



President's Message

Dear Members,

Like many of you, I've been thinking a great deal about the events that are occurring this year and what this all means now and how these events will shape the future. You might say that, at a minimum, the first three quarters of 2020 have been a test of our patience and resolve, perhaps inviting a deeper dive into the discovery of self and maybe the world, or even a call to action. However recent global issues have impacted and continue to affect you, I believe it's important to reserve time to carefully think through matters that are important to you, engage in dialogue and cooperate with each other in a united effort to address and, hopefully, find solutions to the challenges presented to us—not only as individuals, but as a community. Despite the many differences amongst us, we've come together because of our commonalities. We'll continue to work towards common goals leveraging free thinking, thoughtful speech and the principles of scientific reasoning that have empowered us to build our careers and to navigate our world.

As scientists, we're well-positioned to take roles in leadership, or to provide guidance and offer solutions, because we've been trained to examine data objectively, apply appropriate analyses and to derive conclusions based on empirical information. To that end, the beneficial outcomes of the scientific method and the spirit of AIFRB continue to unify us toward a common goal. I want to remind you of our mission:

The American Institute of Fishery Research Biologists (AIFRB), incorporated in 1956, is an organization established to advance excellence in fishery science and to promote stewardship, sustainability and wise utilization of natural resources, through support in professional development and recognition of competent achievement of its members, as measured by the highest of professional standards.

We must not forget this mission and the importance of every members' contributions to fishery science and AIFRB. Let's stay focused on our path, capitalize on our strengths—the bright minds and invaluable experiences of our members and scientific community—and continue to do what we do best in recognizing our members' important work towards fisheries conservation, stewardship and professional development.

This year we've witnessed excellence not only through competitive awards, but also with our own board members taking on important tasks and roles that serve to bolster our mission and purpose. Frank Panek, Lynn Waterhouse and Sean Lucey are three board members who have exemplified what it means to be an AIFRB contributor. Frank Panek joined AIFRB in 1968 as an Associate and, in the course of developing his career path, was promoted through the ranks of AIFRB in parallel—all the way up to Emeritus Fellow. For decades, Frank served as the W.F. Thompson Award Chair, seeking out AIFRB's best and most notable peer-reviewed publications year after year. Frank recently stepped down from his position, but in short order, Lynn Waterhouse has volunteered to maintain Frank's momentum and will be serving as an interim chair for this esteemed award. Finally, Sean Lucey, our former AIFRB-AFS liaison, will continue to support the Board as Treasurer, fulfilling a vital role in managing our fiscal responsibilities, as Cate O'Keefe transitions to President later this year. We recognize Frank, Lynn and Sean as stewards of AIFRB and thank them for their service.

As you may have already learned, the 150th American Fisheries Society meeting from August 30 – September 3, 2020 in Columbus, Ohio has been modified to a virtual conference. As I stated last quarter, AIFRB has not shut down or paused in its efforts to achieve its mission. The Board will discuss alternatives to the in-person annual board meeting. Details will be developed and shared as plans are solidified. Your thoughts and ideas are most welcome, and I encourage you to contact any of the board members, including me, at any time. Visit aifrb.org for board member emails, announcements and more.

Don't forget to stop by via Facebook, Twitter and Instagram (@aifrb_fishery_biologists) and share your work, research, photographs and announcements. Please continue to take necessary measures to ensure your safety and good health and those of the people with whom you interact. Stay safe, healthy and positive.

Sincerely,



Kim Anthony
President
kim.anthony@aifrb.org



**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	Kim Anthony.....	1-2
Research Spotlight	Erica Burton and Robert Lea....	3
	CSULB.....	4-9
Young Professionals Spotlight	Alyssa Clevestine..	10-11
	Brian Galvez.....	12-13
AIFRB Position Opening	District Directors.....	14
Follow the AIFRB Members	Social Media.....	14
AIFRB Positions Filled	Sean Lucey.....	15
	Lynn Waterhouse.....	15
Award Nominations	W.F. Thompson Award.....	16
	Clark Hubbs.....	16
Upcoming Events	Virtual AFS Meeting.....	17
	Marking, Tagging, and Tracking.....	17
	Spill Your Guts.....	18
	Fish Welfare.....	18
	Non-Traditional Date Sources.....	19
	Getting It Right.....	20
	Best Student.....	20
	Incorporating Socioeconomics.....	21
	Tuna Conference.....	21
	AMARE-MED 2020.....	22
	Spatial Stock Assessment.....	23
	Flatfish Symposium.....	24
	Dolphinfish Research Program.....	25-27
Job Postings	University of WA.....	28-29
	Northeast Fisheries.....	30
Contact Information	Officers.....	31

