

### President's Message



Hello AIFRB Members!

I'm excited to introduce myself as your new AIFRB President, and more excited to get to know all of you! I want to start by asking how you're doing — how is your "new normal" day-to-day experience? Are you dealing with pressures of working and schooling at home, figuring out if you can meet all of your financial requirements, feeling overwhelmed or depressed with current events, or just trying to make something different out of the food in your freezer? It's been a long time since we've had a "normal" day, whether personal or professional, and the current outlook is that it may still be a long time coming. Let's find ways to get through this together — small things matter and our AIFRB community is strong.

I served as the Treasurer of AIFRB for the last five years, which gave me the opportunity to become familiar with our membership. My excitement to be your President is based on the amazing research, scientific input, and leadership in the field of fisheries that I have seen from AIFRB members. You, as members, drive the direction of this Institute, and your contributions to our collective field continue to reinforce our mission. I'm humbled and incredibly grateful to have the opportunity to bring AIFRB member contributions to the forefront. We have many accomplishments and tons of potential; we are also living in a very challenging time. I look forward to engaging with all of you and fostering open discussion about ways we can address the current challenges of increasing diversity in our field, responding to a changing climate, and communicating scientific information in a manner that is well-understood by the public.

I want to recognize and sincerely thank our Board members and previous President, Kim Anthony, for the leadership, innovative ideas, and continued positive attitudes and contributions towards AIFRB and fisheries science. I also want to thank our Emeritus members for their donations and advice to the younger generations, as well as all of our dedicated Fellows, Members, Professional Associates, and Students for the continued interest and engagement towards our mission and goals. Please let me know what's going on in your life and work, what's on your mind, and how we can progress together!

Stay safe and well!

Cate O'Keefe

cokeefe@umassd.edu

### **President's Announcements**

Check out AIFRB's website relaunch for information about Awards, Districts and Announcements! <a href="https://www.aifrb.org">www.aifrb.org</a>

Help spread the word about the World Climate Change Statement that includes AIFRB support! https://climate.fisheries.org/world-climate-statement/



### If you haven't already done so...

### Renew Your Membership!

\$25 - Student Associates\$45 - Professional Associates, Members, and Fellows\$600 - Lifetime Member

#### Become a Member!

\$35 - Student Associates \$55 - Professional Associates, Members, and Fellows \$600 - Lifetime Member

Online payments available at www.aifrb.org

Checks payable to "AIFRB" can be sent to:

AIFRB c/o Cate O'Keefe P.O. Box 251 Fairhaven, MA 02719

### **Table of Contents**

| President's Message  |  | Cate O'Keefe1-2  |
|--|--|--|
| Young Professionals Spotlights   |  | Darien Satterfield3-4<br>Ryan Logan5-6   |
| AIFRB Position Opening   |  | District Directors7  |
| Follow the AIFRB Members   |  | Social Media7  |
| Membership Update  |  | Todd Chapman8  |
| Past Events AFS Virtual Meeting8 AIFRB Sponsored Symposium   |  |  |
| Student Sponsorships   |  | Lars J Hammer10 Tyler Robinson11   |
| Upcoming Events  Stock SMART  OneNOAA Seminar  Tuna Conference  Frontiers Pub Submission  Flatfish Symposium  UW Inclusive Practices  Dolphinfish Research Program  12  13  14  15  16  17  17  17  18  19  19  10  10  10  10  10  10  10  10 |  |  |
| Award Recipi   | ent  | Doug Zemeckis21  |
| Job Postings   | ICES Journal Wageningen Universität ECS Environmenta | national University21 al Internship22-23 ersity and Research24 al Solutions25-26 al Solutions27-28 |
| Contact Infor  |  | Officers   |

#### Darien Satterfield - Northern California District



What is your current position, with what company/organization, and what is the focus of your research/work?

I am a first year PhD student at the University of California, Davis in the Population Biology graduate group. My research focus is on how swimming behaviors and morphology varies among species which are commonly caught for the aquarium trade versus those caught for sale in markets, and non-target species.

Where did you receive your education, and what helped pave your way to your current position?

I recently completed my MS from California State University, Long Beach, studying behavioral adaptive responses to spearfishing pressure in California kelp forest species. Before that I received my BS at California State University, Northridge in 2015, where I studied assortative mating in Black Surfperch. Hands on experience with research along the way has guided my interests and goals. I also have much thanks to give to the incredible advisors and mentors who helped with my projects.

How does your work apply to, or influence, fishery management (e.g., stock assessments,

sportfishing, commercial regulations, habitat protection, etc.)?

Aguarium fisheries remove charismatic coral reef species in large numbers. Methods used to remove these fish are typically non-lethal but are unique compared to methods used for market fish. My research aims are to assess how variable fishing methods selectively remove individuals with particular combinations of morphological and behavioral traits. This will be informative in comparing the degree to which different fishing techniques influence diversity on coral reefs.



What is your professional outlook for fisheries management? In other words, what will the future of fisheries management look like 10-20 years from now. What are we doing correctly, what needs to be improved (e.g., in research, policy, education)?

Currently, the inclusion of behavioral responses in fish to fishing pressures or regulation is minimal in fishing management plans. It has become clear through recent studies that behavior can vary widely over space and time and is largely important in mediating mortality. I hope that in the coming years in reviewing management progress analyzing behavior becomes as common as measuring abundance and diversity of fish.

# What is the importance of young fishery professionals today and for the future of fishery management?

Fisheries management is an evolving field. As data continues to be collected on the efficacy of management practices, young professionals can offer recent education and experience with modern

data analysis tools. It is important for young professionals to receive training in fisheries management so that we can use and advance the techniques which have been in practice for generations before.

What drew you to AIFRB, and what does AIFRB do for you and what can it do for other young professionals in this field?



I learned of AIFRB through my eligibility for a student research presentation award for a conference I was presenting at. I think the support AIFRB supplies to students allows young professionals to develop their research projects. I also appreciate the availability of workshops to build my experience with practical skills in fisheries science.

Please contact Darien (drsatterfield@ucdavis.edu) to continue the conversation!

# Ryan Logan - Florida District



What is your current position, with what company/organization, and what is the focus of your research/work?

I am currently a PhD student in the Halmos College of Natural Sciences and Oceanography, and a Research Associate with the Guy Harvey Research Institute, both at Nova Southeastern University in Fort Lauderdale, Florida. My dissertation investigates the long-term movements, fine-scale behavior and trophic ecology of the blue marlin, black marlin and sailfish in the eastern tropical Pacific, based out of Panama.

Where did you receive your education, and what helped pave your way to your current position?

I graduated from the University of Hawaii in 2013 with a B.S. in Marine Biology, and completed a research based internship at Mote Marine Laboratory and Aquarium in Sarasota, FL shortly thereafter. From there, I obtained my M.S. in Biology from California State University Long Beach where I tracked three species of important recreational gamefish on an artificial reef. Being from Colorado originally with no scientists in my family, I never saw myself becoming a doctor of marine biology. But it was the support of my family, in addition to all of the PhD students I assisted in Hawaii, my internship supervisor in FL and my graduate advisor in CA who all pushed me to become a better scientist, are without a doubt the reason I am currently pursuing my own PhD.

