clark Hubbs Student Research Scholarship Sub-Committee
c/o Texas Parks and Wildlife Department
PO Box 1685
San Marcos, Tx78667
kevin.mayes@tpwd.texas.gov



SARA Student Intern job announcement

The San Antonio River Authority (SARA) will be posting a position in January 2018 for a paid intern in its Environmental Sciences Department (ESD). The “**Michael Gonzales Memorial Internship**”, will be open to all eligible non-graduate student members of the Texas Chapter of the American Fisheries Society. The Internship was established in 2012 to honor Michael Gonzales, former Deputy Director of Technical Services at the San Antonio River Authority. The internship opportunity is awarded to a highly motivated outstanding undergraduate student of a Texas institute of higher education. This internship is designed to provide an individual interested in Biology, Chemistry, Geology, other Natural or Environmental Science an opportunity to intern with the San Antonio River Authority Environmental Sciences Department in San Antonio, Texas.

Essential Duties and Responsibilities

Assists in the collection and preservation of biological, water and waste water samples

- Assists with the calibration, operation and maintenance of ESD field instruments
- Makes unbiased observations of aquatic and riparian conditions
- Helps review field data forms for completeness

Other Responsibilities

- Intern will be instructed in sample and laboratory QA/QC procedures as well as Data Management practices
- Performs other tasks as assigned

Education, Experience and Skills Required

- Must be an undergraduate at an accredited college or university with a minimum 3.0 grade point average
- Must be a current member of the Texas Chapter of the American Fisheries Society
- Must be well organized and able to manage time efficiently
- Must be competent in Microsoft Word and Excel
- Must be able to communicate clearly and concisely
- Must be able to establish and maintain cooperative working relationships with the general public and fellow employees
- Ability to swim preferred

Working Conditions

Interns are asked to commit to 40 hours per week. Work days are primarily Monday through Thursday (10 hour/ day) but will vary occasionally with weather and "Other Responsibilities". The internship will be over a 13 week period running from mid-May to mid-August 2018.

Work will be outdoors the majority of the time, sometimes in adverse weather, and the intern may be exposed to such typical hazards of outdoor work as poison ivy, wasps, snakes, and other natural and mechanical hazards. May be exposed to hazardous chemicals and disease causing agents.

Regularly wades into water bodies to gather samples, collect data, measure flows and record information.

Operates potentially hazardous equipment such as electro-shockers, power boats, generators and winches.

Regularly and safely lifts, carries, and handles supplies and equipment weighing at least forty (40) pounds.

Must be able to perform in a small but highly professional team oriented environment.

Must be able to function in a principle based organization that has a culture built on character and SARA Core Values of Stewardship, Integrity, and Excellence.

Requirements

Candidates for this internship must meet the following qualifications:

- Enrolled at an accredited college or university
- Minimum 3.0 grade point average
- Provide transcripts
- Member of the Texas Chapter of the American Fisheries Society
- Provide 2 letters of recommendation
- Provide a 500-word essay explaining your professional goals
- Provide resume

NOTICE

SARA will post the Michael Gonzales Memorial Internship on **January 16, 2018**. Applications will close on **February 27, 2018**. The selected intern will be notified by **April 1, 2018**.

The selected intern for the Michael Gonzales Memorial Internship will receive \$7,000.00 for thirteen (13) weeks work.

For more information about this job opportunity, please contact:

Karen Sablan
San Antonio River Authority
Senior Aquatic Biologist, Environmental Sciences Department
P.O. Box 839980
600 E. Euclid Ave.
San Antonio, Texas 78283-9980
210.302.3673
karens@sara-tx.org



Awards – how does a person go about winning one?

by Michele Nations, Awards Committee Chair

I believe the true award-winner doesn't seek to win one. Does that sound strange to you? Let me explain.

