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A Texas Aquatic Plant Management Society Publication



#### **Texas Aquatic Plant Management Society Newsletter**

# On the Water



# President's Update

TAPMS members, I am honored to serve as the President of TAPMS for 2021. Coming off of a year many would like to forget, one bright moment is that our virtual conference in 2020 was a success. We appreciate all of the speakers as well as all of those in attendance. We look forward to this fall when we will get back together in person for our annual conference. This will be held again at the Stella Hotel in Bryan, TX on November 15<sup>th</sup>-17<sup>th</sup>. Please consider if you would like to serve on the board of directors for 2022 or if you would like to nominate any other individuals please send names to <u>jchapman@lochowranch.com</u>. Don't forget to follow TAPMS on Facebook for up to date information on our conference, as well as information from our aquatic vegetation management community.

Jason Chapman



#### **2021 Texas Aquatic Plant Management Society Meeting**

TAPMS is hosting the annual meeting on **November 15 - 17, 2021** at **Stella Hotel** in Bryan Texas.



Registration and abstract submission are open, so check the TAPMS website <a href="https://www.tapms.org/2021-annual-meeting/">https://www.tapms.org/2021-annual-meeting/</a> for more information.

Who should attend: All TAPMS members and anyone interested in aquatic plant management, biology or ecology, or who are involved in the protection, management and restoration of water and wetland resources, are invited to attend. Whether you work in the public or private sector, as an aquatic weed management professional, water resource manager, researcher, or regulatory official, the TAPMS annual conference delivers up to date information.

**Topics covered**: Aquatic plant management tools and techniques, recent technological advances, new research relevant to your work, environmental laws and regulations, public outreach initiatives, business development, and TAPMS business. All TDA certified aquatic pesticide applicators can receive up to five CEU credits.



### **Conference Registration**

Registration is now open for our 2021 Annual Meeting! Individual 2021 TAPMS memberships will be FREE with paid conference registration.

#### Register NOW!

TAPMS has reserved guest room at a discounted group block rate of \$109.00 for the dates of the conference.



#### The Stella Hotel

4100 Lake Atlas Drive Bryan, Texas 77807 (979) 421-4000

Guest Room Booking link for the attendees to make their reservations:

**TAPMS 2021 Conference** 

Attendees can also call the hotel directly at 979-421-4000 and ask to book a room in the "TAPMS 2021 November Conference" block or they can go to www.thestellahotel.com and use the Group Code: TAPS1114.

**Sponsor and Exhibitors** 

Corporate memberships are a way to represent your business at TAPMS and be recognized as a conference sponsor. Corporate membership dues are used to support non-event-specific conference services that are vital to the success of the event such as facility deposits, programs, placards, advertisement, sound system rentals, plaques, office supplies, and all the little things that make the conference happen. Sponsorships are available at levels from Bronze to Diamond, for conference events, and for student support. Sponsors will be recognized at the conference and in the program.

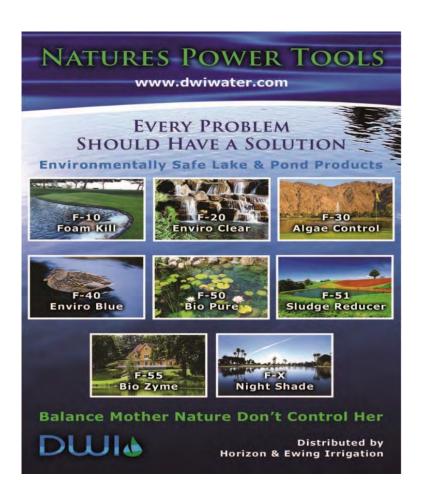
#### **Exhibitor Booth**

High visibility booth location

Approximately 3' x 15" table and up to two chairs

Electric power available upon request

Exhibitors must provide their own self-supporting or table-mounted display boards