# How does your work apply to, or influence, fishery management (e.g., stock assessments, sportfishing, commercial regulations, habitat protection, etc.)?

The Eastern Tropical Pacific is widely considered to be one of the world's best sportfishing locations for my study species. As such, substantial recreational fishing effort has developed in the region, contributing significantly to local economies which have a vested interest in conserving the fishery. In addition, these are all highly migratory species which are likely interacting with commercial fishing gear regularly, and being caught as bycatch. The findings from my research will go directly toward improving knowledge of the species



in the region, and how to best guide management and conservation strategies for these billfish and their ecosystem.



What is your professional outlook for fisheries management? In other words, what will the future of fisheries management look like 10-20 years from now. What are we doing correctly, what needs to be improved (e.g., in research, policy, education)?

While working in the education department at the Waikiki Aquarium in Hawaii, I was always astounded at how little people knew about the ocean and the life in it, let alone something as complex as fisheries management, so easy-to-understand education is paramount. In general, fisheries management and enforcement in the United States should largely be viewed as exemplary for other countries looking to improve their fisheries, but I think we could be doing better at educating people from a young age the importance of the ocean and the resources gained from it. I believe organizations focused on fishing transparency (e.g. Global Fishing Watch) will become fundamental to fisheries management as we try to tackle overfishing on a global scale and improve the way fishing is viewed and managed.

# What is the importance of young fishery professionals today and for the future of fishery management?

Young fishery professionals today have access to resources unfathomable only a generation ago, making them uniquely capable of learning how the system operates and ways of reducing error and estimations. Fisheries management will never be a perfect endeavor, but the young fisheries professionals of today, I believe, have the best chance and know-how to improve fishery population estimation and management.

# What drew you to AIFRB, and what does AIFRB do for you and what can it do for other young professionals in this field?

I went to one AIFRB district meeting to see what the organization was about and if I would be interested in joining as a young graduate student. Everyone at the meeting was very welcoming and it seemed like a great opportunity to expand my network and get to know some of the fishery biologists in my area. AIFRB is a great resource for me as I move forward in my graduate career with travel funding availability for conferences, and support and advice from superiors in my field, which should also appeal to any other young fishery professionals trying to make a career in this field.

Please contact Ryan (<u>rlogan@nova.edu</u>) to continue the conversation!

#### **District Director Vacancies – Now Seeking Nominations!**



The Institute has vacancies for District Directors in the following Districts: Northern Alaska, Southeast Alaska, Pacific Northwest Super District

(Washington, NW Oregon – SW Washington), Oregon, the Carolinas, Arizona/New Mexico, the Gulf of Mexico, Texas, and Florida. These present excellent opportunities for members to get more involved with the Institute in a leadership role in order to help advance our mission, including the professional

development of members and the advancement of the field of fisheries science. District Directors are elected by the membership of each District to serve two-year terms and they are responsible for

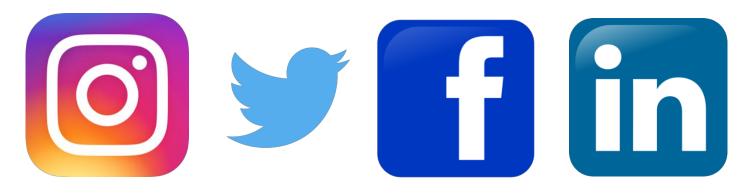
promoting the Institute activities at the regional level, including the recruitment and advancement of members, as well as organization of regional meetings and activities. District Directors also serve on the AIFRB Board of Control to be involved with leadership of the Institute on a national level. Therefore, serving as a District Director presents individuals with many opportunities for professional and personal development while serving in these rewarding roles and making meaningful contributions to our field.



If you are interested in nominating someone (including self-nominations) for one of these vacancies, then please contact <u>Cate O'Keefe</u> by March 1<sup>st</sup>, 2020.

# Follow the AIFRB Members

AIFRB is back on social media! Follow us on Facebook, Instagram, Twitter, and LinkedIn for updates on events, news, member highlights, and more. If you have content from past or advertisements for upcoming AIFRB events, research highlights (e.g. recently published paper, invited talk, presentation at a conference), or other exciting fisheries news, we would like to share it on our social media platforms to spread the word. Please contact our Social Media Director, <a href="Emily Slesinger">Emily Slesinger</a>, with a photo, description, and the names of the AIFRB local district and/or AIFRB members present.



# Membership Update

AIFRB has continued to conduct business during the trying times of 2020. With the annual AFS meeting in Columbus, Ohio being forced into the virtual world, the annual AIFRB trade show booth and the associated new member traffic was not realized. Despite this curveball, our membership has still continued to grow since the 2019 Reno AFS/TWS Conference. We have added a total of 15 new members to AIFRB at the student associate.



professional associate, member and fellow levels. In addition to new memberships, a total of 6 existing members were able seek promotion within the organization. Congratulations to Kristy Forsgren on her promotion to Fellow, as well as Calvin Blood, Raymond Morgan III, Paul Kubicek, Kenneth Beal, and Stephen Brown for their promotion to our Emeritus ranks. As a reminder, promotion is always available for those retiring, completing their time as a student, or continuing along their life journeys while contributing to the world of fisheries. If you are interested in promotion, please contact your national membership chairperson for information who will gladly assist you with the process. As 2020 draws to a close, your AIFRB board members are planning for a productive 2021. As members of AIFRB, if you know of any fisheries minded individuals who could benefit from the many awards, and the collaborative networking opportunities generated by this institute please steer them towards our website {www.AIFRB.org} so we can get them involved.

# **Past Events**



# VIRTUAL ANNUAL MEETING SEPTEMBER 2020

Learning from the Past, Meeting Challenges of the Present, Advancing to a Sustainable Future The American Fisheries Society hosted its 2020 Annual Meeting virtually, on September 14 - 25, 2020. This meeting celebrated the past, present, and future of fisheries research and management, bringing together a diverse group of academics, researchers, private industry professionals, management agency personnel, and students.

# 2020 Symposium: Marking, Tagging, and Tracking

AIFRB co-organized a symposium for this year's AFS Virtual Meeting, titled "Marking, Tagging, and Tracking." This symposium followed the successful 2019 Reno, NV symposium of the same



title and featured 16 presentations. AIFRB sponsored registration for two student presenters, and AIFBRB-AFS Liaison, Dr. Doug Zemeckis, attended the live chat to virtually represent AIFRB and publicly present the awards to the students. The presentations delivered during this symposium spanned a wide range of species and ecosystems throughout the U.S. and in other countries, including both marine and freshwater ecosystems. The conversation during the live virtual sessions provided a venue for attendees to share ideas and suggestions for improving future tagging studies based on lessons learned from their own experiences.

