**President’s message**  
**by Richard Ott**

“Howdy neighbor”, “Like a good neighbor….”, “Won’t you be my neighbor?”. Whether it a quote from a 1990’s comedy, a tag line from an insurance commercial, or an invitation from a nice guy in a sweater, our neighbors have been an important element of human society. For our 2014 TCAFS annual meeting, “neighbors” will take on additional significance because I am happy to announce our neighbors to the north the Oklahoma Chapter American Fisheries Society (OKAFS) will be joining us at Tanglewood Resort in Pottsboro, TX for a joint meeting. This is both exciting and worrisome. Total attendance at our last few TCAFS annual meetings have hovered near 200; inclusion of OKAFS at the 2014 meeting is likely to increase that number by nearly half. To accommodate the increase in attendance (and consummate submission of presentations and posters) some temporary changes to the meeting format were necessary.

Continuing education has been compressed into a single one-hour session and will start at 2:00 pm on Thursday. A plenary session will follow continuing education on Thursday afternoon instead of Friday morning. The plenary session has been similarly reduced to one hour and will likely feature only a single speaker. Although the identity of the speaker and title of the presentation are not yet finalized, it will likely revolve around allocation of water resources. Following the plenary presentation we will begin technical sessions. Because presentation time will be precious we will be following the 15-minute format we have used for the last few years (12 minutes to talk and three minutes for questions). Initially, the time allocated to Texas vs. Oklahoma presentations will be pro-rated by expected attendance in a 2:1 ratio; it will be important to submit your abstracts early for the best chance for selection. As always, if time doesn’t permit everyone a chance to present we will still be offering a poster option. However, if submissions by one or the other chapter don’t fill all time slots the ratio may be slightly modified. The student/professional mixer will follow technical sessions on Thursday evening. Let’s be mindful of the opportunity to engage Oklahoma students as well as Texas students and show them the hospitality we are famous for.

Friday morning starts bright and early with technical sessions which continue until our student/mentor lunch at noon. Students and professionals from both chapters will be mixed at lunch to offer the greatest opportunity for networking. After lunch, technical sessions will resume until we break for the banquet/auCTION/raffle in the evening. Awards for TCAFS and OKAFS will be presented during “beverage time” prior to the
banquet. This gives both chapters the opportunity to brag a little and acknowledge the accomplishments of our respective membership; I hope no one is shy because applause will be abundant.

This year’s raffle/auction will feature not one, but two auctioneers in a tag team format. Receipts’ from the auction/raffle will go to the student scholarship funds of the respective chapters. This provides the opportunity for some friendly competition; let’s all work hard to obtain goods and services for the raffle. Technical sessions will continue Saturday morning until the two chapters separate for individual business meetings. In regards to TCAFS business the EXCOM voted to delay implementation of automatic membership in TCAFS (as a gift for meeting registration) until the 2015 meeting; we will be collecting separate annual dues again this year. This decision, while regrettable, is due to complications resulting from the joint attendance format of the 2014 meeting. Automatic membership in the Texas Chapter would have allowed Oklahoma students to compete in the best presentation/poster competition for TCAFS scholarships. This was not what contributors to our scholarship endowment fund had in mind; nothing personal, just business. Besides, OKAFS has a separate competition.

It has been a long time since TCAFS and OKAFS conducted a joint meeting. Those grey beards among us may remember (or not) it was also at Tanglewood Resort in Pottsboro. As I recall, that was a great meeting; let’s be sure to make our neighbors welcome again.

2014 Joint Chapter meeting of Texas and Oklahoma Chapters of the American Fisheries Society

For full details of the 2014 joint annual meeting between members of the Texas and Oklahoma Chapters of the American Fisheries Society, scan the QR-code below or follow the hyperlink.

http://www.sdafs.org/tcafs/meetings/14meet/2014meethome.html

President-elect’s Message

by Bruce Hysmith

What am I doing here? I am right at the lick-log of retirement, again, and I consented to be a candidate for President-elect of the Texas Chapter AFS. Am I crazy or what? Assuming I am not crazy, “I thought OK”, I might slide right on by and escape election and not have to serve. Fat chance, I do not know by what margin I won the election and it really does not matter. What matters is I was elected and serve I will. Just like my auctioneering days, I take serving very seriously, serving the membership of the Texas Chapter AFS. I began my association with the chapter many moons ago conducting the auction/raffle at annual meetings. The first time was at the annual meeting in Kerrville and the rest is history. And later I chaired the Continuing Education Committee as well. The auction/raffle grew over the years and participation was great; our folks are very generous and it showed in our steady increase in revenue. I think we have a great chapter and our colleagues
in other states feel the same way and look to us for leadership. In fact when I approached the EXCOM of the Oklahoma Chapter AFS, they were excited to be meeting with us. So much so, that they changed their meeting time from fall to winter. I hear pros and cons regarding membership in the AFS and local chapters. In my mind the pros include the following: AFS is the only nationwide organization representing fisheries biologists. Other professions have organizations that represent them, i.e. medical doctors, lawyers, educators, police and fire personnel, and such, so, why not an organization for fisheries biologists? And if you are a biologist why not belong? Then I hear the cost is too high. Maybe so, but it is the only fisheries biologist organization to which I belong, so I pay my dues and move on. I have been a dues paying member since graduate school days, 1969. And, I can’t think of any justifiable cons, so there you go!