#### Sponsorship Levels and Benefits

Sponsor Levels and Benefits	Diamond	Platinum	Gold	Silver	Bronze	Conference Special	Silent Auction Contributor
Available Number of Sponsor Support/ Year	1	1	2	2	4	Unlimited	Unlimited
Contribution	\$2,800	\$1,950	\$1,700	\$1,400	\$1,100	\$560	
Exhibitor Booth (\$380)	2	1	1	1	1	1	
Conference Registration with Membership (\$190/each)	4	3	2	1	1	1	
Acknowledgement on TAPMS Website with Direct Link	X	X	X	Х	X	X	X
Acknowledgement on TAPMS Meeting Sponsors Program Page	X	Х	X	X	Х	X	
One Rotating Banner Ad	X	X	X	X	X	X	
Advertisement in Newsletter	Full Page	Half- Page	Third Page	Quarter Page	Business Card		
Acknowledgement on Sponsor Sign for Break	X	X	X	Х			
Acknowledgement on Sponsor Sign for Lunch	X	X	X				
Present Current Data on R&D Related to Plant Management	10 Min	5 Min					
Acknowledgement on Sponsor Sign for President Reception	X	X					
Acknowledgement on Sponsor Sign for Dinner Banquet	X						

#### Student Scholarship Award Criteria

TAPMS is seeking deserving college students currently enrolled in relevant academic programs and who are interested in applying for a \$1,500 scholarship. The 2021 scholarship will be awarded during the TAPMS banquet on November 16, 2021. Applicants are strongly encouraged to attend the banquet. Scholarships will be awarded based on academic excellence, professional and extracurricular activities, career goals, and contributions to aquatic plant science and management or contributions relevant to the TAPMS focus in the fields of biology and ecology. Applicants must be registered for the 2021 conference to apply for a scholarship; a presentation is preferred but not required.

For student attendees: Aquatic Ecosystem Restoration Foundation will be covering airfare, if applicable, and lodging and meals that are not covered by the conference and for the dates of the conference only; receipts are required to be submitted and meals are limited to GSA rates.

Scholarship applications must be received by October 20, 2021, and should be submitted via email to Monica McGarrity at <a href="monica.mcgarrity@tpwd.texas.gov">monica.mcgarrity@tpwd.texas.gov</a>. Please prepare your application as a PDF or Microsoft Word document in the following format (incomplete applications will not be considered):

Provide applicant information:

- o Contact information: include name, institution, department, mailing address, phone number, and email.
- o Student classification (i.e., Undergraduate, Master's program, Ph.D. program), expected graduation date, and current GPA.
- o If you will be a student presenter, please attach a copy of your presentation abstract.
- o List honors, fellowships, and scholarships you have received, publications, and professional society membership, as applicable.
- o Describe relevant professional or extracurricular activities.
- O Describe your work experience since beginning college-level studies; please include all experience, even if not directly related to this field.
- o Provide at least one academic or professional reference: include name, institution, department, phone number, email, and their role (e.g., major professor, internship/job supervisor).
- o Provide a statement of your future career goals and motivations for pursuing a career in this field (e.g., aquatic plant science/management, aquatic ecology, or other biology/ecology relevant to TAPMS focus).



#### Student Abstract Submittal Information

Texas Aquatic Plant Management Society 2021 Conference Call for Student Papers Students are invited to submit an abstract for the 2021 TAPMS Annual Conference!

Submit an Abstract: **Abstract submission deadline is October 15, 2021**, but early submissions are preferred. For more information and to submit an abstract, visit: <a href="https://www.tapms.org/abstract-submission">https://www.tapms.org/abstract-submission</a>

Presentation Types & Topics: Oral student presentations for original research on all aspects of aquatic resource management are welcomed, including: • Biology of aquatic plants • Ecology of aquatic habitats • Effects of aquatic habitats and aquatic plant management on fish and wildlife • Biological and chemical control of aquatic plants • Management and restoration of aquatic, wetland, and riparian ecosystems