Annotated checklist of fishes from Monterey Bay National Marine Sanctuary with notes on extralimital species

Erica J. Burton¹, Robert N. Lea^{2,3}

1 Monterey Bay National Marine Sanctuary, National Ocean Service, National Oceanic and Atmospheric Administration, 99 Pacific Street, Building 455A, Monterey, California 93940, USA **2** Department of Ichthyology, California Academy of Sciences, Golden Gate Park, 55 Music Concourse Drive, San Francisco, California 94118, USA **3** Section of Ichthyology, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, California, 90007, USA

Corresponding author: Erica J. Burton (Erica.Burton@noaa.gov)

ABSTRACT

Monterey Bay National Marine Sanctuary is a federal, marine protected area located off the central coast of California, USA. Understanding biodiversity, and how it is changing, is necessary to effectively manage the sanctuary. The large size of this sanctuary, which contains a variety of habitats and is influenced by several water masses, provides for a diverse fish fauna. The central California coast has a rich history of ichthyological research and surveys, contributing to a unique repository of information on fish diversity. Herein, we provide a checklist of fishes that occur within the sanctuary, including justification for each species. Ancillary record information including name-bearing type specimens, historic species, cold- or warm-water event species, introduced species, and occurrence at Davidson Seamount or Elkhorn Slough are also provided. This represents the first comprehensive annotated checklist of 507 fishes known to occur within the sanctuary. In addition, 18 species are considered to be extralimital. This annotated checklist of fishes can be used by those interested in zoogeography, marine protected areas, ichthyology, regional natural history, and sanctuary management.



The Special Issue is open access and available at: <https://zookeys.pensoft.net/issue/2798/>

Research Spotlight

“If you remove these oil platforms by blowing them up, you’re going to wipe out a huge part of the population of economically important fish.” – Chris Lowe, Ph.D., CSULB

To some, the oil platforms scattered along Southern California’s coastline are simply eyesores. But beneath the water’s surface lies a vast ecosystem of marine life that not only calls the structures home but flourishes as a result of them. As the platforms reach the end of their production cycles, the state is planning for their decommissioning, which will entail full removal, partial removal or leaving them in place. Whatever the case may be, petroleum companies will foot the bill.

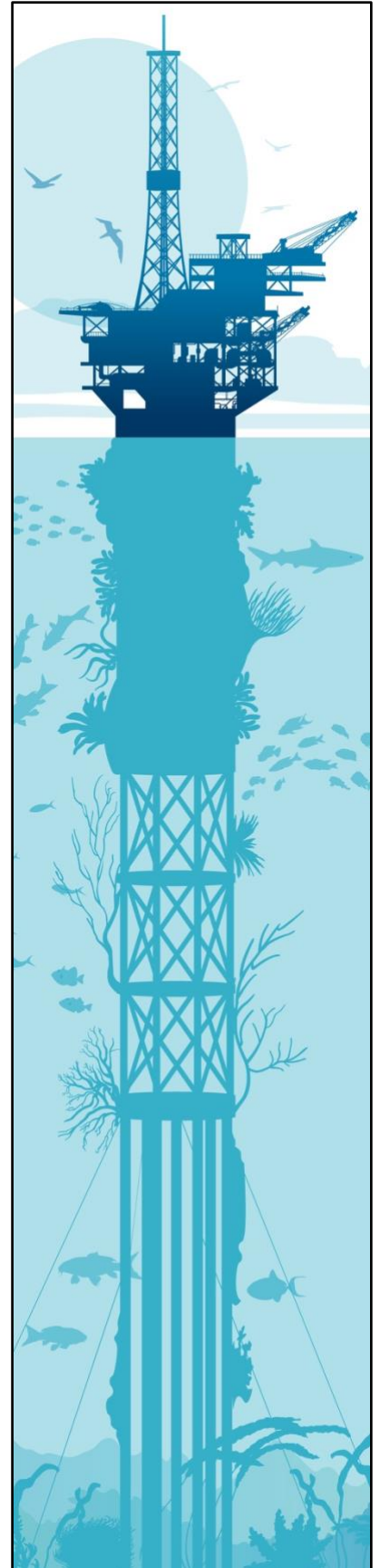
Research conducted by CSU faculty and students has uncovered repercussions that could arise from the destruction of the oil platforms and impact these essential underwater worlds. In doing so, students have gained invaluable experience that has helped them land in-demand jobs. “It definitely contributed to me getting hired for the full-time marine biologist position I accepted with the California Department of Fish and Wildlife after graduation because my experience lined up so well with what the job required. I stood out against applicants without any experience outside the classroom,” says [California State University, Long Beach](#) alumna Heather Gliniak.