The first requirement of this office is to identify a venue and secure a contract for meeting place, accommodations for attendees, and ad-hoc activities; in other words plan for next years (2014) meeting. I will tell you up front, auctioneering is much more fun. Bottom line, we have a time and place for 2014 and it will be right here on the shores of Lake Texoma at Tanglewood on Texoma Resort Thursday, Friday, and Saturday, February 13-15, 2014. We have plenty of room with lots of accommodations. We have golf and of course, our world-class striped bass angling and excellent smallmouth bass along Denison Dam and Eisenhower State Park. There are plenty of parking spaces for boat trailers if you are so inclined.

Currently at issue are the zebra mussel infestation, blue-green algae blooms, and the affect of drought on Lake Texoma. Unfortunately, we cannot solve these issues; we can only promote awareness and provide public information to allow better understanding of these issues and their potential impacts. So far the zebra mussels have not been as devastating as earlier reported in the great lakes region, Kansas and Oklahoma. Right off the bat they covered everything, rocks, stumps, boat houses, etc. Now driven to occupy deeper water because of drought conditions, they are not so visible, still there, but out-of-sight.

Blue-green algae comes and goes, but in the long haul is influenced by the age old process of eutrophication. And this will never go away; we have to work around it. Finally there is the weather-related drought, nothing we can do here. However, on the positive side associated lower water levels appear to be enhancing angling success. Anglers on Lake Texoma have posted some fantastic fishing over the past two years.

The stocking of two non-native fish species completely changed the angling complexion of Lake Texoma: 1) striped bass by ODWC in 1965 and 2) smallmouth bass by TPWD in 1981. Neither flood, severe winter, drought, nor invasive species have compromised recreational angling on Lake Texoma and as stewards of this vast resource, ODWC and TPWD personnel intend to maintain status quo. By now I am sure you have received information on the up-coming 2014 bi-state meeting with the Oklahoma Chapter AFS, and I am sure you are looking forward to it as we are, so adios for now and we will see you in February.

“TCAFS Homecoming King and Queen”
by Dave Buzan, Awards Committee Chair

Rumor is circulating the Texas Chapter will stop recognizing outstanding fisheries workers after this year. Next year, the chapter will recognize a chapter King and Queen and they both will be crowned at the next annual meeting and each presented a dozen red roses.
If rumor proves true, this will be your last chance ever to nominate your colleagues, students, or others for outstanding fisheries worker of the year. Don’t miss this last historic opportunity. In case you have forgotten our awards categories they include:

- Fisheries Administration
- Fisheries Management
- Fish Culture
- Fisheries Education
- Fisheries Research
- Fisheries Student
- Technical Support
- Special Recognition in Fisheries Work

Forms (soon to be collector’s items) for nominations can be found at: http://www.sdafs.org/tcafs/awards/TCAFS_Award_Nomination_Form_2011.pdf.

The deadline for submittal is December 13 (also known as lucky Friday the 13th.) Awards will be presented at the chapter’s annual meeting in February. Any questions about awards and nominations can be directed to Dave Buzan, david.buzan@atkinsglobal.com, 512.372.1207.

Raise your voice in support of your fisheries co-workers and colleagues. Nominate someone today!

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**Announcement of TCAFS Scholarships**

*by Mike Morgan, Scholarship Committee Chair*

The Scholarship Committee of the Texas Chapter of the American Fisheries Society is seeking deserving students enrolled in fisheries-related curricula who are interested in applying for scholarships.

Up to six scholarships in the amount of $1,500 each will be awarded to a minimum of two undergraduate students, one Master’s student, and one Ph.D. student. Students are eligible to receive one award in each degree category during their scholastic career. No nomination is necessary, and more than one student from the same university may apply in each category. Scholarships will be awarded during the annual meeting February 13-15, 2014 at the Tanglewood Resort on Lake Texoma. Scholarship winners are strongly encouraged to attend the annual meeting to receive their award.