You can find award winners everywhere in your life when you look closely. They are the special people who march into tough situations when others can't or won't. I can think of numerous examples:

- The wife who tends to her husband or child when they have been diagnosed with an incurable disease but does not give up hope,

- The mother or father who somehow take care of that sick child even though they are stressed to the max at work,

- The firefighter who sees a burning building and enters it anyway, looking for survivors,

- The men and women in combat situations who continue to move forward against an unknown foe and not retreat,

- The workers who have experience in boating and don't hesitate to offer their help in trying to save people from a hurricane (before or after it hits shore),





- The person who doesn't hesitate when asked by a friend for help and doesn't even question what the help needed might be (are you lucky/blessed to have such a friend?),
- The person who doesn't have experience in a particular area or job at work but says, "I'll give it my best shot!"
- The person who studies a problem and risks the challenges to present the results to co-workers or boss(es), knowing that doing so might offend or be ridiculed,

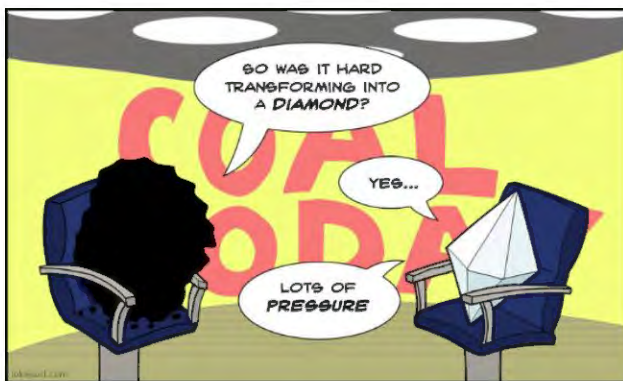
- The student or professor who challenges his- or herself to move beyond the comfort of familiarity and climb higher on the academic ladder



- Then there is the person who might be physically handicapped (eg: our governor – Greg Abbott) and doesn't focus on his/her limitations. (Photo: Greg Abbott encourages emergency officials working at the State Operations Center on August 25, 2017, in preparation for Hurricane Harvey.)

These people aren't going the extra mile to receive any recognition for their actions; it is who they are.

For some people, as shown above, the situations find them. It's not like they go looking for ways to show off their courage; they just show up! It's these people, the quiet heroes/heroines, who are the award winners.



As we give out the awards at the meeting, I'd like you to look at the people who receive the awards and think about what kind of heroes they are. **But** it takes another step for a person to win an award. That step requires another person – the person who searches, looks around for one or more of these heroes (could be a team?), and submits a nomination so that others can see these diamonds in the rough.

The deadline for submitting nominations has been extended to January 5th.



Texas Chapter AFS Business Meeting Minutes

June 14, 2017

Hilton College Station and Conference Center, College Station, Texas

by Niki Ragan, Secretary Treasurer

Determination of a quorum: Yes, by Niki Ragan at 10:07am.

President's Report – (Randy Rushin): Randy and Mike Homer met with hotel staff that morning to discuss meeting details, take a tour, and plan out logistics. Wants to discuss website updates, Sarah will update on that.

SDAFS Officer Update – (Craig Bonds): Not present; no report.

President-Elect – (Mike Homer):

- Contract has been initiated.
- Some of the renovations may not be done by the meeting. Originally promised to be completed, but now may not be.
- Our contract has changed hands 3 times with different managers, but Gayla Rhinebolt is now taking over our contract and has been with the hotel for 17 years and doesn't plan on going anywhere.
- Big issue for meal planning now is considering dietary restraints and possible modifications/ accommodations.
- Student mentor lunch and Past Presidents' breakfast plans have been made.
- Spaces for the various events have been lined out. The banquet and technical presentation space has changed, which will affect the raffle and auction storage. Items will need to be moved and stored, but shouldn't be too much of a headache.
- 17 letters have been sent out to solicit sponsorships. Sonatronics and Water Monitoring Solutions have offered sponsorship – no definite amount from Sonatronics at this time.
- We were denied from Academy Sports & Outdoors – scope of our meeting was not big enough.
- Haven't received responses from Bass Pro, Kelty, or Cabela's regarding sponsorship.
- College Station and Bryan Visitors and Convention Bureau grant (should we receive it) will be used towards gift packages, registration bags, and lanyards.
- The hotel is offering good beer for the meeting socials, we are close to North Gate and restaurants, and hotel offers a shuttle to North Gate and Downtown Bryan.
- Need to figure out A/V and layout for exhibitors and sponsors.
- No contact yet for transition to online registration. Dan Daugherty is considering using Google Docs for online registration. Moving forward we'll need to hash that out.
- No theme has been (or will be) designated for the meeting, but Mike Montagne will be the plenary speaker (45 minutes) and will present on Watershed Protection and its Role in Fish Management and Impaired Fisheries.
- (Meeting attendants had the opportunity to meet with Gayla and the Audio/Visual Team and tour parts of the hotel.)