STRUCTURES ON THE HORIZON

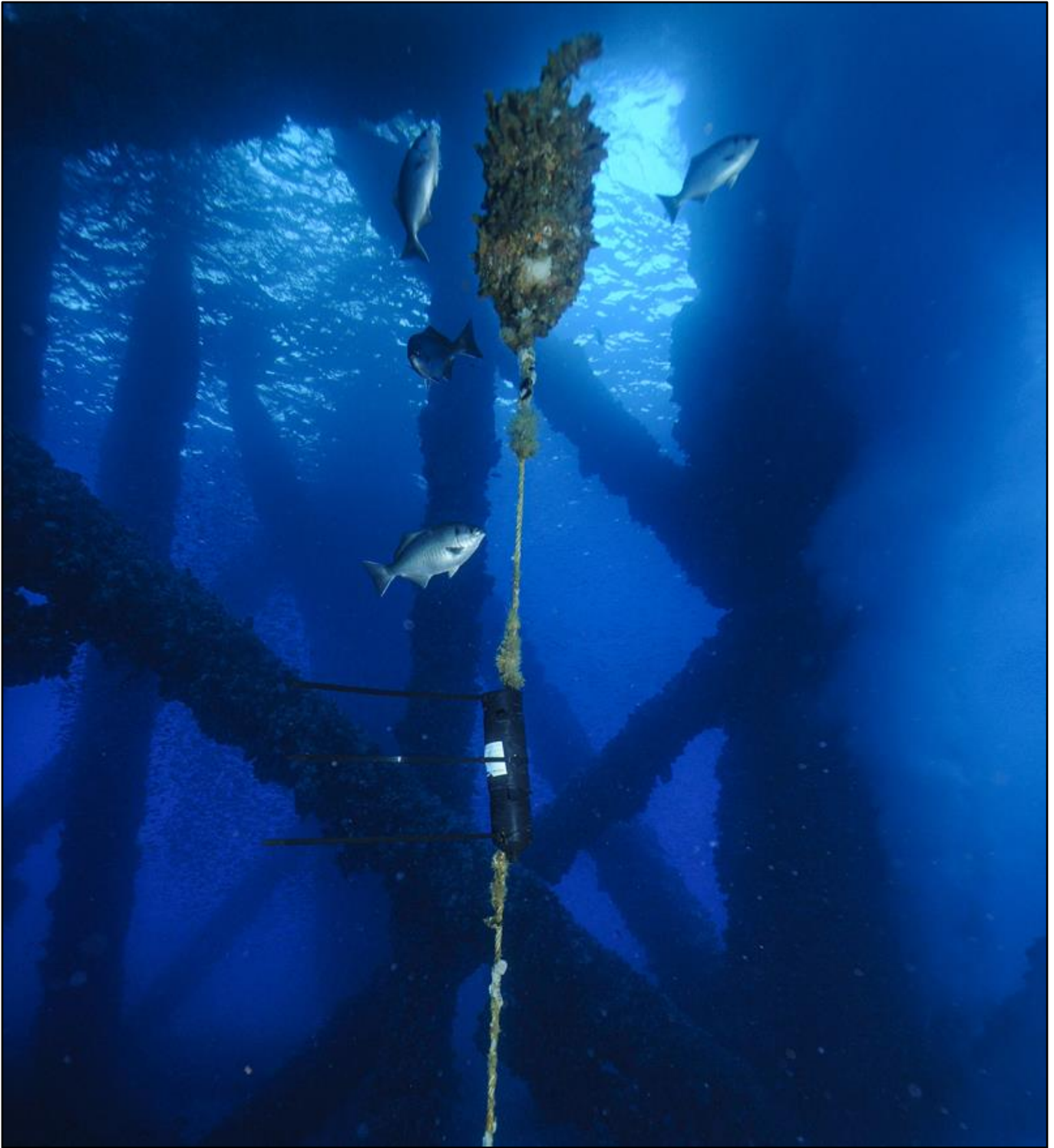
Twenty-seven oil platforms, all located in Southern California, span from Huntington Beach to Point Conception in Santa Barbara County. Four reside in state waters and 23 in federal waters at depths that range from 100 to 1,200 feet. Many of the platforms, which have been in place for 30 to 50 years, are currently not producing enough oil to make them worth maintaining.