#### Benefits:

- **✓** Presentation experience
- ✓ Free TAPMS student membership
- ✓ Complimentary conference registration (includes most meals)
- **✓** Networking among professionals
- ✓ Full student travel reimbursal (i.e., mileage or flights, hotel, any meals not included with registration), courtesy of the Aquatic Ecosystem Research Foundation (<a href="www.aquatics.org">www.aquatics.org</a>)

Student presenters at the 2021 TAPMS Annual Conference have the opportunity to share their research with a broad audience of professionals. Best student presenter will receive an award and prize. The TAPMS also offers the **David Allen Bass Scholarship** (\$1,500) to a deserving college student who attends the 2021 conference and submits an application. A presentation is not required but recommended. Registration for student presenters is free and student attendees will receive free TAPMS student membership. The Aquatic Ecosystem Restoration Foundation will provide full reimbursal (no advance payments) of 2021 travel costs for the first ten student applicants; partial reimbursal may be available for later applicants. For more information on student scholarships, presentation awards and judging criteria, and travel reimbursal see below:

2021 David Allen Bass Scholarship Information & Application

Student Oral & Poster Presentation Awards – Information & Criteria

Student Presenter Travel Reimbursal Information & Request Form









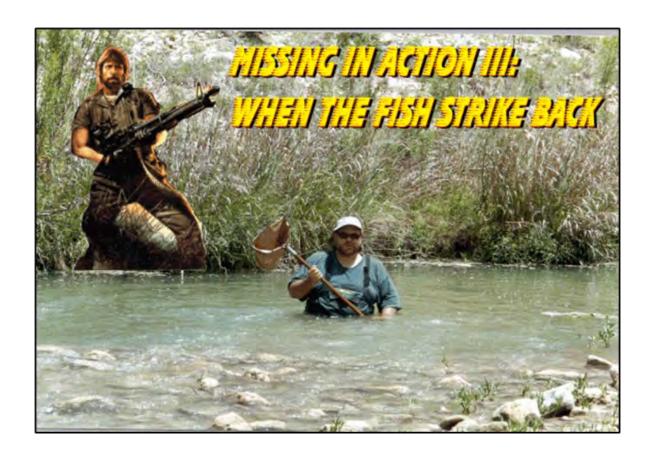
In Memoriam

It is with great sadness that we remember our friend and colleague, David Allen Bass. Born in New Orleans, Louisiana, on the 29th of May 1968 to Mary Ellen and Donald Douglas Bass, David was one of four children. David attended Louisiana Tech then after graduation, he came to Texas and built ropes courses for experiential education across the nation. He went on to complete his master's degree in biology from Southwest Texas State University in San Marcos, Texas. Following graduation, David moved to Kyle, Texas and secured a career with the Lower Colorado River Authority in Austin where he served as an Aquatic Scientist protecting the Colorado River, its reservoirs, and tributaries for over 20 years. He was a well-respected expert in the field of water quality data collection and analysis, and aquatic systems management. He worked closely with other scientists and agencies to develop aquatic assessment tools for statewide evaluations. Professional affiliations included the Texas Aquatic Plant Management Society, where he held multiple offices and participated in state and local conferences and training events; and he was a mentor to many students at Texas State University.

David was a naturalist and loved hunting and being outside. He had a penchant for British humor and television shows. He was known for his annual crawfish boils and "Gumbo Days" at the office. His gumbo was so well enjoyed that he would take special orders and even make home deliveries to his friends and coworkers. He was a loyal friend and would help anyone, anytime - personally or professionally.

David leaves behind a legacy of hard work, dear friends and family. He is survived by his father Donald Douglas Bass, his sisters Laurie Elizabeth Bass, and Kathleen Melise Blankenship and her wife Samantha. He will also be missed by his niece Brook Evans and nephew Jacob Evans, and his beloved cats, Sybil and Basil.

Please keep David's family and friends in your prayers as they heal from their sudden loss. Please visit <a href="https://www.harrellfuneralhomes.com/obituary/594074/david-allen-bass/">https://www.harrellfuneralhomes.com/obituary/594074/david-allen-bass/</a> to share a fond memory, photograph, or condolence with David's family on his on-line memorial.