**Symposium Organizers:** Jeff Heindel (McMillen Jacobs Associates), Michelle L. "Mick" Walsh (Florida Keys Community College), Quinton Phelps (Missouri State University), Kim Anthony (American Institute of Fishery Research Biologists), Paul Venturelli (Ball State University), Richard D. Methot (NOAA Fisheries/Northwest Fisheries Science Center)

#### **Symposium Description:**

Tracking data inform how individual organisms and populations distribute locally, utilize habitat, migrate over larger scales, and evolve over time. Analyzed carefully, these data may indicate changes in climate and land use, biodiversity, invasive species, predict spread of diseases or parasites, and correspond to effectiveness of stocking efforts.

Successful approaches not only involve proper tagging and placement of monitors to detect movements, but also require robust analyses and effective communication of large datasets. This symposium shared technologies, methodologies, findings, analytical approaches, and troubleshooting tips to highlight more recent developments and encourage collaboration. Talks focused on the following topics:

- Description of novel tagging methods or monitoring approaches
- Description of novel combinations of technologies for improved data quality or quantity, including metadata collection
- Connection of tracking data to environmental data, such as climate, habitat, or water quality
- Explanation and demonstration of useful software for tracking data management and analysis
- Explanation and demonstration of robust analytical approaches used with tracking data
- Application of tracking data to inform decision-making processes in fisheries policy

# Lars J. Hammer - University of New Hampshire

Movements and Feeding of Arctic Char Relative to Summer Ice-Off in an Arctic Embayment

#### **Abstract**

Arctic waters are warming and increasing temperatures are expected to continue altering summer ice-off timing. This ice-off provides a productivity bloom that aquatic consumers potentially depend on. Arctic char (*Salvelinus alpinus*) undertake seasonal migrations to marine waters presumably to feed on this seasonal pulse, but specific migratory timing in relation to ice-off is largely unknown. Further, the quantity and quality of food consumed during this period will dictate the value of this event to char fitness.



To investigate the movements and feeding of char, a total of 110 individuals were tagged with acoustic transmitters between 2017 (n=58) and 2018 (n=52) within Tremblay Sound, Nunavut, Canada, and stomach contents were collected from 54 char in 2018 (n=23) and 2019 (n=31). Migration timing of char was linked to ice-off, with individuals arriving prior to ice-off initiation and exiting after a month of complete ice-off. Additionally, char exhibited multiple migratory patterns, which may indicate subpopulations or potential ontogenetic shifts in migration distance. Furthermore, char fed at high rates during the ice-off, with stomach contents representing up to 4.6% of their bodyweight. Thus, the seasonal ice-off appears to affect Arctic char migrations, with potential implications for energy budgets and resilience to climate change.

### **Biography**

Lars is an MS student at the University of New Hampshire in Dr. Nathan Furey's Fish and Movement Ecology Lab. His research focuses on the movement and trophic ecology of Arctic char in relation to a strong seasonal prey pulse associated with summer ice-off in the Canadian Arctic. Lars' work underscores the importance of the brief ice-off season to this species and has potential implications for climate change resilience and resource management in a rapidly changing Arctic.





# Tyler Robinson – Bemidji State University

Diel Vertical Migration of Burbot in a Northern Minnesota Lake

#### **Abstract**

Applications of acoustic telemetry aid in analyzing behavior and migration of fish throughout a system. More specifically, acoustic telemetry helps fisheries biologists understand spawning behaviors, distribution, and habitat preferences of fishes. Diel vertical migration (DVM) of organisms typically is credited to feeding or avoidance from predators. A total of sixty-six Burbot between the lengths of 366-845mm were tagged with VEMCO combination pressure and temperature transmitters during the months of March-May in 2019.

Measures of dissolved oxygen, temperature, light, as well as season and diel period, were used to model the depth selection of Burbot in a closed system in Northern Minnesota. Burbot was found to occupy shallower water at night than during the day. However, this vertical movement was less pronounced during August and September compared to April and May. This lack of activity during those months suggests limitations of Burbot due to insufficient oxygen levels near the bottom in conjunction with high water temperatures near the surface. The DVM of Burbot is advanced, triggered through light, temperature, and dissolved oxygen, and likely focused around feeding opportunities.

### Biography

Tyler is a second-year MS student at Bemidji State University, focusing on understanding movement patterns of Burbot in land-locked lakes. His research includes seasonal changes in diel movement patterns and seasonal variations in home-range size concerning the spawning vulnerability of Burbot. Additionally, he is assessing the oxy-thermal habitat of Burbot in Minnesota. Tyler has worked as a seasonal fisheries technician for the Wisconsin Cooperative Fishery Research Unit, where he contributed to assessing walleye recruitment, evaluating northern pike ages, assessing fish movement in Green Bay, and examining trophic interactions among walleye, yellow perch, and lake whitefish in Green Bay. He also served as a Fish and Wildlife Biologist Intern at Leech Lake Band of Ojibwe Division of Research Management focused on analysis of diet contents of double-crested cormorants. Tyler is a member of the AFS Bemidji State Subunit and is a Senior Committee Member for the Bemidji State Fishing Team. He enjoys spending time at his family's cabin in Central Minnesota where he focuses fishing efforts on large and smallmouth bass with the occasional walleye and muskellunge trips. Tyler archery hunts for white-tailed deer and enjoys road trips to national parks.







#### **National Stock Assessment Science Seminars series**

# Stock SMART: NOAA Fisheries' Stock Status, Management, Assessment, and Resource Trends Web Tool







**Speakers**: Jeffrey Vieser, ECS Federal for NOAA Fisheries, National Stock Assessment Program; Abigail Furnish, NOAA Fisheries; Kristan Blackhart, ECS Federal for NOAA Fisheries

**Abstract**: NOAA Fisheries recently launched Stock SMART, a web tool providing public access to information related to Stock Status, Management, Assessment, and Resources Trends. With Stock SMART, users can access, visualize, compare, and download thousands of stock assessment results for federally managed fish stocks dating back to 2005. Future development will add information on fisheries management and status determinations. Stock SMART increases transparency, understanding, and trust in the fisheries management decision-making process by broadening awareness of the condition of fishery resources and informing discussions about sustainable management.

#### **Key Takeaways:**

- 1. Users can use Stock SMART to search, view, and download the results from thousands of stock assessments.
- 2. Stock SMART provides direct, updating links to the best scientific information available to describe the current condition of all federally managed fish stocks.

**About the Speakers:** Abby, Kristan, and Jeff, are part of the National Stock Assessment Program (NSAP) in the Assessment and Monitoring Division of the NOAA Fisheries Office of Science and Technology. NSAP's mission is to provide national leadership, coordination, and representation to support science-based sustainable fisheries management and advancement of the stock assessment enterprise.

#### Accessibility: \*This presentation will be recorded and available on our **YouTube Channel**.

If you would like to request an ASL interpreter in person or via webcam for an upcoming webinar, please apply through the <u>NOAA Office of Human Capital Services' Sign Language Interpreting Services Program</u>.