ABUNDANCE OF LIFE

As nature tends to do, it adapted to the towering structures, creating habitats for a multitude of fish and invertebrates amid the metal beams. “These oil platforms are unique relative to natural reefs because they go from the bottom of the ocean to the surface,” says Jeremy T. Claisse, Ph.D., associate professor of biological sciences at [California State Polytechnic University, Pomona](#). “There’s a lot of water flowing through, bringing plankton to feed the mussels, scallops and anemones that have encrusted the structure.”



Those invertebrates then serve as sources of food for fish, 90 percent of which are rockfish, which are economically and ecologically important to California. While other natural reefs have been fished heavily by recreational and commercial fisheries, it's likely the platforms have provided shelter where fish have been allowed to repopulate.



Dr. Chris Lowe's team at CSULB deployed this autonomous acoustic receiver on Platform Edith in San Pedro to monitor for presence and depth of reef fish caught and tagged at this and other nearby platforms. Photo: Bob Wohls

TRADITIONAL DECOMMISSIONING PROCESS

Removing structures that are submerged in 1,000 feet of water is an expensive, technically challenging and risky project. Not to mention the large carbon footprint created by the whole operation and then having to figure out where to recycle the massive and odorous structures. Traditional methods of removal, like the ones used in the Gulf of Mexico, involve dropping explosive charges down the legs of the platform, causing them to rupture at about 13 feet below the surface.

“Then they use cranes to lift it up and cut it, lift it up and cut it,” explains Chris Lowe, Ph.D., professor of marine biology and director of the [Shark Lab](#) at Cal State Long Beach. “The problem is billions of animals use those platforms as their home. All fish with a swim bladder that are within 500 yards of the explosion will die and all invertebrates growing on the platforms will dry up and die. I was skeptical of the data indicating the oil rigs are valuable, but having worked on them for so long, as long as the wellheads can be sufficiently capped to prevent leaking, I’m in favor of reefing.”

Dr. Claisse says that’s not even the biggest issue at hand: “It’s not so much about the fish that are currently living there, but about the habitats the platforms provide over decades so fish can reproduce. Losing the habitat is the bigger effect.”

In 2010, then-governor Arnold Schwarzenegger signed [AB 2503](#), which created the option of allowing oil companies to turn oil platforms into artificial reefs.

Left to right: CSULB alumnas Erica Jarvis-Mason, Kim Anthony and Heather Gliniak catching and tagging rockfishes at Platform Gail in the Santa Barbara Channel. Tagged fish were translocated to the Anacapa Island State Marine Reserve. “The overarching lessons I learned were not just managing people, performing different tasks and coordinating their activities so we were all in lockstep with one another, but also managing different personalities, needs and skill sets,” Anthony says.



THE PLATFORM PREFERENCE

Over the span of nine years, Dr. Lowe oversaw a number of projects (funded by \$660,000 in grants and contracts) that involved a team of 10 CSULB graduate students and focused on researching whether fish prefer living at oil platforms. The findings would help determine if the platforms should be retained or removed. They assessed the habitat value at platforms in Long Beach and used [acoustic telemetry](#) to discover how long fish were staying there.

The next step was to find ways to mitigate the mortality that would occur during full decommissioning by physically moving fish to different habitats. “We caught fish on several platforms in the Santa Barbara Channel, tagged them and translocated them to a [marine protected area](#) off Anacapa Island [12 miles away] across a deep water channel,” Lowe says. “Twenty-five percent of them returned to the platform they were caught at, which really shocked us.”



Dr. Chris Lowe pictured with a real-time acoustic receiver buoy prototype. Instead of requiring a diver to retrieve an underwater receiver, this special buoy has a cellular modem and allows for real-time detections of tagged fishes and sharks and can provide text alerts of detections.