Each applicant must be a member of the Texas Chapter of the American Fisheries Society or pay their membership dues when the scholarship application is submitted. The Scholarship Committee will select the scholarship recipients based on academic excellence, professional activities, promise of future professional involvement, and contribution to the field of fisheries science.

Applications must be received by January 10, 2014. A copy of the application form has been enclosed with this announcement. Additional copies may be obtained from the TCAFS website at http://www.sdafs.org/tcafs Applications may be submitted by email (preferred) or U.S. Mail.

Please direct applications and questions to:

Mike Morgan – Scholarship Committee Chairperson
3030 Sugar Wood Dr.
League City, TX 77573
(281) 974-9964
mike.morgan@tpwd.texas.gov
TCAFS Student Scholarships will be fully funded in 2014
by Dave Terre, Endowments Committee Chair

Thanks to generous donations by the Patsy B. Hollandsworth Family Foundation and the Sportsman’s Club of Fort Worth, our student scholarship program will be fully funded during 2014. These donations also help build the financial security for our program into the future.

The Patsy B. Hollandsworth Family Foundation (PBHFF) donated $17,500 to the TCAFS in September 2013. This will allow us to fully fund four scholarships at $1,500 each and allow us opportunity to grow our Student Scholarship Endowment for the future. Our relationship with the PBHFF began in 2004 with a single donation of $5,000. Since that time, they’ve provided funds for 33 scholarships over the past nine years. Because of the hard work of Jimmie and Kirk Green who continue to grow and nurture our relationship with the PBHFF, along with the proper management of our endowment investments, we are securing a solid future for our scholarship program. Many of you have had the pleasure of meeting the PBHFF board members at our past two annual meetings and we hope that they will again attend our meeting at Lake Texoma in 2014. If you see them there, please let them know that we greatly appreciate all they’ve done for the TCAFS.

In October, the Sportsman’s Club of Fort Worth (SCFW) agreed to fund two fisheries scholarships ($1,500 each) to honor the legacy of one of their founding members, Harry Tennison. Our relationship with the SCFW began in 2011 because of some behind the scenes work by Dr. Ray Drenner who had a personal connection with this outstanding organization. Since that time, the SCFW has provided the funds necessary to allow us to award six scholarships over the past three years. We’ve accomplish this through a pass-through grant offered to students by the SCFW through their university. The SCFW allows us to use our proven student scholarship selection process to choose the Harry Tennison Scholarship award winners each year. This process is administered by Mike Morgan and the TCAFS Student Scholarship Committee.

The moral of this story is that we have some very forward-thinking members in our chapter who have stepped-up and worked hard to initiate and/or maintain the relationships we have with these private organizations for the betterment of all Texas fisheries students (past, present and future). Our model works because of the Chapters longstanding commitment to its student members and the leadership provided by our working committees who volunteer their time to make this happen in a very professional way.

What can YOU do to help the chapter build a new funding source or relationship in support of our student scholarship program? Please call me if you have some ideas and we will work together to make it a reality. I can be reached at 512-467-4962.

Students can learn how to apply for one of these scholarships on the preceding page (4) of this newsletter.
Abstracts for oral and poster presentations are requested for the 2014 joint meeting of the Texas and Oklahoma Chapters of the American Fisheries Society. The meeting will be held Thursday through Saturday, February 13 – 15, 2014, at the Tanglewood Resort on Lake Texoma, Texas-Oklahoma.

To submit an abstract to be considered for the technical program, please provide the following information. **Incomplete submissions will not be accepted.**

**AUTHOR NAME(S) AND COMPLETE ADDRESS(ES)** - presenting author denoted with *

**PRESENTER STATUS** - student or professional (at time of submission)

**PRESENTATION TYPE** - oral or poster

**PRESENTATION TITLE**

**ABSTRACT** - Single paragraph, 300-word maximum length

**PROFESSIONAL PRESENTERS** - please indicate your willingness to judge student presentations

**PUBLICATION IN TCAFS PROCEEDINGS** - Abstracts from this meeting will be published in the Texas Chapter’s annual Proceedings unless specifically declined. Authors also have the option to publish a full manuscript of their paper in the Proceedings as a peer-reviewed publication recognized by AFS. Please indicate your intentions for your presentation in the 2014 TCAFS Proceedings (e.g., decline, published abstract, or manuscript). All presentations are eligible.

Oral presentations should be prepared as a 15-minute presentation (about 12 minutes for presenting, 3 minutes for questions) using MS PowerPoint®.

Poster presentations should be formatted to include a title, abstract, introduction, methods, results, discussion/conclusions, and literature cited. Posters must not exceed 48” in any dimension.