Check out our <u>Library Seminars page</u> for upcoming seminars. Email your questions to: <u>library.seminars@noaa.gov</u>

# **Upcoming Events**



The OneNOAA Science Seminar Series is a voluntary effort by NOAA employees, started in 2004 with contributors from Line Offices across NOAA to bring you the most comprehensive summary of NOAA-hosted, publicly accessible, environmental science and climate seminars across the nation. There are over 40 NOAA seminar partners who contribute to this

See <a href="https://www.nodc.noaa.gov/seminars/">https://www.nodc.noaa.gov/seminars/</a> for detailed information. Visit the link below to subscribe to this weekly OneNOAA Science seminars list. Seminars may be updated at any time; please check the OneNOAA Science Seminar website for the latest seminar information. For general questions about the seminars,

contact <u>Tracy.Gill@noaa.gov</u>, <u>Lori.Brown@noaa.gov</u>, or <u>Hernan.Garcia@noaa.gov</u>. For questions specific to a seminar, please contact the point of contact listed in the seminar description for each seminar in the seminar calendar. Everyone is invited to be a speaker in our OneNOAA Science seminar series.

To subscribe to the OneNOAA Science Seminar weekly email: Send an email to OneNOAAscienceseminars-<u>request@list.woc.noaa.gov</u> with the word 'subscribe' in the subject or body.

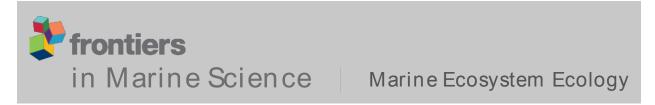
# **Upcoming Events**

#### 71st Tuna Conference

The 71st annual Tuna Conference has been postponed until 2021. The current developments with COVID-19 prompted this difficult decision. The conference committee wants to do their part to help everyone stay safe and healthy during these difficult times. Those who registered this year do not have to take any action. Unless requested otherwise, registration and lodging payments will be forwarded to cover the 2021 conference. If, however, you would like to request reimbursement, please notify Stephanie (Stephanie.Flores@noaa.gov). IATTC's registrations have already approved to go towards next year. Next year's dates are for May 17 - 20, 2021. Owyn and Stephanie will remain the chair and coordinator,



respectively, and the theme will remain the same. Student scholarship winners will also remain the same even if the student graduates in the meantime. The committee thanks you all for your participation and attendance over the years and they look forward to seeing you in 2021!



**Research Topic Title:** Data-limited Research in Stock Assessment to Increase the Understanding of Fisheries Resources and Inform and Improve Management Efforts

**Topic Editor(s):** Giuseppe Scarcella, Simone Libralato, Natalie Anne Dowling, Joanna Mills Flemming, Matthias Wolff

Journal/Specialty: Frontiers in Marine Science - Marine Ecosystem Ecology

Impact Factor: 3.661 | CiteSource: 4.4

Manuscripts can be submitted directly here: <a href="https://www.frontiersin.org/research-topics/12217">https://www.frontiersin.org/research-topics/12217</a>

Here are quick links to:

- Author guidelines: <a href="https://www.frontiersin.org/about/author-guidelines">https://www.frontiersin.org/about/author-guidelines</a>
- List of article types and publishing fees: https://www.frontiersin.org/about/publishing-fees

Please be reminded that the manuscript submission deadline for this article collection is on Feb 2, 2021.

Should you require any assistance or have any questions, do not hesitate to contact the Editorial Office at marinescience@frontiersin.org.

Kind Regards,

Giuseppe Scarcella Topic Editor, Marine Ecosystem Ecology Section, Frontiers in Marine Science

# **Upcoming Events**

Dear Flatfish Colleagues,

After much deliberation, we have decided to postpone the 11<sup>th</sup> International Flatfish Symposium until 2021. We recognize that there is too much uncertainty in how COVID-19 will affect the world in the months to come, and at best, field work and data collection will have been interrupted and travel still may not be possible for many in the fall. We are eager to come together to celebrate all of your research accomplishments, learn from each other, form new collaborations, and enjoy each other's company in person. For all of that to happen, we need to be patient and wait for a safer time to gather. The new dates for IFS 2020 are November 14-19, 2021. All other details, including the location, remain the same. Any further updates will be posted on symposium website.



At this time, we also want to acknowledge the generous support of the following sponsors who are instrumental in making the International Flatfish Symposium possible: Royal Netherlands Institute of Sea Research, American Institute of Fishery Research Biologists, University of New Hampshire College of Life Sciences and Agriculture, New England Fishery Management Council, Northwest Atlantic Fisheries Organization, National Marine Fisheries Service Greater Atlantic Regional Office, New Hampshire Sea Grant, University of Massachusetts Dartmouth School for Marine Science and Technology, Cape Cod Commercial Fishermen's Alliance, New England Aquarium, Star-Oddi, Hallprint, Sonotronics, Innovasea, and Floy Tag.

Please feel free to reach out to us with any questions. We look forward to seeing you all in November 2021.

The local organizing committee, Elizabeth Fairchild
University of New Hampshire
elizabeth.fairchild@unh.edu

Steve Cadrin

UMASS SMAST

scadrin@umassd.edu

Cate O'Keefe

AIFRB

cokeefe@umassd.edu

# **Upcoming Events**



### FISH 513: Cultivating Inclusive Conservation Practices

Join us for weekly discussions illustrating the importance of and barriers to culturally competent conservation. The 30-minute public talks will start at 10 AM on Fridays this fall and will be lived-streamed on the <u>SAFS YouTube channel</u>. Can't watch it in real time? No worries, the videos will remain there to be watched at your convenience. Want to follow along with the readings we are doing in class? They will be posted weekly <u>on the website</u>. Please click on the hyperlinks below when the time comes, visit the SAFS channel and go to the Home page, or find each week's video in the FISH 513 playlist on YouTube.

#### Schedule:

- Oct 9: <u>Antiracism in Conservation</u> David Muñoz, Research and Equity Specialist, Penn State University
- Oct 16: <u>Power, privilege, positionality, and conservation</u> Isabel Carrera Zamanillo, Diversity, Equity, and Inclusion Program Specialist, University of Washington
- Oct 23: Reintroducing Fishers to their historical range in Washington: Culturally competent approaches in conservation biology - Tara Chestnut, Ecologist, National Park Service, Mount Rainier National Park; Nettsie Bullchild and Jeremy Badoldman, Tribal Historic Preservation Office
- Oct 30: <u>The ecological and evolutionary consequences of systemic racism in urban</u> environments Chris Schell, Assistant Professor, University of Washington Tacoma
- Nov 6: <u>Nature So White</u> Khavin Debbs , Educator & Partnership Manager, Tiny Trees Preschool
- Nov 13: <u>Indigenous systems of management for culturally and ecologically resilient Pacific salmon fisheries</u> Will Atlas, Salmon Watershed Scientist, Wild Salmon Center; William Housty, Board Chair, Heiltsuk Integrated Resource Management Department
- Nov 20: <u>Tribal treaty resource collaborative restoration</u>: <u>Partnerships to restore natural processes and resilience</u> Brett Shattuck, Restoration Ecologist, Tulalip Tribes Natural Resources
- Dec 4: <u>Conflict or Collaboration? Factors affecting community relations in stewarding Puget Sound</u> Sara Breslow, Social Science Lead, EarthLab, University of Washington; Maggie Allen, Education & Grants Specialist for NOAA's Office of Education

**About the Organizer:** <u>Dr. Staci Amburgey</u> is a postdoctoral researcher in the Washington Cooperative Fish and Wildlife Research Unit in Dr. Sarah Converse's Quantitative Conservation Lab. She is focused on population modeling and management of wildlife species.

