



E-SLATE

American Academy of Underwater Sciences (AAUS)

EDITORIAL NOTE –June 2018

Welcome to the June E-Slate. In this edition, we continue 2018 AAUS BOD elections, announce the 2018 Conrad Limbaugh award and continue Scholarship applications. There is also an opportunity for you to win a free symposium pass! Check out the Spotlight feature for details. We welcome news, announcements, job postings, and images of underwater work at aaus@disl.org. Current and past issues of the E-Slate are available at www.aaus.org.

President's Message

The quarterly BOD meeting was held via conference call on May 2nd. Below is a summary of the major points addressed:

1) The BOD voted on a contract for the new website! Heather Albright and Mike Anghera researched options over the past year. Since then Heather has had discussions with at least 5 firms, and one has met all our requirements (including design experience, site functionality, support, and price). Some of the attractive benefits for membership include community spaces for the individual OMs, DSOs, and AAUS BOD members, as well as enhanced financial capabilities for collections of dues, donations, etc. Heather and Mike will continue working with this group over the summer to get the new site designed; if you have photos or video to donate to the cause please forward to aaus@disl.org. Please note at some point the member login function on the current site will be disabled. However, the public site, statistics submission, and the Annual Symposium registration sites will not be affected so there should be no problem registering for this exciting meeting in Lake Tahoe CA (09-13 October).

2) The Joint Agency Workshop to address issues relative to scientific diving and: 1) the OSHA exemption, and 2) inter-agency reciprocity, has been scheduled for 25-26 June in Denver. The attendees include DSOs and/or BOD members from: AAUS, Association of Dive Program Administrators, Bureau of Ocean Energy Management, National Oceanic & Atmospheric Association, National Science Foundation- US Antarctic Program, Smithsonian Institution, US Environmental Protection Agency, US Fish & Wildlife Service, US Forest Service, US Geological Survey, and US National Park Service. In general, the first day will focus on OSHA Exemption issues, and the second day will include discussions of reciprocity, medical standards, statistics/database coordination, training, and international collaborations. I know many of you would like to attend this workshop, but space constraints make that impossible. As you can tell, this is going to be a packed agenda (and we expect that subsequent *ad hoc* committees will be formed to

address the issues in depth). I'll report on this meeting, and opportunities going forward, in the next E-Slate.

3) As of May 2nd, 105 OMs submitted statistics, 4 OMs reached out and are in the process of completing their submission, and 38 OMs have not reported statistics for 2017. Six diving incidents were reported in 2017; none were DCI and no other information is available at this time.

4) The review period for the new Standards Manual is over. Currently the ad hoc committee is incorporating suggestions from the membership, and the BOD will likely vote on this final draft by the end of the summer.

As always, we welcome your feedback and/or questions on these and any other pressing issues!

Marc Slattery
University of Mississippi

NEWS/ANNOUNCEMENTS

AAUS 2018 Election

The 2018 AAUS election opens May 01 and closes June 30. This year the academy will elect a Director-at-Large whose terms will start on January 01, 2019. The election is open to Full Voting Members (individual and OM Reps) in good standing. Ballots are accessed via the AAUS website, www.aaus.org, by logging into your **individual account** and selecting 'Voting and Polling.' To write in a candidate, email name of the write-in candidate to two of the election committee members:

Rick Riera-Gomez (rgomez@rsmas.miami.edu)

George Peterson (gpeterson@mbayaq.org)

Rob Robbins (Rob.Robbins.Contract@usap.gov)

Lora Pride (Lora.Pride@ch2m.com)

Steven Sellers (steven_sellers@nps.gov)

2018 AAUS Director at Large Slate of Candidates

Candidates' biographical sketches and answers to election questions are attached to this email and available at

https://secure.aaus.org/2018_aaus_bod_election

Jonathan Langham, Georgia Aquarium

Will Love, University of Washington

Ross Whippo*, University of Oregon

*Current BOD member serving as an appointed DAL

2018 Conrad Limbaugh Memorial Award for Scientific Diving Leadership

We are proud to announce that the winner of the 2018 Conrad Limbaugh Memorial Award for Scientific Diving Leadership is Michael Dardeau. Mike recently retired from Dauphin Island Sea Lab where he was supervisor of technical support and vessel operations as well as DSO for most of his 33 year tenure. Mike also served on the AAUS Board of Directors from 2004-2015, serving under 6 presidents, as Statistics chair and then Treasurer. He was also the driving force behind the creation of the AAUS Foundation and has served on its Board of Directors since its inception.