**DEADLINE FOR ABSTRACT SUBMISSIONS IS 15 DECEMBER 2013.**

Please submit your presentation abstract ELECTRONICALLY (preferably in MS Word®) to: Dan.Daugherty@tpwd.texas.gov, with “2014 ABSTRACT” in the subject line.
SARA Student Intern Job Announcement

The San Antonio River Authority (SARA) will be posting a position in January 2014 for a paid intern in its Environmental Sciences Department (ESD). This position, formally called 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 intern will assist ESD aquatic biologists.

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 per 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 2014.
- 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. Work requires the ability to traverse uneven terrain, and intermittently walk, stand, climb, balance, bend, crouch and reach while performing work duties. 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.
NOTICE
SARA will post the Michael Gonzales Memorial Internship on January 17, 2014. Applications will close on February 28, 2014. The selected intern will be notified by Monday, March 14, 2014.

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:

Steve Lusk
San Antonio River Authority
Manager, Environmental Sciences Department
P.O. Box 839980
600 E. Euclid Ave.
San Antonio Texas, 78283-9980

For additional details contact Steve Lusk at stevelusk@sara-tx.org or (210)302-3637 or view the announcement from SARA at: https://www.dropbox.com/s/pivcrig14q6xw37/SRA%20Announcement.docx

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Texas Chapter AFS 2013 Fall Meeting Minutes

Date: October 10, 2013

Site: Pottsboro, TX (Tanglewood Resort)

Meeting Summary:
- A dual chapter meeting was held on October 10, 2013 between EXCOM members from the Texas (TCAFS) and Oklahoma (OKCAFS) Chapters of the American Fisheries Society.
- The purpose of the meeting was to coordinate and plan the upcoming joint meeting between the TCAFS and OKAFS chapters at the Tanglewood Resort and Conference Center on Lake Texoma (Pottsboro, TX) on February 13 – 15, 2014.
- TCAFS EXCOM and Committee Reports were not given during the meeting.

Attendees:
- TCAFS – Rick Ott, Bruce Hysmith, Michelle Nations, Haley Woelfel, Danny Lewis, Mike Morgan, and John Clayton.
  - Remotely via WebEx: George Guillen, Craig Bonds, Debbie Wade, Dan Bennett, Dan Daugherty, Mark Webb and Jenny Oakley.

Call to Order:
- The meeting began at 1pm with welcome and introductions handled by current Presidents Richard Ott (TCAFS) and Jim Long (OKCAFS).
TCAFS President Elect Bruce Hysmith:
- Bruce gave an update on the planning and details for the OKC/TCAFS 2014 Annual Meeting venue to be held at the Tanglewood Resort and Conference Center on Lake Texoma near Pottsboro, TX (http://www.tanglewoodresort.com/).
- The student professional mixer will consist of various finger foods.
- The banquet menu will consist of a ribeye steak (or a vegan option). Two drink tickets will be given to all registrants and extra drink tickets will be $5 each.
- There will be two breaks during the technical sessions with assorted bake goods and fruit.
- For Friday, there was discussion regarding whether to have lunch on your own or have something at Tanglewood. Because of the limited off-site food options and need to maintain a conservative timeframe, the discussion indicated an on-site option was desirable. A reduced price, on-site lunch buffet was discussed with Marsha Coleman (Director of Sales and Marketing at Tanglewood Resort). (Currently, the final details are unresolved on this matter but further discussions with Marsha indicated that the lunch buffet would happen but would require additional negotiation).
- Room rates at the Tanglewood Resort will cost $77 for a single/night and $105 for a double/night. The Resort will honor those rates on Wednesday and Saturday nights as well for those arriving early or staying late. There is a need to fulfill 252 room nights and the resort has set aside 72 single rooms and 105 double rooms for attendees.

2014 Annual Meeting General Items (general discussion by OKCAFS/TCAFS EXCOM Members):
- For the meeting theme plenary session, there were several suggestions (i.e., water allocation, fracking, wise water usage, and exotic species). A committee between the two chapters was formed to decide on the theme and speakers. The plenary session will be Thursday afternoon from 3:00-4:00pm and is entitled “Water: A Shared Resource and Responsibility”.
- In regards to the continuing education (CE) workshop, it was determined that a joint session on the proper cleaning of equipment (field and hatchery) to prevent disease and invasive species spread. The CE session will be a Powerpoint presentation at 2:00pm - 3:00pm on Thursday.
- After the CE and plenary sessions, there will be an hour of technical presentations held on Thursday between 4:00 – 5:00pm.