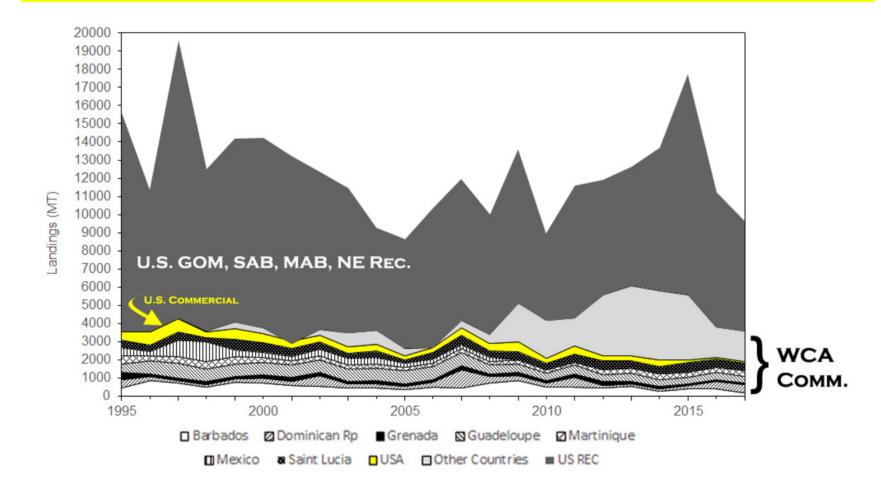


Made Possible by a Grant from the Guy Harvey Ocean Foundation

**Click here** for PDF version or **click here** for webpage story

# **ABOUT US I GET INVOLVED I DONATE**

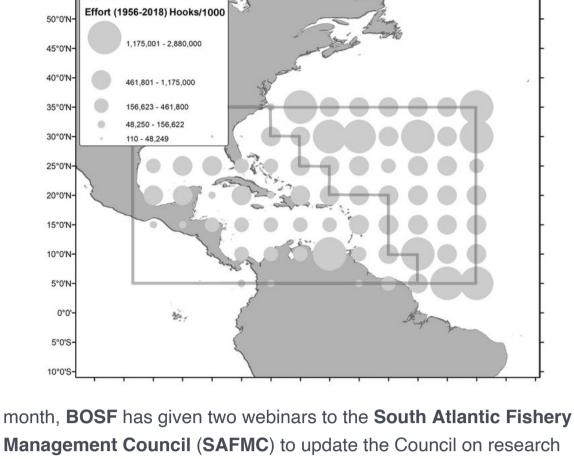
# **Dolphin Landings in the Western Central Atlantic Ocean**



Bight, Mid-Atlantic Bight, and New England constitute the largest component of recorded landings when compared to countries that submit dolphinfish commercial landings to the Food and Agriculture Organization (FAO) for the western central Atlantic (WCA) Ocean. Not included in this graph, however, are 16 nations within the WCA that do not submit dolphinfish commercial landings to the FAO as well as recreational landings for jurisdictions throughout the Caribbean Sea and Tropical Atlantic; this data is needed in order to gather a more complete view of annual landings that can be used to better assess seasonal and interannual population trends. In addition, there are several unknowns related to the level of misreporting for nations that do submit landings data as well as the level of dolphin bycatch among international longline vessels in the WCA (image below). Over the past 90°0'W 80°0'W 70°0'W 50°0'W 40°0'W 30°0'W 60°0'W 55°0'N Legend Effort (1956-2018) Hooks/1000

Ongoing research by the **Beyond Our Shores Foundation** (**BOSF**)

shows U.S. recreational landings from the Gulf of Mexico, South Atlantic



included a detailed look at data collected throughout the tagging program as well as ongoing research in order to better document regional dolphinfish landings and fishing effort. These seminars were conducted upon request from SAFMC as the Council continues to gather information relative to Amendment 10 to the Dolphin Wahoo Fishery Management Plan. Click here to learn more about SAFMC's Amendment 10, click here to submit public comments to the Council, and click the button below to learn about ongoing research to assess anecdotal population trends reported by taggers over the past few years and what this means for the WCA dolphinfish stock. Click here to read more

conducted to date for the **Dolphinfish Research Program (DRP)** which

**New Mid-Atlantic Bight Recapture** 

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**Fishing Team** 

FISHING CLUB Florence, SC



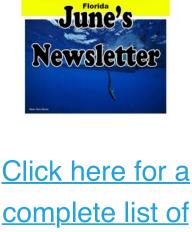
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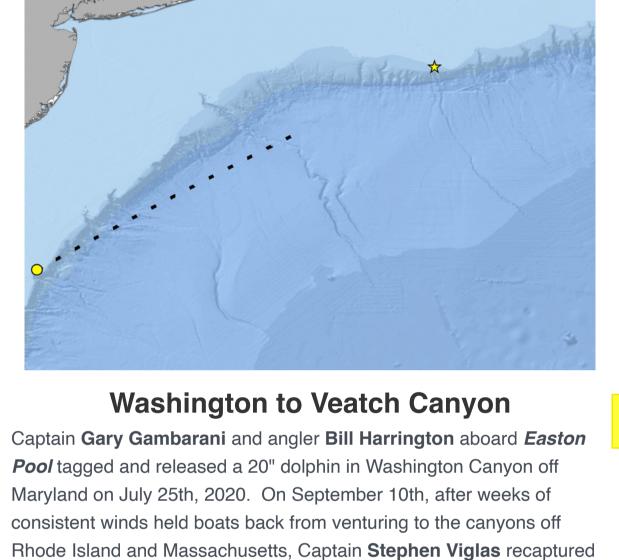
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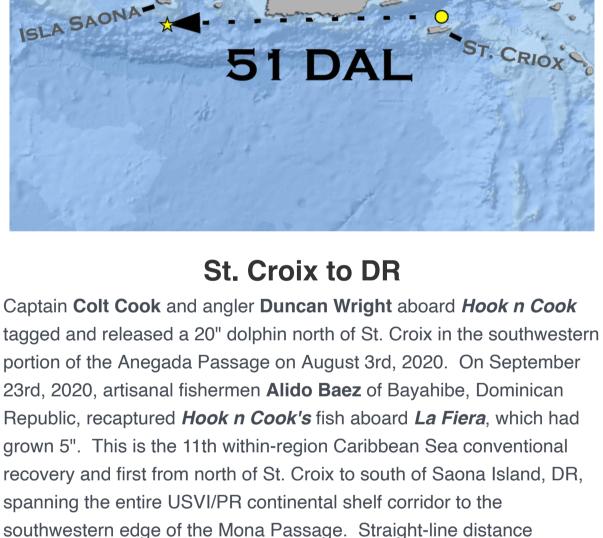
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# Mid-Atlantic Bight recovery for the **Dolphinfish Research Program** (**DRP**) but the first canyon-to-canyon northeasterly movement spanning