“We also caught fish off the natural reef and moved them to the platform and then caught fish off the platform and moved them to the natural reef. We found that the fish caught on the natural reef stayed on the platform and the fish we took off the platform and moved to the natural reef came back to the platform.”

With direction from Lowe, CSULB alumnus Chris Martin led the study design, data collection and analysis of fish community data. “This work was published as my thesis as well as two separate peer-reviewed journal articles,” says Martin, who is now an environmental scientist at Metro Vancouver Regional District. “My

CSU experience was no doubt invaluable, and I wouldn't be in my current senior position without the skills and knowledge I gained.”

IN THE FIELD

At Cal Poly Pomona, Claisse has been studying fish behavior around oil platforms for almost a decade, expanding on datasets developed by Milton Love and Ann Scarborough Bull, researchers at UC Santa Barbara. “We focused on taking that data and converting the counts—how many fish, how big they were and which species—into a uniform metric that can be used to compare platforms to natural rocky reefs,” he explains. “That way, you can compare the amount of production between the two to get a sense of how they're functioning as an ecosystem.” Claisse and his team found these platforms are

among “the most productive habitats for fish anywhere that’s been studied in the world—about 27 times more productive than the natural rocky reefs in our region.”



CPP graduate student Chelsea Muñoz Williams says her research on the platform project helped her see the value of applied science and how science informs policy. “From an environmental standpoint, one would assume complete removal of these platforms and restoration to the original natural state would be the best ecological option,” says Williams, a research associate, grants manager at Occidental College. “However, these structures act as refugia for hundreds of species of fish and invertebrates throughout the water column, none of which would exist over soft, sandy substrate.”

CSULB alumnus Carlos Mireles CSULB catching reef fish underwater at Platform Edith for tagging and monitoring of depth and presence at this and other nearby platforms. “The experience taught me how to lead a large and diverse field team, coordinate with stakeholders, perform underwater SCUBA based research in challenging conditions, perform data analysis and share scientific findings through public presentations and written reports/peer reviewed literature,” says Mireles, who is now a fisheries biologist for the California Department of Fisheries & Wildlife in Santa Barbara.

As part of Chelsea Williams’ master’s thesis research at Cal Poly Pomona looking at the geographic- and habitat-related variation in age and growth patterns in Garibaldi (California’s State Marine Fish), she captured and chemically tagged some of the fish to validate her aging methods.

ADDING TO CALIFORNIA'S BLUE ECONOMY

Environmental groups are pushing for complete removal of the oil platforms, calling them unsightly and citing the possibility of oil leaks. Others claim the locations can serve multifunctional purposes, including as dive sites and anchoring points for offshore aquaculture.



“If you have this platform offshore and it already cost millions and millions of dollars to put into place, why not retrofit it for something else, like wave energy or wind energy?” Lowe poses. “One of the other options discussed is to take off the superstructure and just leave a flat platform to use as a roosting habitat for seabirds. My dream is to convert one of them into a marine lab.”



Sea lions look on as Dr. Jeremy Claisse surveys the benthic invertebrates and habitat at Begg Rock, a pinnacle reef 80 miles off the coast of Los Angeles that is now part of California's statewide marine protected area (MPA) network. Claisse is part of a team that has been conducting surveys of rocky reef and kelp forest habitats inside and outside of California's MPAs in Southern California. Photo: Jonathan Williams

WHAT THE FUTURE HOLDS

While the state and federal government are determining the exact process, 10 platforms are projected to be decommissioned in the Golden State by 2030. The first one will likely be Platform Holly in Santa Barbara, which the state owns as a result of the petroleum company claiming bankruptcy.

Lowe and Claisse are hopeful the deciding bodies will take their research findings into consideration. Whatever transpires, they

are grateful for the rich experiences gained by CSU students. “With their participation in the oil rig projects, many of my students learned how to do science in difficult places and how to deal with policies,” Lowe says. “They got a lot more than a master’s degree.”

For more information on how the CSU is working to solve the biggest threats to California’s oceans, check out our [oceans series](#).