During his career as a marine scientist, he contributed to over 40 publications including a taxonomic monograph on coral reef shrimp, characterizations of hard bottom communities in the Gulf of Mexico, natural history studies of temperate gorgonians and analyses of AAUS annual statistics. He also chaired Technical Advisory Committees for the local National Estuarine Research Reserve and National Estuary Program and received over \$1 million in extramural funding to construct and support coastal observing systems in Alabama. See more about Mike at aaus.org/2018_cl_award.

2018 AAUS/OWUSS Internships

Shane Farrell, Lawrence University, has been awarded the 2018 Lee H. Somers Scientific diving internship. Bigelow Laboratory for Ocean Studies will host this year's intern. Shane will be working with benthic ecologist Doug Rasher and will receive his AAUS certification from the University of Maine.



Lena Block, University of Hawaii, has been awarded the 2018 Mitchell Scientific Diving Research internship. University of Alaska Fairbanks will host this year's intern. Lena will be working with Ginny Eckert and Jared Weems on Pribilof Island blue king crab (*Paralithodes platypus*) recruitment limitation as a potential bottleneck to rebuilding from overfished status out of remote St. Paul, Alaska (Pribilof Islands, Bering Sea).

Find out more about these interns and keep up with their summer adventures at https://aaus.org/2018_aaus_owuss_interns

Our World Underwater Scholarship Society held their 44th annual awards program in New York City April 20-21, 2018. Representing AAUS from left to right: Christopher Rigaud (2014, 2015, 2018 AAUS Intern host), Heather Albright (AAUS), Erica Sawicki (2017 Intern), Mykle Hoban (2010 Intern) Jenna Walker (OWUSS Internship Coordinator, 2011 Intern), Lena Block (2018 Intern) and Shane Farrell (2018 Intern).



2018 AAUS Diving for Science Symposium

The 2018 AAUS Diving for Science Symposium will be hosted by the University of California Berkeley and the University of California Davis in Tahoe City, CA from October 09-13, 2018. We welcome diving scientists, students, diving safety officers and anyone with an interest in diving science to participate in this event. www.aaus.org/annual_symposium.

Our venue for this year handles groups a little differently than in past years and we want you to be informed before you register and book lodging. **All participants need to review the information on the website thoroughly and contact the AAUS office with any questions.** A full schedule and a link to lodging reservations are available at www.aaus.org/annual_symposium

Tuesday, October 9

- Maritime Heritage Archaeology (Diving Workshop)
- Altitude Diving (Diving Workshop)
- DAN Pro IQC (2 day workshop)
- PSI Visual Cylinder Inspection Workshop
- New Boating Safety Officer Orientation (Hosted by SBSA)
- Shore Diving - Tuesday

Wednesday, October 10

- Maritime Heritage Archaeology (Diving Workshop)
- Altitude Diving (Diving Workshop)
- Tethered SCUBA for Science (Diving Workshop)
- AAUS DSO Orientation
- AUP Equipment Repair
- Oxygen Cylinder Cleaning Technician Workshop
- Lake Tahoe Topside Science
- Valve Repair Technician

Vendor In-Water Demo
VCI Update (PSI - evening workshop)

Thursday, October 11

AAUS Business Meeting and National Diving Safety
Officers Meeting
Lake Tahoe Topside Science

Friday, October 12

Science Symposium (All day)
2018 Bubblebreaker (evening)

Saturday, October 13

Science Symposium (All day)
2018 AAUS Annual Awards Banquet (evening)



Call for Abstracts

The AAUS is now accepting abstract submissions for the 2018 AAUS Diving for Science Symposium. **This year, ALL who intend to submit an abstract or full manuscript should complete the intention form by June 15th.** AAUS will accept short abstracts (maximum of 300 words), extended abstracts (800-1200 words) or full manuscripts. The deadline for ALL submissions (abstracts and full papers) to be submitted electronically to aaus@disl.org is **July 15, 2018**. Please put "2018 AAUS symposium" followed by the format (abstract/extended abstract/full paper) and your name in the message line to facilitate tracking. Notification on the disposition of submitted abstracts will be returned to the first author electronically by **August 08th**, with any suggested revisions due by **September 01st**. No presentation will be allowed unless the final abstract or manuscript has been cleared for publication in the Proceedings, and abstracts/manuscripts will only be published if the presentation will be given. **All submissions MUST use the templates**, which include detailed formatting instructions. Templates can be found at www.aaus.org/annual_symposium