Easton Pool's fish in Veatch Canyon. This is the 11th within-region

nearly the entire region. Straight-line distance between tag and recapture sites = 312.59 miles; Straight-line movement rate = 6.65 miles per day; Days at liberty = 47. <u>Click here</u> to learn more. **New Caribbean Sea Recapture** 



# or .68"/week. Click here to learn more. **Support Our Tagging Program**

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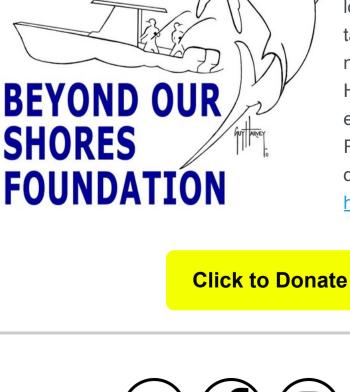
rate = 5.05 miles per day; Days at liberty = 51; Growth rate = .098"/day



Help support the **Dolphinfish Research Program** (DRP) by purchasing a DRP tagging kit, program t-shirt, hat, or AFTCO-DRP performance fishing shirt. Proceeds from your purchase helps fund our tagging program and research of one of the ocean's most iconic offshore fish species. Click here or below to support us. **Click to Here to Shop** 

> Shores Foundation, a 501(c)(3), formed three

Support the DRP in 2020



years ago, we have distributed 13,834 tags around the world and logged over 5,682 new tag deployments and 144 new dolphin movements. Help us continue to expand the Dolphinfish Research Program by donating today. Click here to donate.

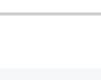
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#### 2019 Distinguished Service Award – Doug Zemeckis

Dr. Douglas Zemeckis (Rutgers University) received the 2019 Distinguished Service Award from AIFRB, which was presented virtually at the 2020 annual Board meeting. Dr. Zemeckis became an AIFRB member in 2013 and was an active Student Associate member in the New England District while working as a graduate student under the supervision of Dr. Steven X. Cadrin at the University of Massachusetts Dartmouth. He then transitioned to Rutgers University and in the Fall of 2017 was promoted to a full Member of the Institute and became the Keystone District Director. Doug led a team involved with the planning of the annual AIFRB social in 2018, which occurred in conjunction with the inaugural Stakeholder Engagement Day at the annual meeting of the American Fisheries Society in Atlantic City, NJ and

brought great attention to the Institute, including the recruitment of new members. Doug continues to serve on AIFRB's Board, as the Keystone District Director, and as the Liaison between AIFRB and the American Fisheries Society in order to continue advancing the Institute and the field of fisheries biology. Dr. Zemeckis currently works as a County Agent III (Assistant Professor) with Rutgers Cooperative Extension in New Jersey.

# **Job Postings**



### Responsibilities

Developing quantitative modeling approaches to assess and predict fisheries population dynamics. Applying statistical methods to fisheries-dependent and -independent data to improve sampling programs. Current funded researches focus on spiny lobster and red snapper, but open to other

marine species. Other duties include administrating database, mentoring undergraduate students, and preparing reports and presentations for scientific meetings.

#### **Qualifications**

M.S. in biology, ecology, oceanography or a related field. Applicants should ideally have strong quantitative background and computer programming skills or demonstrate enthusiasm to immerse themselves in these areas. The deadline for application is Jan 5th, 2021. For other graduate admission requirements of Florida International University, please see: <a href="https://case.fiu.edu/biology/phd-in-biology/admissions/index.html">https://case.fiu.edu/biology/phd-in-biology/admissions/index.html</a>. Applicants should be sure to request a teaching assistantship on the application form.

#### Contact

Dr. Yuying Zhang, <a href="mailto:yzhang13@fiu.edu">yzhang13@fiu.edu</a>



#### Call for applications

#### **ICES Journal of Marine Science**



#### **Editorial Internships for Early-Career Researchers**

The ICES Journal of Marine Science is offering internships to support early-career researchers who are interested in learning more about scientific publishing and journal editing. Internships are for a period of one year. This is an unpaid, part-time (a few hours per month), remote-work educational opportunity.

#### Goals of the Internship

- Provide professional development for early-career researchers in scientific publishing, peer review, the editorial decision-making process, and scientific writing.
- Provide Interns opportunities to explore personal interests in some aspect(s) of science, scientific writing, editing and publishing, and to communicate their experiences to fellow early-career researchers and to others.
- Help diversify the Journal, and our community, by recruiting some Interns from underrepresented groups.

#### **Expectations of Interns**

- Shadow a member of the editorial board (who agrees to mentor them) to learn about the manuscript evaluation and editorial decision-making process.
- Participate in occasional meetings with the Journal's Editor-in-Chief (EiC), their editor-mentor, and other Interns.
- Interact with the EiC and their editor-mentor in order to better understand Journal processes and policies.
- Participate in the annual editorial board meeting.
- Use the Internship to explore topics of special interest to them and to gain knowledge of new topics (e.g. participate in the development and/or editing of a themed article initiative).
- Communicate their experiences via social media posts, blogs, articles in the ICES Newsletter, or virtual events.
- Act as ambassadors for the Journal, particularly to early-career researchers and to those from underrepresented groups.

#### **Eligibility**

- Applicants must have completed a Ph.D. not more than five years prior to applying. Candidates with special circumstances (e.g. parental leave; illness) can request a waiver of this requirement.
- Applicants may be in any professional position related to marine science at the time of application.
- Applicants must have published at least three articles as first author in a peerreviewed scientific journal.
- Applicants must have served as a reviewer for at least two manuscripts submitted to peer-reviewed journals.

# ICES International Council for the Exploration of the Sea

#### Call for applications

#### **ICES Journal of Marine Science**



#### **Editorial Internships for Early-Career Researchers**

#### How to apply

Interested parties should submit the following application material to Howard Browman, Editor-in-Chief, ICES Journal of Marine Science, by email at: howard.browman@hi.no. The deadline for submissions is 7 December 2020.