Secretary/Treasurer's Report – (Niki Ragan):

- Taxes are done!
- Chapter bank account has \$22,107.68. Another permission form is needed before Niki has access to the Endowment Fund to transfer money over. Will deposit excess of \$14,000.00 into the endowment account once permissions are granted.
- Tax form needs to be signed and submitted to our CPA so they can submit to IRS.

2019 Division Planning – (Mike Homer for Dan Daugherty):

- Had a Committee Chairs conference call to lay out responsibilities of Oversight, Program, Local Arrangements, Fundraising, & Finance Committees, identify needs for committee staffing and recruitment, and set action items and accomplishment goals for the next meeting.
- Next meeting to be held immediately before the Inland Fisheries staff meeting in Athens
- Fundraising Committee has had a conference call and will meet again at committee level.
- Allison continuing to work on Proceedings.
- Stephen, Stephanie, Randy, and Tom Lang had a conference call to discuss plan of attack for sponsorships and fundraising. Want to make sure they minimize the overlap between the upcoming Chapter meeting and the Southern Division meeting. SD should have a bigger pull for sponsorships and may have success from companies that have denied support for the state level chapter meeting.

Committee Reports

History/Awards – Michelle Nations (present):

- Will work on getting History and Past Presidents and Awards info. online.
- Outstanding Fisheries Workers nominations will be requested earlier this year, possibly online. Will work with Sarah and John to get that done.
- Will be soliciting for judges soon, previous judges and anyone else is interested.
- Will work with Dan Daugherty to get presentation information (talk title, speaker affiliation, presentation time).
- Wants to pull from all sectors of business for judges.
- Prepping for 2019 - will create poster or other display of past, present, and future of TCAFS.
- Solicited votes for TX student subchapters – voting closes August 1st.

Continuing Ed. – Lynn Wright (not present):

- No update, but Lynn would like to hear suggestions for 2018 meeting continuing education courses and prospective educators.

Editorial – Dan Daugherty (not present) and Allison Pease (not present):

- Via Dan, Allison is working on finishing up the proceedings.
- Possibility of concurrent sessions was discussed – possibly after SDAFS.

Endowments – Dave Terre (not present):

- No update.

Internet – Sarah Haas (present), Danny Lewis (present), & John Taylor (not present):

- Been working with Grant Price with WordPress and Beth Bearde – have fixed about 80% of the problems and fixed most of the hyperlinks.
- When we switched to a “multi-site” it created issues with folders and links, but most have been fixed and have only a few left.
- Website hasn’t been updated in a while, so document updates need to be sent to committee, so they can put those up.
- Officers that don’t have pictures on website, send one to Sarah so she can update.
- Sarah needs deadlines for meeting announcements, etc. to know when to post/call to action.
- Our chapter has WAY more media than any other chapter and we may need to reduce that because of space limitations. Example: we have podcasts from 4 years ago and hyperlinks to hotels from several years ago. We may need to archive some of those eventually and make available by request to members.

-
- New website link is: units.fisheries.org/tx
 - Anyone who has info or documents that need to go on the website, get it to Sarah.
 - Projectors – the ones we use from TPWD headquarters are off-colored and old (approaching 15 years) and we need new ones. Danny got thorough specs for new ones and they've gotten cheaper...can get comparable for about 1/3 of the price as when the current ones were bought. Looking for avenue to get them purchased. Need to figure out who will purchase and where they will "live" once purchased.