Nautilus Live-Aboard Special AAUS Offer

Due to a large group cancellation, Nautilus has a full boat opening on the August 17th-22nd 2018 trip and we are excited to offer the trip at half-price to any AAUS member plus one guest. This trip will be led by Mike Anghera onboard our flagship, the custom-built dive liveaboard, the *Nautilus*

Explorer. Nautilus leads the way in liveaboard diving as well as ongoing support for marine science and conservation, and we are very excited to welcome you aboard! Experience Great White shark diving at Guadalupe Island. Over 241 Great Whites (and counting) have been identified at Guadalupe as part of the Marine CSI project, and the visibility is usually between 100-125ft. We generally see Great Whites on three out of four dives, and we have seen as many as 12 Great Whites around the boat on just one dive! Contact info@nautilusliveboards.com or call +1-604-241-1918 to book your spot. Informational flyer is attached.



STUDENT OPPORTUNITIES

AAUS Student Scholarships 2018

The AAUS Foundation awards scholarships to graduate students engaged in, or planning to begin, research projects in which diving is used as an important research tool or studying diving science. The Foundation awards \$3000 to each winning proposal from the Masters and Doctoral level submissions. Additionally, the AAUS may award \$1500 scholarships to the second ranked proposals in each category. The Foundation also grants the Kevin Flanagan Travel Award providing up to \$800 for undergraduate/graduate students to attend an AAUS scientific meeting. Please note that for 2018 there is not a gear award. Applications are submitted electronically and **all proposals are due June 30**. For more information and application instructions, visit www.aausfoundation.org, or send questions to the Scholarship Committee Chair at aaus@disl.org

UPCOMING EVENTS

Heritage Awareness Diving Seminars (HADS)

Two HADS workshops are planned for June 2018. The first will be in Key West in partnership with the Key West Art and Historical Society on June 14-16, and the second will be in Islamorada in partnership with the History of Diving Museum on June 18-20. HADS is intended to explain the advantages of conserving shipwrecks and other submerged cultural resources, not only to preserve information about the past, but also to preserve the vibrant ecosystems that grow around historic shipwrecks. HADS focuses on providing SCUBA dive leaders with a greater knowledge of how to proactively protect shipwrecks, artificial reefs, and other underwater cultural sites as part of the marine environment.



Each HADS consists of two evenings of classroom instruction and one day of open water diving on two historic shipwrecks. Participants will receive the HADS workbook and a USB with all PowerPoint presentations to use in their own classes. Upon completion of HADS, participants can also submit paperwork to teach the Heritage Awareness Diving Specialty Course through SDI, PADI, or NAUI. HADS is taught by the Florida Public Archaeology Network (a program of the University of West Florida) in coordination with the Florida Bureau of Archaeological Research and the Florida Keys National Marine Sanctuary. For more information, those interested can contact Nicole Grinnan at ngrinnan@uwf.edu or visit FPAN.us/HADS.

JOB ANNOUNCEMENTS

Full information and application instructions for the following jobs can be found at www.aaus.org/job_board

Louisiana Universities Marine Consortium
Diving Safety Officer

Maritime Aquarium at Norwalk
Diving Safety Officer

SPOTLIGHT

Do you want to win a free symposium pass for Tahoe? For every article submitted from your OM to our new Spotlight feature between May 15 and July 30, OMs will earn an entry into a drawing for a free symposium pass (valued at \$295). Articles (3-8 paragraphs) must contain information about current research or training involving science diving, photos (1-5) and an OM logo (short video welcome as well). Articles can be submitted by any AAUS diver in your program (students, faculty, staff) or your PR/Outreach department. Submission can be made via email or through the online submission form (<https://secure.aaus.org/spotlight>). Drawing will be held August 1st with the symposium pass being awarded to the OM to distribute as it chooses.

Help AAUS spotlight all the great research happening by our members and win your symposium pass for Tahoe!