- A cover letter explaining why you are interested in being an Intern in general, and specifically with ICES Journal of Marine Science, and how the Internship will contribute to your professional development and career goals (1,000 words maximum).
- A CV with a list of your publications and a list of the reviews that you have conducted for peer reviewed journals and funding agencies.
- A description of your areas of expertise, specifically topics that you would be confident in acting as a reviewer for (250 words maximum).
- A statement describing your views about what constitutes a high standard of peer review/editorial process for a manuscript (250 words maximum).
- Your views on the current state of science publishing, for example, the landscape of journals, open access, preprint platforms, peer review (e.g. fully open and transparent vs. completely blinded), etc. (1,000 words maximum).
- The names and contact details of at least two referees who can support your application.

Applications will be reviewed by a selection committee comprised of the EiC and members of the Journal's editorial board. A short-list of potential candidates will be interviewed by videoconference. At least three Interns will be selected early in 2021, with Internships to begin during the first half of 2021.

If you have any questions, or would like additional information before applying, contact Howard Browman by email at: <a href="mailto:howard.browman@hi.no">howard.browman@hi.no</a>.

ICES Journal of Marine Science values diversity. We encourage all qualified candidates to apply for these Internships.

#### Fisheries researcher: 2 vacancies

Wageningen Marine Research is a leading, independent research institute that focuses on strategic and applied marine ecological research. The institute was established in 2006. Products and



services are executed on a project basis (more than 400 research projects) and are diverse in nature: field research, experiments on a realistic scale, exploratory studies on lab scale, data management and modelling. The institute has modern research facilities and is ISO 9001 certified. Wageningen Marine Research is an organisational part of Wageningen University and Research.

The research in our organisation focuses on understanding population dynamics of a variety of species, ranging from benthos to fish, marine mammals, birds, and fishing fleet dynamics. We collect field data and use these to improve mathematical and statistical models to gain better understanding of the marine environment and provide ecosystem based fisheries management advice based on cutting-edge science. We carry out much of our research in close cooperation with the fishing industry, including data collection by fishers. We expect the successful candidates to have a strong marine ecology background, affinity with marine data collection, open to working together with fishers, and keen to develop and analyse model output and perform statistical analyses on large data sets. You will furthermore participate in international working groups and workshops, and will report your findings in reports and presentations to clients and stakeholders and in the peer-reviewed literature.

We seek 2 university educated ecologists with a keen interest in marine biology, fisheries science, and research in support of policy. Affinity with the conceptual / theoretical aspects of ecology (modelling) is expected. Experience with data handling and programming in R is strongly preferred. You should have a firm ecological background and have an interest in conducting applied research, enjoy working as part of a multidisciplinary team, dare to be critical, and be able to work under time pressure. You enjoy working with stakeholders, you are result oriented and show initiative. You are willing to occasionally carry out work at sea. Your level of communication skills in English is C1.

We offer an interesting and challenging job (36 hours per week) with ample space for bringing in your own initiatives. You will be part of a highly motivated group of colleagues who want to work with you on projects to achieve good end results. The function level will be Researcher 4 maximum € 4549,-- per month based on a 36 hour work week. We offer a temporary contract for one year with possible extension. You will be based in our IJmuiden office. You will be appointed at a Payroll company.

For more information on the job description, contact the Niels Hintzen or Nathalie steins, both Research at Wageningen Marine Research, tel. +31 (0) 317-487090, e-mail <a href="mailto:niels.hintzen@wur.nl">niels.hintzen@wur.nl</a>, +31 (0) 317-487092, email <a href="mailto:nathalie.steins@wur.nl">nathalie.steins@wur.nl</a>. The deadline for applications is 30 October 2020. The interviews will be held on 12 November 2020 via an online connection. An assessment can be a part of the selection procedure.



# **Research Associate - Spatial Stock Assessment Tool Development**

Location: Silver Spring, MD

**Job Description**: NOAA Fisheries' is responsible for the conservation and management of our Nations living marine resources and their habitats. By developing high quality science and supporting an ecosystem-based approach to management, NOAA Fisheries provides important services to the Nation, including sustainable fisheries, healthy ecosystems, safe seafood, and protected species recovery.

NOAA Fisheries' fish stock assessments are critical to sustainable fisheries management in the United States by providing the sound science results necessary for the conservation and management of fishery stocks. Using data collected from a variety of sources, a stock assessment uses mathematical models to describe the past history of fishing and the current status of the stock, as well as make predictions about how the fishery will impact stock size in future years.

A small number of generic and widely used stock assessment software tools can now account for spatial structure and connectivity. However, assumptions about spatial dynamics are not uniform and may be a major source of process-driven uncertainty. There is little best-practice guidance available to inform the decision-making process when choices among various spatial assumptions need to be made. In response, a fine-scale data simulator is being developed within an international collaborative project to explore differences and commonalities among spatial stock assessment software tools worldwide. This simulator will be the focus of a 2021 World Fisheries Congress workshop where global stock assessment scientists will gather to report on methods/approaches used to incorporate spatial data into stock assessment and provide guidance on future needs for the next generation of spatial models.

This recruitment is for a quantitative fisheries scientist to support ongoing projects and conduct independent research related to the development of analytical tools for spatial stock assessments and the assimilation of international spatial modeling advancements.

#### Required Skills

- PhD degree in fisheries science, marine ecology, statistics, oceanography, or related field
- Excellent understanding of population dynamics
- Knowledge and/or experience with statistical software, such as R, AD Model Builder, and Template Model Builder
- Experience and understanding of code versioning software, such as Git
- Familiarity and experience with NOAA Fisheries' stock assessment software, particularly Stock Synthesis, including an understanding of analytical techniques, terminology, and the connection between stock assessment and marine resource management
- Strong scientific writing skills as documented through peer-reviewed journal articles
- Demonstrated proficiency for the following skill sets:
- Project management for complex and technical scientific programs
- Coordinating and leading diverse project teams to develop, improve, and achieve program goals
- Communication both verbally and using written materials (including visual presentation) with a variety of audiences including technical, scientific and non-scientific
- Working with diverse groups of individuals under strict timelines to accomplish goals
- Working independently with strong time management skills
- Adaptability to quickly changing priorities
- Attention to detail

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ECS is a leading mid-sized provider of technology services to the United States Federal Government. We are focused on people, values and purpose. Every day, our 3000+ employees focus on providing their technical talent to support the Federal Agencies and Departments of the US Government to serve, protect and defend the American People.

### Find more details and apply here

https://chu.tbe.taleo.net/chu02/ats/careers/v2/viewRequisition?org=ECS\_FEDERAL&cws=44&rid=69\_11\_



#### **Research Associate - Stock Assessment Model Development**

Location: Silver Spring, MD

Job Description: NOAA Fisheries' fish stock assessments are critical to sustainable fisheries management in the United States by providing the sound science results necessary for the conservation and management of fishery stocks. Using data collected from a variety of sources, a stock assessment uses mathematical models to describe how the past history of fishing and the current status of the stock, as well as make predictions about how the fishery will impact the stock size in future years. NOAA Fisheries' National Stock Assessment Program (NSAP) is responsible for coordinating the national stock assessment enterprise, developing national stock assessment science policy and guidance, and implementing national policies and procedures to ensure our science products are high quality and the best available for supporting fisheries management.