#### **REGULATORY & RESEARCH NEWS**

#### **Grass Carp Rules Public Comment Opportunity**

Texas Parks and Wildlife Department (TPWD) is proposing changes to regulations pertaining to triploid Grass Carp in the Harmful or Potentially Harmful Fish, Shellfish, and Aquatic Plants rules. Interested persons can provide public comment to Monica McGarrity, Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas 78744; (512) 552-3465; email: monica.mcgarrity@tpwd.texas.gov or via the department website at <a href="https://tpwd.texas.gov/business/feedback/public\_comment/">https://tpwd.texas.gov/business/feedback/public\_comment/</a>. More details regarding timeline for comments will be on the TAPMS website.

#### **Triploid Grass Carp Stocking Permits Period of Validity**

Currently, triploid Grass Carp stocking permits do not expire until all fish authorized by the permit have been purchased. However, due to recent rule changes eliminating the requirement for sellers to provide copies of transport invoices, TPWD does not have the ability to verify when all fish have been purchased and permits have expired and so must archive these permits indefinitely. To address this administrative issue, TPWD is proposing an 18-month period of validity for triploid Grass Carp stocking permits, during which all fish must be stocked. This time period was selected to allow for adaptive pond management so that permit holders may stock only a portion of the authorized fish during the first year if desired and stock the remaining fish the following year.

#### Transfer of Triploid Grass Carp with Property Sale/Transfer

Under current regulation, triploid Grass Carp may not be transferred live to another person. However, these fish typically live for approximately 5-10 years and so it may be necessary to transfer the fish stocked in a pond/tank to a new property owner when a property is sold or transferred to a new owner. The proposed rules would allow such transfers, provided the new owner is provided a copy of the exotic species transport invoice and triploid certification required to be kept by the person in possession of these fish.

#### **Other Minor Changes**

The proposed rules would also clarify the intent of the rules that triploid Grass Carp permits are specific to the pond for which they are issued.

The proposed rules would also clarify the procedure TPWD applies to harvest of triploid Grass Carp stocked in public waters by listing water bodies from which they may not be taken, versus water bodies from which they can be harvested. This clarification better describes how these <u>waterbodies</u> are listed on the TPWD website.

#### House Bills 2225 & 2716

**HB 2225** is a bill that directs **Texas Parks and Wildlife Department** (TPWD) to take an active role in expanding the use of the existing Texas Water Trust to preserve instream flows in the state's rivers and freshwater inflows to our productive coastal bays and estuaries. These "environmental flows" are critical to maintaining healthy populations of fish and wildlife dependent upon that water. Such flows also enhance water quality and provide recreational opportunities enjoyed by millions of Texans and visitors to our state.

HB 2225, sponsored by State Rep. Tracy King and others, passed the House in April on a vote of 138 to 10. The bill is now in the Senate, where the legislation is being carried by State Senator Judith Zaffirini. HB 2225 has been referred to the Senate Committee on Water, Agriculture & Rural Affairs and is expected to be heard in that Committee.

<u>HB 2716</u>, also sponsored by Rep. King, is an even more critical bill. It would restore to TPWD the authority of the agency to contest water rights permits and pollution discharge permits issued by the Texas Commission on Environmental Quality (TCEQ) if such permits might adversely affect state parks and wildlife management areas or the fish and wildlife managed by the agency. TPWD had that authority until 2011 when a single sentence buried in an amendment to a bill on TCEQ gutted that authority. Most legislators did not know what happened until after the bill had passed and become law.

As a result of the law change TPWD was unable to fight a proposed wastewater discharge that would have flowed into spring-fed Honey Creek and the <u>Honey Creek State Natural Area</u> (next to Guadalupe River State Park). Fortunately, in that case, sufficient public pressure was brought to bear on the developer seeking the discharge to resolve the issue. Next time, the outcome might be different unless (TPWD) is once again given the authority to protect the public's properties and the public's fish and wildlife.