Scientific Diving Class Opens Doors for Rutgers Undergraduates

By Ken Branson and Cameron Bowman
April 5, 2018

Breathing through their scuba gear, Ailey Sheehan and her classmates dropped a new and improved lionfish trap – a hinged net that will help scientists study that invasive fish in the Caribbean – into the dive pool at Rutgers.

Sheehan, a junior marine science major, discovered the opportunity to help design, build and conduct underwater testing of the fish-snaring device through Rutgers-New Brunswick's scientific diving class, created through collaboration between the Department of Marine and Coastal Sciences and Rutgers Recreation.

Led by Rutgers Recreation's scuba coordinator Debbie Miller, a veteran diver, scientific diving is one of the few such classes open to undergraduates in the United States. The class leads to certification as a recreational diver, a rescue diver and – by the American Academy of Underwater Sciences – a scientific diver.

“Scientific diving is essential to oceanographic research, an area in which Rutgers is a worldwide leader,” Miller said. The students in her class learn advanced open water and rescue diver skills, as well as the use of scientific methods underwater. That they can acquire these skills and attain this certification while still undergraduates opens more doors, and opens them sooner, than would be the case if they had to wait until they entered graduate school as in other institutions.

“You can apply for graduate programs. You can apply to do research. You can be a citizen scientist. The course sets all the groundwork, so if you want to go into professional diving or be a dive master, you can do that as well,” Miller said.



Photo: Cameron Bowman

Rutgers sends its faculty and student scientific divers around the world.

For example, they help deploy, recover and repair the submersible robot gliders whose use the university has pioneered as ocean-observing instruments. Right now in the Philippines, a team led by environmental sciences professor Malin Pinsky is using scientific diving to research how anemone fish – better known as clownfish – disperse their larvae in coral reefs.

For Julian Maheu, a junior marine science major, the scientific diving class also teaches confidence. “In high school, my grades were very good, but in college I was losing confidence. Having scuba diving and being very good at it and improving with my peers, has taught me that school is not just about the grade you get on your exam but about the experience you build.”

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RECENT PUBLICATIONS

- Brebeck, A.K., Deussen, A., Range, U., Balestra, C., Cleveland, S., Schipke, J.D. (2018). Beneficial effect of enriched air nitrox on bubble formation during scuba diving. An open-water study. *Journal of Sports Sciences*, 36(6): 605-612.
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- Buzzacott, P., Mease, A. (2018). Pediatric and adolescent injury in aquatic adventure sports. *Research in Sports Medicine*, 26: 20-37.
- Kumar, J.S.Y., Geetha, S., Raghunathan, C., Sornaraj, R. (2018). A note on shallow water Octocorallia from Nicobar Islands, India. *Indian Journal of Geo-Marine Sciences*, 47(1): 60-66.
- Kurz, M. (2018). Diving Medicine - work where others go on Holiday? *Deutsche Medizinische Wochenschrift*, 143(5): 363-364.
- Miller, R.J., Lafferty, K.D., Lamy, T., Kui, L., Rassweiler, A., Reed, D.C. (2018). Giant kelp, *Macrocystis pyrifera*, increases faunal diversity through physical engineering. *Proceedings of the Royal Society B-Biological Sciences*, 285 (1874).
- Ranapurwala, S.I., Kucera, K.L., Denoble, P.J. (2018). The healthy diver: A cross-sectional survey to evaluate the health status of recreational scuba diver members of Divers Alert Network (DAN). *PLOS ONE*, 13(3).
- Riera, R., Monterroso, O., Nunez, J., Martinez, A. (2018). Distribution of meiofaunal abundances in a marine cave complex with secondary openings and freshwater filtrations. *Marine Biodiversity*, 48(1): 203-215.
- Vassallo, P., Bianchi, C.N., Paoli, C., Holon, F., Navone, A., Bavestrello, G., Vietti, R.C., Morri, C. (2018). A predictive approach to benthic marine habitat mapping: Efficacy and management implications. *Marine Pollution Bulletin*, 131(2018), 218-232.
- Zrane, A., Abedelmalek, S., Tabka, Z. (2018). Effect of 16 weeks diving practice at two different times of day on the pulmonary function, spirometry measurements and 6-minute walk test data of healthy professional

Tunisian scuba divers. *Biological Rhythm Research*, 49(4): 581-596

The mission of the American Academy of Underwater Sciences is to facilitate the development of safe and productive scientific divers through education, research, advocacy, and the advancement of standards for scientific diving practices, certifications, & operations.

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