A suite of analytical tools is available to assessment analysts to support quantitative analyses conducted during each stage of the stock assessment process. Often created in-house, many analytical tools have varying degrees of generality, accessibility, testing, documentation, and adherence to software development practices. Tools may or may not have an available graphical user interface (GUI) to facilitate standardized assessment practices and ease of use, and algorithms may be coded in various programming languages (C, R, ADMB). NSAP manages the NOAA Fisheries Integrated Toolbox (FIT), which serves as a clearinghouse for tested, documented and broadly applicable stock assessment tools. In addition to a defined process for migrating existing tools into the FIT, NSAP has also developed processes for evaluating and operationalizing the development and testing of new regional tools for inclusion.

NSAP additionally supports development of new tools and software for stock assessment in collaboration with regional stock assessment scientists and the national Assessment Methods Working Group. Development of analytical tools at the national level advances NMFS' stock assessment science, improves standardization, ensures that development is completed to testing and documentation standards, and guarantees availability across regions.

NSAP requires a contractor to support projects related to FIT and development of analytical tools for stock assessment.

#### **Required Skills**

#### Master's or PhD degree

- Excellent programming skills, including experience that may include Visual Basic, C, Fortran, and Java
- Knowledge and/or experience with statistical software, such as R, Splus, SAS, MATLAB, AD Model Builder, and others
- Experience and understanding of code versioning software, such as Git, SVN, mercurial, and others
- Demonstrated experience in the development of graphical user interfaces for scientific purposes with data analysis and familiarity with the design, development, and management of relational databases for scientific information
- Familiarity and experience with NOAA Fisheries' stock assessments, including an understanding
  of analytical techniques, terminology, and the connection between stock assessment and
  marine resource management
- Knowledge of web-based software and website management
- Experience with developing and implementing standards in software and data management and documentation
- Demonstrated proficiency for the following skill sets:
- Project management for complex and technical scientific programs
- Coordinating and leading diverse project teams to develop, improve, and achieve program goals
- Communication both verbally and using written materials (including visual presentation) with a variety of audiences including technical, scientific and non-scientific
- Working with diverse groups of individuals under strict timelines to accomplish goals
- Working independently with strong time management skills
- Adaptability to quickly changing priorities
- Attention to detail

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ECS is a leading mid-sized provider of technology services to the United States Federal Government. We are focused on people, values and purpose. Every day, our 3000+ employees focus on providing their technical talent to support the Federal Agencies and Departments of the US Government to serve, protect and defend the American People.

#### Find more details and apply here

https://chu.tbe.taleo.net/chu02/ats/careers/v2/viewRequisition?org=ECS\_FEDERAL&cws=44&rid=69

# **Contact Information**

#### **President**

Cate O'Keefe Fishery Applications Consulting Team 99 Bakerville Road Dartmouth, MA 02748 cokeefe@umassd.edu

#### **Past President**

Tom Keegan HELIX Environmental 11 Natoma St., Suite 155 Folsom, CA 95630 TomK@helixepi.com

#### Past President, Service Kasahara Award

Steve Cadrin SMAST – UMass Dartmouth 836 South Rodney French Blvd New Bedford, MA 02744 scadrin@umassd.edu

#### **Treasurer**

Sean Lucey
Northeast Fisheries Science Ce
166 Water Street
Woods Hole, MA 02543
sean.lucey@noaa.gov

#### Secretary

Mary Blasius Orange Coast College 2701 Fairview Rd Costa Mesa, CA 92626 meblasius@gmail.com

# Young Professionals Representative

Connor Capizzano
UMass Boston
School for Environment
100 William T. Morrissey Blvd.
Boston, MA 02125
connor.capizzano001@umb.edu

#### **Membership Chair**

Todd Chapman
ECORP Consulting, Inc.
1801 Park Court Pl., B-103
Santa Ana, CA 92701
tchapman@ecorpconsulting.com

# **Hubbs Research Assistant Award**

Jerry Ault Rosenstiel School – U Miami 4600 Rickenbacker Causeway Miami, FL 33149 jault@rsmas.miami.edu

#### **Achievement Award**

Dick Beamish DFO Canada (Retired) 3904 Hammond Bay Rd. Nanaimo, BC, Canada rabeamish@shaw.ca

#### W.F. Thompson Award

Lynn Waterhouse
Daniel P. Haerther Center for
Conservation Research,
John G. Shedd Aquarium
1200 South Lake Shore Dr
Chicago, IL 60605
waterhlz@gmail.com
lwaterhouse@sheddaquarium.org

#### **Investment Chair**

Allen Shimada 7909 Sleaford Place Bethesda, MD 20814 amshimada@gmail.com

#### **Newsletter Editor**

Beth Bowers Biological Sciences Florida Atlantic University 777 Glades Rd. Boca Raton, FL 33431 mebowers5@gmail.com

#### **AIFRB-AFS Liaison**

Doug Zemeckis
Cooperative Extension of
Ocean County
Dept. of Agriculture and Natural
Resources Rutgers University
1623 Whitesville Road
Toms River, NJ 08755
Zemeckis@njaes.rutgers.edu

BRIEFS, the newsletter of the American Institute of Fishery Research Biologists, is intended to communicate the professional activities and accomplishments of the Institute and its Members.

Comments and written contributions should be sent to Beth Bowers at mebowers5@gmail.com

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# **District Directors**

#### **British Columbia**

Brittany Jenewein Fisheries and Oceans Canada #301-1918 McCallum Road Abbotsford, British Columbia btjenewein@gmail.com

#### California, Northern

Thomas Keegan Senior Fisheries Scientist Helix Environmental Planning, Inc. 11 Natoma Street, Suite 155 Folsom, CA 95630 TomK@helixepi.com

#### California, Southern

Danny Heilprin Senior Marine Biologist ManTech International Corporation 420 Stevens Avenue, Suite 300 Solana Beach, CA 92075 danny.heilprin@aifrb.org

#### Capital

Jeffrey D. Vieser NMFS Science & Technology 1315 East West Hwy Silver Spring, MD 20901 Jeffrey.vieser@noaa.gov

#### **Great Lakes**

Lynn Waterhouse
Daniel P. Haerther Center for Conservation
Research, John G. Shedd Aquarium
1200 South Lake Shore Dr Chicago, IL 60605
waterhlz@gmail.com
lwaterhouse@sheddaquarium.org

#### **New England**

Alex Hansell
Postdoctoral Researcher
Gulf of Maine Research Institute
350 Commercial St Portland ME 04101
ahansell@gmri.org

#### Keystone

Doug Zemeckis
Cooperative Extension of Ocean County
Dept. of Agriculture and Natural Resources
Rutgers University
1623 Whitesville Road
Toms River, NJ 08755
Zemeckis@njaes.rutgers.edu

#### Mississippi

Sara Pace Researcher & Administrative Assistant Science Center for Marine Fisheries Gulf Coast Research Laboratory 703 East Beach Drive Ocean Springs, MS 39564 sara.pace@usm.edu