2014 Annual Meeting Financial Issues (general discussion by OKCAFS/TCAFS EXCOM Members):
- Operation of meeting registration was discussed with options including PayPal and registration services such as REGonline. Later, further investigation into using the REGonline service revealed a significant cost than what was originally thought so it was decided to use traditional registration and payment methods (cash or credit card using PayPal). The link for the registration page for the 2014 Annual Meeting can be found at: http://www.sdafs.org/tcafs/meetings/14meet/2014meethome.html.
- As in the past, there will be a deadline for reduced registration rates ($90/professional and $45/students) to be January 24, 2013. After that date, registrations will increase to $105/professionals and $55/student. It was also discussed on who would handle the registration, either a single point of contact of parallel contacts within each chapter. It was decided that a single point of contact would work best for registration and Greg Southard would serve as that contact. The registration form can be found at: http://www.sdafs.org/tcafs/meetings/14meet/TCAFS-OKAFS_2014_Meeting_Registration.pdf
Another discussion item regarded the cross posting of registration information for both TCAFS and OKCAFS websites and the need to share chapter logos for promotional purposes.

The Friday Student/Mentor lunch was discussed but with limited resolution regarding whether a field option was feasible considering the location of the conference. It was later determined that the lunch would occur.

Because of a previous TCAFS vote that was passed earlier this year that would combine the TCAFS annual chapter dues and annual meeting registrations as one payment, this change would cause the unanticipated consequence of OKCAFS members also becoming TCAFS members for 2014 and thus qualifying them for TCAFS student and professional awards. Because of this unique situation, there was a vote after the meeting by TCAFS EXCOM to delay this implementation of the change until the annual meeting of the TCAFS in 2015. Therefore, the collection of individual chapter dues would be handled by each chapter. TCAFS 2014 dues can be paid either using the pre-registration form or at the annual meeting. OKCAFS dues will be handled at the meeting by OKCAFS representatives.

There was discussion on how to handle the collection of funds, payment for meeting costs and disbursement of any profits from the meeting. It was decided the prorate the registration fees, sponsorship fees, vendor fees, and any contributions for meeting operations based on each chapters participation but to keep the auction and raffle profits separate by individual chapters. The pre-existing contributions for the student endowment funds (e.g., Patsy B. Hollandsworth Family Foundation) will also be kept separate based upon chapter affiliation.

2014 Annual Meeting Operation of Technical Sessions/Posters (general discussion by OKCAFS/TCAFS EXCOM Members):

- There was discussion regarding the meeting format and contributed presentations.
- In regards to the submission of abstracts and the selection process, it was decided that each chapter will select their own presentations. 2/3 of the presentation slots will go the to TCAFS (because of greater membership) and 1/3 of the presentation slots would go to the OKCAFS. If a chapter can’t fill all of their allotted slots, the other chapter will have that opportunity for more presentations. The first call for papers has been released and can be found at: [http://www.sdafs.org/tcafs/meetings/14meet/2014_TC_OKC_AFS-1st_CALL_FOR_PAPERS.pdf](http://www.sdafs.org/tcafs/meetings/14meet/2014_TC_OKC_AFS-1st_CALL_FOR_PAPERS.pdf)
- In regards to audio/visual (AV) needs and support, the TCAFS will provide the computer to run the Powerpoint presentations. All other AV needs will be met through a contract with the resort. Danny Lewis (TCAFS) was nominated to be the AV “point man” and it was suggested that volunteer(s) may also be sought to help out with AV needs and to give Danny a needed break at times.
- Podcasts will reside on the SDAFS website with links to both the TCAFS and OKCAFS websites.
- Publication of the Annual Meeting Proceedings will be in Texas Proceedings but open to Oklahoma members. It was not determined whether to publish abstracts only or full manuscripts.
- The poster session will be a joint venture by both the TCAFS and OKCAFS with the Texas Chapter providing the easels for the posters.
- Debbie Wade volunteered to prepare the meeting signage but requested needing at least two weeks to get it completed.
2014 Annual Meeting Judging of Presentations and Posters (general discussion by OKCAFS/TCAFS EXCOM Members):

- There will not be concurrent technical presentation or poster sessions. All presentations and posters (professional and student) will be judged by one set of judges comprised of selected volunteers from both TX and OK chapters.
- Professional and Student Awards will be specific for each chapter.

2014 Annual Operation of Social Events and Exhibits (general discussion by OKCAFS/TCAFS EXCOM Members):

- Chapter awards will be presented at the banquet (for the 2013 Annual meetings for both TX and OK chapters).
- Coordination for soliciting donations, sponsorships, and vendors will be coordinated by each chapter with their representatives. For the TCAFS, Jenny Oakley and Preston Bean will head the effort. Contact lists will be shared between chapters to prevent overlap and multiple requests.
- Collection of items for the auction and raffles will be handled separately by each chapter. During the raffle/auction, items and services to bid upon will be kept separately depending on which chapter obtained the donation. Each chapter will have an auctioneer.
- The individual Chapter Business Meetings will be held concurrently on Saturday. The meeting room can be partitioned into two separate rooms for each chapter to conduct their meeting.
- The Past-President breakfast will be in the Galley Room Saturday morning.