Issues – Mark Webb (not present) and Niki Ragan (present):

- No update.

Membership – Debbie Wade (present):

- No update.

Newsletter – Kevin Storey (present):

- Finished Spring Newsletter but has not posted it yet. Will send out an announcement when the new Newsletter comes out. Not sure when that will be since the Spring one just came out.

Nominating – Dan Bennett (not present):

- No update.

Pond Management – Greg Binion (present):

- Committee meeting scheduled for 6/27 to discuss revisions to Pond Management Manual and delegate tasks to get revisions going.
- Solicited feedback from committee for updates and modifications to committee's section in the Chapter manual and bylaws, but has received little feedback so far. Will discuss that at meeting as well.

Publicity/Exhibits – Stephen Curtis and Stephanie George (present):

- Met to discuss SDAFS meeting in 2019. Also discussed 2018.
- Had a lot of contacts and interest leftover from 2017 donors. Have 4 or 5 individuals who helped at the meeting and want to help again.
- Will get started mid to late summer on soliciting fundraiser items. Will have a lot of repeat donors, but will also contact donors/industries/resources that didn't get to contact last year.
- Using Google spreadsheet system again to keep track of donors and correspondence with donors.
- Discussing how to prompt for next year without doing a dual request for 2019 – like a "save the date" type thing to keep us in mind for the SDAFS meeting in 2019.
- Discussed other organizations/businesses/companies to solicit for donations for upcoming meetings.

Scholarship – Jennifer Butler (present):

- Joe Beach has updated her with university contacts, so she is in a good place moving into the fall.

Student Outreach – Joe Beach (present):

- We have 4 subunits: Texas A&M, Texas A&M Corpus Christie, Texas Tech, and Tarleton State. There are also a few allied groups: Texas State Aquatic Biology Club, Texas Christian University Aquatic Biology Club, Dr. Guillen's group with University of Houston Clear Lake.
- Have interest from Tarleton and TAMUCC to help TCAFS out on social media. Drafted a TCAFS social media usage, engagement, and comment guidelines for students to help us expand to another form of social media such as twitter, Instagram, or snapchat. Students will submit their proposed posts to Michelle to be approved, and/or Alice Best if Michelle is not available, so that they can help us expand our reach and presence on social media. Students helping with TCAFS media could help us promote and recognize our subunits better.
- Starting with social media, we can hopefully increase student involvement with the chapter.

-
- Students will be enlisted to help with A/V in 2018 so that they will be prepared to help with the SDAFS meeting in 2019. If enough A/V help, students will be available to help with registration desk and/or t-shirt sales.

Student Subunit Chapter Reports

- None present; no update.

Old Business:

- Dave Buzan has not worked on Procedures since last meeting and will be able to continue in August. Portions will have to be reviewed and approved by the chapter at the annual meeting. Drafts will be out this fall so that members can make comments.
- Need to add social media updates to Procedures. Will be voted on during the business meeting in 2018.

New Business:

- The SDAFS Warmwater Streams Committee (Jim Burroughs with Oklahoma Dept. of Wildlife Conservation) has approached Randy about:
 - Do we have any topics of interest that we would like to see in the Southern Division related to Warmwater Streams? Any issues of concern? If so, let Randy know and will get you in touch with Jim.
 - Solicit funding from TCAFS to offset travel for the committee for their committee meetings and to attend the SDAFS annual meeting.
- Need TCAFS procedural update to be able to help other chapters/committees? Do we need to set a limit to our yearly allocations? There are a set of groups we know and expect to be solicited by, and therefore can plan for, but what of the other requests? Could be a potential expansion of our mission – to be discussed at annual meeting.
- Mike made motion to donate \$250 to the SDAFS Warmwater Streams Committee to offset their travel costs for meetings. Dave Buzan seconded the motion. All voted in favor.
- T-shirts – do we want to order new ones? Do we want to order other items like tumblers? Suggestions?

Adjourn: Mike Homer made the motion to adjourn the meeting; Kevin Storey seconded the motion. Meeting adjourned at approximately 12:03 pm.