HB 2716 was favorably reported from the House Natural Resources Committee on Earth Day (April 22). As of this writing, the bill is in the House Calendars Committee, awaiting a decision as to if and when it will be set for consideration on the House floor.

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#### **EPA Announces Plan to Revise WOTUS Definition**

On June 17, 2021, the EPA and the Army Corps of Engineers announced plans to revise the definition of "waters of the U.S." or WOTUS to determine which waterways and wetlands federal agencies can regulate under the Clean Water Act. The agencies also intend to initiate a new rulemaking process to restore the pre-2015 definition of what constitutes WOTUS and have requested a federal judge to remand the Trump Administration's 2020 Navigable Waters Protection Rule. The 2020 rule, which replaced the Obama Administration's 2015 Clean Water Rule, moved WOTUS back towards Congress's original intent of "navigable waters" and removed ephemeral streams that flow only after heavy rainfall or snowmelt as well as wetlands without surface water connections to intermittent or perennial streams from the agencies definition of WOTUS. Many agricultural and homeowner groups are opposed to changing the current Navigable Waters Protection Rule because they feel it provided longoverdue certainty and clarity for landowners affected by the scope of WOTUS' jurisdiction. There is concern about government overreach and regulatory confusion in how federal agencies decide which waters of the United States they can regulate. The Biden Administration eventually plans to draft its own definition of which waterways, wetlands and groundwater they can regulate by "drawing from the lessons learned from the current and previous regulations, as well as input from a wide array of stakeholders, so we can better protect our nation's waters, foster economic growth, and support thriving communities." More information about the new rulemaking is forthcoming.

#### Eagle Killing Neurotoxin Linked to Hydrilla Identified

Bald eagles, as well as other wildlife, have been succumbing to vacuolar myelinopathy (VM) in the southern U.S. since the 1990s. In a March 2021 issue of Science, researchers finally identified the neurotoxin, aetokthonotoxin (AETX), which is produced by the cyanobacterium Aetokthonos hydrillicola that is the cause of VM deaths. The cyanobacterium, A. hydrillicola, grows very well on hydrilla covering 20-90% of its leaf surfaces. A. hydrillicola has also colonized hydrilla in more than half the watersheds in the southeastern US. Reference: "Hunting the eagle killer: A cyanobacterial neurotoxin causes vacuolar myelinopathy" by Breinlinger et al., 26 March 2021, Science 371. There was some controversy created by inaccurate media reports that linked the herbicide diquat dibromide as a possible cause. AETX biosynthesis relies on the availability of bromide. The authors recognize that a number of conditions may increase or even decrease bromide availability such as environmental conditions (e.g., lake turnover, agitation), natural sources (e.g., geologic), as well as anthropogenic sources (e.g., power plants, water treatment plants, gasoline additives, chemicals, plant management). Breinlinger et al. (2021) state that "the consequences of elevated bromide from geologic and anthropogenic sources (e.g., water treatment and power plants) on VM should be further investigated". It should be noted that there are VM-positive water bodies with AETX where diquat has never been used. Likewise, diquat controlling hydrilla is desired because hydrilla is the source of the problem. Furthermore, the water concentration of bromide after a diquat application is 25 to 125 times below the optimum water concentration of bromide required for AETX production. The bigger travesty in all of this is that hydrilla is a federally listed noxious weed, and without question, the most widespread aquatic noxious weed on the federal list. APHIS Plant Protection and Quarantine (PPQ) has limited funding for managing and preventing the interstate spread of federal noxious weeds under the Plant Protection Act. While APHIS has active permits for two hydrilla biocontrol agents, Hydrellia balciunasi and Hydrellia pakistanae, unfortunately, APHIS confirmed that they do not have a current program for the control and management of hydrilla.

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#### **LIKE TAPMS on Facebook!**

#### Below are some interesting posts from Aquatics FB pages

To the untrained eye, baby's tears is often confused with Hydrilla. To learn more, visit <u>University</u> of Florida's Center for Aquatic and Invasive Plants Directory.





We've seen some interesting critters in lakes across the upper Midwest, but this drone fly larva (*Eristalis* sp.) is definitely one of the strangest.