The joint chapter meeting adjourned and TCAFS and OKAFS EXCOM members were given a tour of the Tanglewood Resort (conference facilities and hotel rooms).

For some things, small works fine!

Smartphones and tablets demonstrate that you can harness capable computing power in a small package. For the adventurous there is now a small computer that can fit in the palm of your hand; the Raspberry Pi. This project started at the University of Cambridge Computer Laboratory in 2008 and the vision was to create a tiny, cheap computer to encourage kids to learn computer programming. These devices, now in their second revision, have been embraced by computer hobbyists to power all kinds of interesting projects.

The board is 3.4 x 0.8 x 2.2 inches and weighs 1.6 oz and it costs about $40. It is powered by a 700 MHz ARM processor, contains 512 MB RAM, and has onboard connectors for 10/100 Base T Ethernet, HDMI, 2 x USB 2.0 ports, an SD card socket, RCA video and a 3.5 mm audio out jack. The system runs on versions of Linux that are copied onto an SD card (I suggest at least 16 GB). Additional resources you’ll need to get started; USB mouse, USB keyboard, a micro USB power cord, Ethernet connection to the Internet, HDBI capable digital TV or monitor or conventional monitor with converter cable. The easiest way to get started is to download New Out of Box Software (NOOBS) from [http://www.raspberrypi.org/downloads](http://www.raspberrypi.org/downloads), copy it to a formatted SD card and then power up the system. You can choose from a number of Linux distributions; the default is Raspbian. You can add a USB hub to increase the number of USB ports then add an external hard drive for storage. With a little work you can configure the system to share its storage in a network to provide a homemade NAS device. There is a very active and creative community supporting this device. Don’t get crazy! [http://www.raspberrypi.org/](http://www.raspberrypi.org/)
Asian carp confirmed in the Lake Erie Basin

The Sandusky River is a 133-mile long tributary that flows into Lake Erie in north-central Ohio. The river has an unusually high strontium to calcium ratio and fish living in the area have elevated levels of strontium in their bones including their otoliths. This was one of the characteristics used to enable scientists from the U.S. Geological Survey (USGS) to document the first evidence of natural reproduction of grass carp (*Ctenopharyngodon idella*) in the river.

Grass carp have been caught intermittently in the Great Lakes for a long time, but they were always assumed to be sterile. Grass carp are termed Asian carp along with silver carp and bighead carp to denote their invasive status. Researchers used ageing techniques, ploidy analysis, and otoliths microchemistry to assess whether four grass carp caught in the Sandusky River were the result of natural reproduction within the Lake Erie Basin. All of the fish were age 1+ and two fish were diploids which cannot legally be released in the Great Lakes Basin. All of the fish had elevated strontium to calcium ratios indicating they had lived in a high strontium environment for their entire lives. Further, the 2011 growth increment (a high water year) was lower than the increment in 2012 (a low water year) reflecting the inverse relationship between discharge and strontium concentration in these rivers.

This new evidence is of concern since it confirms Asian carp can survive in small tributaries like the Sandusky River. Since Asian carp share similar habitat requirements it indicates bighead and silver carp could also reproduce in this area. These latter species have threatened the Great Lakes for years because they will out-compete native fish for food and they are very hard to catch.

Unpredicted migratory responses to global warming

Conventional wisdom suggests that the response of marine organisms to warming ocean waters as a result of climate change should to move towards higher latitudes away from warmer waters found near the equator. For the past 40 years, marine species found around North America’s coasts have moved towards cooler water but the direction is often not poleward. Off the coast of California some species have been observed moving south towards the equator and a similar trend was seen in the Gulf of Mexico.

In a recent study in Science (Vol. 341, No. 6151, pp 1239-1242, 2013), Malin Pinsky, a marine ecologist from Rutgers University and his co-authors compiled a database of North American coastal surveys from 1968 to 2011 which included 128 million individuals from 360 marine taxa. The data were taken from over 60,000 trawler hauls from coastal regions covering more than 1.27 million square kilometers, an area almost twice the size of Alaska. The researchers used water temperature data to calculate the direction and speed in which areas of constant temperature were moving. They discovered that “climate velocity”, the rate and direction that climate shifts across the landscape, explained the latitudinal and depth shifts observed in more than 70% of species.