Texas Chapter AFS Business Meeting Minutes

December 4, 2017

EXCOM conference call

by Deborah Wade, Membership

Determination of quorum: Yes, by Randy Rushin at 9:00am.

President's Report – (Randy Rushin): Dave Buzan is working on updates to the Chapter By-laws which will be presented at the annual meeting In January 2018.

SDAFS Officer Update – (Craig Bonds): Not present; no report.

President-Elect – (Mike Homer): Secured a grant of \$1,000 for the meeting from the City of College Station. to cover promotional materials. TCAFS will be reimbursed after the meeting. Working on discount coupons for meals from area restaurants. The registration fee has increased slightly from \$50 to \$65 for students and from \$102 to \$125 for professionals to cover operational costs at the meeting. Google form for registration appears to be working well.

Secretary/Treasurer's Report – (Niki Ragan): Not present, no report.

SDAFS Planning Committee Report – (Dan Daugherty) Sub-committees are making progress and staying on schedule. The next Planning meeting is scheduled on Thursday, January 25, prior to the start of the TCAFS annual meeting.

Committee Reports

History/Awards – Michelle Nations (present): The application form for 8 categories of Outstanding Fisheries Worker of the Year is available online. Members were encouraged to nominate deserving fisheries workers.

Continuing Ed. – Lynn Wright (present):

- Two good topics, Freshwater mussel conservation in Texas and Introduction to genomics for fisheries research, have been secured for workshops at the annual meeting.

Editorial – Dan Daugherty (not present) and Allison Pease (not present):

- Allison is working on finishing up the proceedings.

Endowments – Dave Terre (not present):

- No update.

Internet – Sarah Haas (present), Danny Lewis (present), & John Taylor (not present):

- Sarah has worked on updating the reformatted Chapter website
- Google forms for registration, abstract submission and scholarship applications are all working well.

Issues – Mark Webb (not present)

- No update.

Membership – Debbie Wade (present):

- TCAFS has a current roll of 272 members
- 272 professionals, 79 students, and 1 silver

Newsletter – Kevin Storey (present):

- Apologized for taking so long to get a newsletter together

-
- Deadline for submissions to Volume 43, No. 3 is December 14, 2017.

Nominating – Dan Bennett (not present):

- No update.

Pond Management – Greg Binion (present):

- The Committee is working on updating the pond management manual

Publicity/Exhibits – Stephen Curtis and Stephanie George (present):

- So far, they have managed to get a good mix of donated items but they are still approaching new sources

Scholarship – Jennifer Butler (present):

- A total of 38 applications have been received for 10 scholarships
- Jennifer asked for volunteers to assist with reviewing applications

Student Outreach – (vacant):

- Joe Beach no longer works for TPWD nor is he associated with TCAFS
- Looking for a new chair for this Committee
- There are currently 4 student subunits in Texas (Texas A&M, Texas A&M Corpus Christie, Texas Tech, and Tarleton State) although Texas Tech is currently inactive
- Alice Best spoke with Josh Perkins, A&M Professor. He may be interested heading up this committee

Old Business:

- Dave Buzan is working on Procedures Manual and By-Laws Updates
- The proposed changes will be procedural to streamline with TCAFS operations
- Portions will have to be reviewed and approved by TCAFS members at the annual meeting and voted on during the business meeting in 2018.

New Business:

- Southern Division AFS will be offering disaster relief aid that will focus on the professional needs of members; including, but not limited to meeting travel, membership support, or assistance with replacement costs for equipment or libraries.
- We are in the process of finalizing details on eligibility and resources

Adjourn: Michele Nations made the motion to adjourn the meeting; Kevin Storey seconded the motion. Meeting adjourned at approximately 11:00 am.

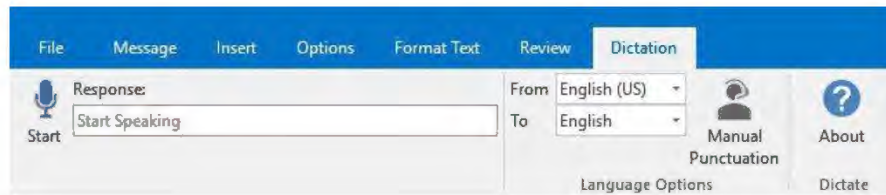




Freebies for the busy fisheries professional!