Many thousands of pounds of aquatic invasive plants have met their end after APM diver sends them on a short ride up the Milfoil Express





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#### A NEW INVASIVE SPECIES??

The Meadows Center for Water and the Environment has a team of expert invasive aquatic plant removers that have discovered a new species with seemingly no end. This species (named *Titleist pro*) buries itself deep into the substrate and exhibits different colors but is predominately white. The amount removed thus far stands at 25,000 and counting.



•
Aquaplant- A Diagnostics Tool for Pond Plants and Algae
Center for Aquatic and Invasive Plants
Aquatic Plant Management:
TPWD's Aquatic Vegetation Management Guidance
Why Aquatic Herbicides Affect Aquatic Plants and Not You!
Aquatic Plant Related Societies, Foundations and A
Aquatic Plant Management Society
Aquatic Ecosystem Restoration Foundation
Botanical Society of America
Florida Aquatic Plant Management Society
Guadalupe-Blanco River Authority
Lavaca-Navidad River Authority
Lower Colorado River Authority

Agencies:

Aquatic Plant Identification:

North American Lake Management Society

Northeast Aquatic Plant Management Society

Midsouth Aquatic Plant Management Society

Midwest Aquatic Plant Management Society

Sabine River Authority of Texas

San Jacinto River Authority

Society of Wetland Scientists

South Carolina Aquatic Plant Management Society

Texas Commission on Environmental Quality

Texas Invasives

Texas Society for Ecological Restoration

Texas State Soil & Water Conservation

**Texas Water Development Board** 

**Trinity River Authority** 

**US Army Corps of Engineers** 

US EPA Region 6

**USGS** Texas

Western Aquatic Plant Management Society







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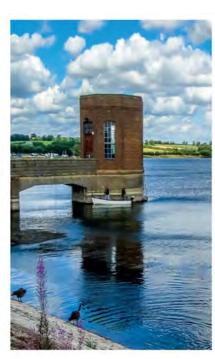
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#### SERVICE PROVIDERS LIST

Texas Aquatic Plant Management Society members are a diverse group that includes professionals who are experts in the management of aquatic plants to promote business, recreation and other aquatic uses and most importantly to preserve the natural aquatic environments. The TAPMS website is now featuring a list of companies owned/managed by our members that provide aquatic plant management services--similar to the 'TAA Availability List' on the Texas Aquaculture Association website.

Aquatic Features, Inc Scott Smith scott@aquaticfeaturesinc.com

AquaMaste Fountains
Rudi Huber
<a href="mailto:rhuber@aquamasterfountains.com">rhuber@aquamasterfountains.com</a>

Helena Agri-Enterprises Kelly Duffie duffiek@helenaagri.com

Kasco Marine, Inc Paul Amos paul@kascomarine.com

Keycolour Rick Purcell rpurcell@keycolour.net

Lochow Ranch Pond and Lake Management Jason Chapman jchapman@lochowranch.com

Solitude Lake Management Cole Kabella <u>ckabella@solitudelake.com</u>

Vollmar Pond and Lake Management, LLC Brad Vollmar brad@texaspondmanagement.com

To be listed as a service provider, please provide your information online at <a href="http://bit.ly/TAPMS-ServiceProviders">http://bit.ly/TAPMS-ServiceProviders</a>. The person completing the form must be a current TAPMS member. Please coordinate on a single company response to ensure that the appropriate contact person is listed and help to prevent duplicate entries that might delay publication of the list on the website.



#### **Contribute to 2022 TAPMS Newsletters**

Participation in TAPMS shouldn't end after the conference and this newsletter is a great way to share information. Our editor needs your help to keep the newsletter interesting, timely, and relevant.

Want to share information about an event of interest to the society? Have an interim update on new research or new product testing results? Willing to share a "day in the life of" story for students as a professional in our field or want to write a member highlight about a TAPMS colleague? Have a funny story from field work?

Don't keep it to yourself—email the editor!

The newsletter is what you make it...