Along the coast of California, the “climate velocity” pointed south so marine organisms had to move in that direction to stay ahead of warming waters. In the Gulf of Mexico species moved southward to deeper and therefore cooler water. This new insight will assist marine scientists in anticipating future movements of marine species to help people better manage fisheries or select better sites for marine sanctuaries.
**World’s fastest-maturing vertebrate**

Dr. Martin Reichard and colleagues from the Institute of Vertebrate Biology, Academy of Sciences of the Czech Republic studied the aging of two species of wild-caught killifish in southern Mozambique under laboratory conditions. In their native environment, these fish live in temporary pools that only occur when depressions in the savannah fill with rainwater. Extremophiles like these fish which inhabit temporary and unpredictable habitats have characteristically explosive growth rates, early sexual maturation, and high reproductive investment.

*Nothobranchius kadleci* started to reproduce in 17 days and a day later *N. furzeri* followed suit. Some eggs hatched in 15 days, also the shortest generation time of any vertebrate. It is essential for these fish to have accelerated development since these habitats may dry out in three to four weeks. During the dry season, dormant eggs and embryos remain in the soil waiting until the next rain event which may be more than a year away. When the rains do eventually come, eggs and/or embryos hatch and the cycle is repeated.

**I’ve been slimed**

Scientists have been looking for natural alternatives to synthetic petroleum-based fibers like nylon, lycra, and spandex. Researchers at Guelph University in Canada have focused on a rather unusual candidate; the hagfish (*Myxinidae*). Rather it’s the slime of the hagfish that has attracted their attention. Hagfish are a family of jawless marine pre-vertebrates that are abundant in the deep ocean. They are known to be effective scavengers but there is also evidence that they are also active predators. When threatened by predators, the hagfish’s defense is to produce copious quantities of thick slime which clogs the mouth and gills of would-be attackers. This material is excreted from a large battery of slime glands and 90 to 200 associated slime pores running laterally along the full length of each side of the body. The slime contains mucins bonded together with protein threads which expand in contact with seawater to create huge amounts of clear slime composed of very thin, super-strong, and stretchy fibers. Scientists believe hagfish slime or similar proteins could be turned into tights or breathable athletic wear or even bullet-proof vests.

Since it is not feasible to culture these deep sea fish to ramp up production of slime, scientists will likely work on creating similar artificial proteins in the lab. There are even considering attempting to make the protein threads using genetically engineered bacteria. If hagfish slime protein threads ever become commercially viable, hopefully there won’t give their garments a fishy smell!
Fisheries-related apps from the Texas AgriLife Extension Service now available for download in the iTunes store

AmmonicCalc – Instantly calculate un-ionized ammonia concentration by inputing simple, easily measured water chemistry measurements such as pH and temperature. Cost $1.99

AquaCide – A guide for recreational pond managers and aquaculture professionals on herbicide selection, effectiveness, and restriction. Cost $2.99.

AquaPlant – This is a companion to the Service’s popular website (http://aquaplant.tamu.edu/) on identification and management of aquatic vegetation. Cost $5.99.

AquaRef – Inclusive set of tables and conversion factors for aquaculture professionals. Much of the information was taken from the Aquaculture Producer’s Quick Reference Handbook developed by Larry Dorman, Extension Fisheries Specialist, Cooperative Extension Program, University of Arkansas at Pine Bluff. Cost $0.99.

PondCalc – A comprehensive tool to enable easy calculation of surface area and volume of any shaped pond without having to do any math. Cost $1.99

Seafloor crop circles?
About 20 years ago divers first noticed unusual 6.5 feet wide circular structures near Japan’s Amami-Oshima Island. Recently scientists solved the mystery. These circles are actually nests created by male pufferfish to court females. The males which measure less than 5 inches in length, spend about 7-9 days carefully constructing and decorating these structures. He even decorates the outer portion with shell and coral fragments just like a marine version of a bowerbird! When a female fish is successfully attracted, she lays her eggs in the center of his handiwork and then leaves the male to guard the nest until the eggs hatch, six days later.
http://www.nature.com/srep/2013/130701/srep02106/full/srep02106.html
Open source alternative to Lightroom
If you need to make some adjustments to your photographs to make them more presentable, and you don’t want to use a web-based application, you might consider the open source photo management program LightZone. In order to access the software, you’ll need to register at http://www.lightzoneproject.org and then you’ll receive an e-mail with a link to the download. From there you’ll have to install the program on your hard drive. This used to be a commercial product but the developer recently made the program open source. So if you need ot make some adjustments and you don’t relish going into debt to purchase an industry-leader such as Adobe Photoshop or Adobe Lightroom try this free alternative. LightZone is available for Windows, Mac and Linux.