❖ Dictate for free in Microsoft Office

Microsoft Garage (<https://www.microsoft.com/en-us/garage/>) offers a free dictation tool add-in for some Microsoft Office applications. Dictate works with Outlook, PowerPoint and Word using state-of-the-art speech recognition behind Cortana to convert speech to text. The program supports more than 20 languages for dictation and offers real-time translation to 60 languages. It requires Office 2013 or later, and Windows 8.1 or newer. Versions are available for 32-bit and 64-bit versions of Office, although many users with 64-bit versions of Windows actually use a 32-bit version of Office. You will also need .Net Framework 4.5.0 or later. Oh, and don't forget the microphone! <http://www.dictate.ms/>



❖ Integration between Android devices and Microsoft apps

Savvy Android users are aware that Microsoft has made a slew of their apps available to run on these Linux-based devices. Here are some of the more obvious choices;

- Office - Excel, Outlook, PowerPoint and Outlook
- Scan pictures, notes, business cards - Office Lens
- Android replacement launcher - Microsoft Launcher
- Cloud access – OneDrive gives you access to Microsoft's cloud-based storage

You can access individual apps through the Play Store, but the fastest way to see what's available is through an app called Microsoft Apps. After installation, if you need another Microsoft offering you can open the app and see what else is available.

If you're just interested in Office apps, Microsoft will provide you with a download link by email or SMS

<https://products.office.com/en-us/mobile/office-mobile-apps-for-android>



Phone

Link your Android, iPhone

The latest version of Windows 10, version 1709, lets you link your Android or iPhone to your desktop. Start browsing on your phone and continue working on a larger screen by sharing to your PC. Load a Spreadsheet from OneDrive and share it to your desktop. Sweet! You'll need to link the phone in Windows Settings. This could be a boon for ageing eyes!

Tempted to ditch a Windows PC or Mac and try a Chromebook instead? Newer models now support Google Play. You can install Microsoft Office apps if you need more than Google's G Suite has to offer. If your device has a screen 10.1 inches or larger, you'll need to purchase an Office 365 subscription to edit, create or print anything. For a list of Chromebooks that support Android apps:

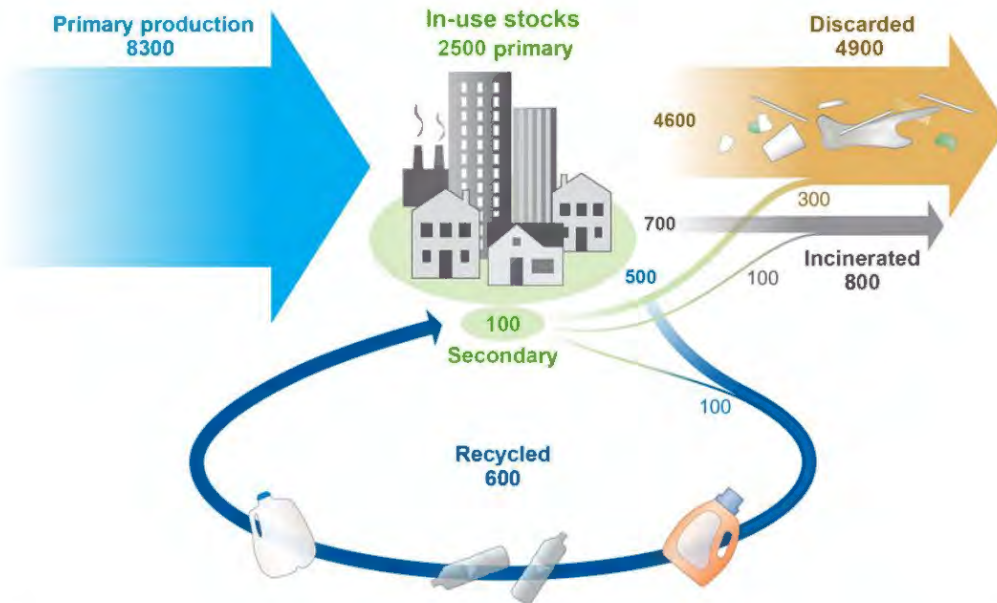
<https://sites.google.com/a/chromium.org/dev/chromium-os/chrome-os-systems-supporting-android-apps>



Time to think about plastics

According to a paper published in July 2017 in the journal Science Advances, since the 1950s, 8.3 billion metric tons (MT) (1MT = 1.102 US tons) of virgin plastics have been produced worldwide. That's equivalent to the weight of 25,000 Empire State buildings or 1 billion elephants!

<http://advances.sciencemag.org/content/3/7/e1700782>) None of the commonly-used plastics are biodegradable so they ultimately generate a mountain of waste. As of 2015, this amounted to 6.3 billion MT, only 9% of which was recycled. Incineration accounted for 12% of loss and a whopping 79% accumulated in landfills or the natural environment.



Unless production and waste management trends change, an estimated 12 billion MT of plastic waste will be deposited in landfills or the natural environment by 2050.

Scientists from the National Center for Ecological Analysis and Synthesis and the University of Georgia in Athens estimated 8 million MT of plastic ended up in the oceans in 2010. They predicted that to increase to 9.1 million MT per year by 2015, so by now it's likely to be closer to 10 million MT!

http://wedocs.unep.org/bitstream/handle/20.500.11822/17969/Plastic_waste_inputs_from_land_into_the_ocean.pdf?sequence=1

- Sea birds and larger marine creatures like turtles, dolphins and seals can become entangled in plastic debris or mistakenly ingest it as food
- Consumed plastic bags and/or larger pieces of plastic can cause internal blockages, damage digestive systems and result in death
- Larger plastic particles can fragment creating secondary microplastics
- Microplastics can also be manufactured to be a specific size, primary microplastics. They are derived from a variety of sources including cosmetics, clothing, and industrial processes
- Microplastics often become embedded in tissues of organisms through ingestion or respiration
- A wide range of organisms have been found to contain microplastics including; annelids, crustaceans, sea cucumbers, corals, zooplankton, fish and birds
- Consumption of microparticles can result in malnutrition or starvation of fish
- Microplastics also absorb chemical pollutants which could also have potential toxic effects
- Ingestion by humans of microplastic-contaminated fish could eventually become a concern

If there's truth to the statement, "You are what you eat", the reality might be sobering!

Join the Texas Chapter

If you are interested in joining or renewing your membership to the Texas Chapter of the American Fisheries Society, you can get membership materials at our web site, <https://units.fisheries.org/tx/tc-membership/> or by contacting Deborah Wade, Texas Freshwater Fisheries Center, 5550 FM 2495, Athens, TX 75752, (903) 670-2234, Deborah.Wade@tpwd.state.tx.us

If your e-mail address has changed, please contact us with an update so you can continue to receive the chapter newsletter.

Members are encouraged to make submissions to the Newsletter Editor by mail or e-mail to one of the addresses listed below.

EXECUTIVE COMMITTEE

PRESIDENT Randy Rushin
PRESIDENT-ELECT Michael Homer
PAST-PRESIDENT Dave Buzan
SECRETARY-TREASURER Niki Ragan

COMMITTEE CHAIRPERSONS

AWARDS Michele Nations
CONTINUING EDUCATION Lynn Wright
EDITORIAL Dan Daugherty & Allison Pease
ENDOWMENTS Dave Terre
HISTORY Michele Nations
INTERNET Sarah Haas / John Taylor
ISSUES Mark Webb
(includes Stocks-at-Risk & Exotic Species Sub-committees)
MEMBERSHIP Deborah Wade
NOMINATING Dan Bennett
POND MANAGEMENT Greg Binion
PUBLICITY / EXHIBITS Stephen Curtis & Stephanie George
SCHOLARSHIP Jennifer Butler
STUDENT OUTREACH

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