Stitch all of your cloud content together
We have increasingly become reliant on storing our data on Internet-connected servers. Many of these “cloud-based” services are appealing and most people nowadays have accounts with more than one provider. Keeping track of all of this data can be a challenge. Jolidrive (http://www.jolicloud.com) offers a way to bring many of these services together under one interface. You can access storage services such as Dropbox, SkyDrive, Box and Google Drive, view photos on Picasa, watch videos on Vimeo and YouTube, listen to music on SoundCloud, and access content on Tumblr, Instagram, Facebook and Google+. Jolidrive works with all modern browsers like Chrome, Firefox, Safari and Internet Explorer. There is also an iOS app available on Apple’s App Store.

Secure file sync outside the cloud
Cloud storage services such as DropBox and SkyDrive make is easy to have data available on multiple computers but they won’t let you specify folders outside of their file hierarchy. BitTorrent Sync (http://www.bittorrent.com/sync) offers unlimited free syncing of any folders you specify. Data is synced between computers and/or mobile devices via the Internet instead of being stored on servers. You have to install an application on your computer and select a folder you want to sync. The program generates a “secret”, a random and unique sequence of characters that functions like a key that connects multiple devices into one sync network. On the second computer you install the application and during setup you are prompted for the same “secret”, and you decide on a folder where you want the data synced. Once you complete this process syncing begins and it may take several days to complete depending on the size of the folder. If you wish to sync data to a mobile device, you right-click on the folder path and select ‘Connect Mobile’ and a QR-code will be generated which will be scanned into your mobile device as the “secret”. There are desktop applications for Windows and Mac, mobile apps for iOS and Android along with other platforms such as FreeBSD, Linux, and PowerPC.
2014 Joint Chapter Meeting  
Texas and Oklahoma Chapters of the American Fisheries Society  
Tanglewood Resort (Lake Texoma, Texas)  
February 13-15, 2014

Registration includes access to all technical sessions, the continuing education workshop, Student/Professional Friday Lunch, and Friday night banquet. The deadline for early registration is **January 24, 2014**. Please print legibly, especially e-mail addresses.

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**MEETING REGISTRATION:**

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<td>OKAFS Chapter Dues – (payment for OKAFS dues will be handed separately at Chapter Meeting)</td>
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<td>TOTAL REGISTRATION COST (make checks payable to TCAFS; no cash!!)</td>
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**ADDITIONAL MEETING SIGN-UP INFO:** **Free for all registrants** - please indicate if you plan to participate.

- **Willingness to serve as a presentation judge at meeting (OKAFS and TCAFS Professional Members only, students are not eligible):** Yes □ No □

- **Thursday Continuing Education Workshop:**
  Description: Presentation on TPWD Inland Fisheries use of Hazard Analysis and Critical Control Point (HACCP) Planning for Dealing with Nuisance Aquatic Species.
  Yes □ No □

- **Friday Student/Mentor Lunch:**
  Pair up with someone with interest in or experience with governmental agency, academia, private consulting, etc. (select your role or leave blank if not interested)
  Student □ Mentor □

- **Saturday TCAFS and OKAFS Business Meetings:**
  TCAFS and OKAFS will have separate, concurrent business meetings following the technical sessions Saturday morning. Please attend for more information on committees to serve on, chapter business and any potential voting that may be conducted.

**SEND COMPLETED REGISTRATION FORM TO GREG SOUTHARD:**

- One (1) form per person.
- Please make checks payable to TCAFS, please do not send cash!!
- To pay by Credit Card (PayPal), check here and send completed registration form to Greg Southard. (A PayPal invoice will be sent to email address provided above with instructions on how to pay using your credit card).

Greg Southard  
TX Chapter AF3 Treasurer  
507 Staples Road  
San Marcos, TX 78666  
Phone: 512-353-7332  
FAX: 512-353-0026  
Greg.Southard@tpwd.texas.gov
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, www.sdafs.org/tcafs/index.htm 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.

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PAST-PRESIDENT ................. George Guillen
SECRETARY-TREASURER ....... Greg Southard

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HISTORY .......................... Michele Nations
INTERNET .......................... Danny Lewis / John Taylor
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          (includes Stocks-at-Risk & Exotic Species Sub-committees)
MEMBERSHIP .................... Deborah Wade
NOMINATING ....................... John Clayton
POND MANAGEMENT ............ John Tibbs
PUBLICITY / EXHIBITS ........... Preston Bean / Jenny Oakley
SCHOLARSHIP .................... Mike Morgan
STUDENT OUTREACH ............... Michael Homer

NEWSLETTER EDITOR
Kevin Storey
2122 Old Henderson Highway
Tyler, Texas 75702
903-593-5077  FAX 903-531-0109
E-mail: kevin.storey@tpwd.state.tx.us