STORY: MICHELLE MCCARTHY

PHOTOGRAPHY: DR. CHRIS LOWE AND C/O CSU CAMPUSES

Young Professionals Spotlight

Alyssa Clevens – Southern California District



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

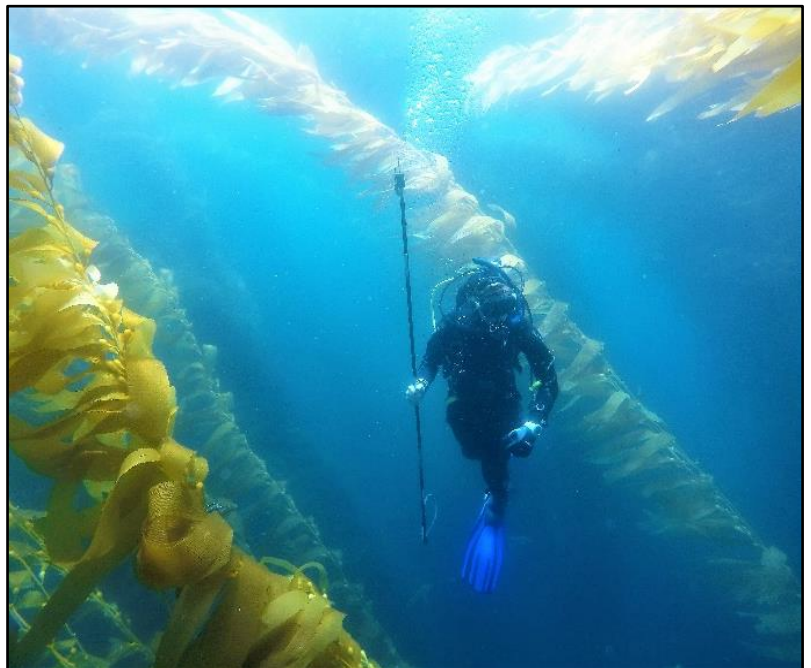
I am a California Sea Grant State Fellow working for the Port of San Diego focusing on coastal planning and policy. The focus of this position is to assist with policy development to support a variety of land and water use projects, conduct environmental reviews of aquaculture and blue technology efforts, and work with stakeholders on sea level rise and adaptation planning in the San Diego area.

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

I earned my Bachelor of Science in Fish and Wildlife Conservation from the University of Illinois at Urbana-Champaign and my Master of Science in Biology from California State University Long Beach. My parents and mentors were extremely supportive, hardworking, and adventurous, which I try to emulate and has helped me find jobs and programs that challenge me to grow professionally and personally.

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

My undergraduate research focused on monitoring movement of invasive Asian carp (*Hypophthalmichthys* spp.) within Chicago waterways and was a small part of a larger project to protect native ecosystems and fisheries of the Great Lakes. That work led me to pursue a graduate degree focused on an endangered species, the giant sea bass (*Stereolepis gigas*). After being nearly extirpated from southern California in the 20th century, I used telemetry to quantify temporal and spatial rhythmicity of giant sea bass aggregations at an offshore island to provide a baseline of movement and behavioral data that can be used to improve our understanding of the species and in



future management decisions on a state, and potentially international, level.

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)?

Fisheries management continues to grow in this country as a result of more investment in fisheries research and more interest in fish as a food source. I believe much of this stems from educational programming in schools and the media about our rivers, wetlands, lakes, and oceans, and the environmental impacts of what we put on our plates. It is very exciting to live and work in communities that value sustainability in addition to healthy economies and ecosystems, and I believe investment in all-ages education across every social and economic group will improve community investment in fisheries management and build better researchers and more informed consumers.



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

The future of fishery management is dependent on the quality and diversity of ideas from young professionals across many fields. It is exciting to see young folks from around the world using new tools and introducing different perspectives that drive research and development in fisheries and climate research. By creating more opportunities to get students involved in fisheries

from a young age we will be able to develop more well-rounded managers, scientists, and policy makers that use their diversity as a strength.

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

Having been involved in AFS as an undergraduate, I knew the value of society membership and mentorship. Upon entering graduate school, I joined AIFRB to get a better understanding of some of the research going on in my local area and to learn more about the variety of work available to fisheries scientists. It has been a great experience to meet and learn from so many different people throughout southern California and Baja, as well as receive support through awards, networking, and professional development, all of which are reasons why other young professionals should join AIFRB.

Please contact Alyssa (aclevenstine@gmail.com) to continue the conversation!

Young Professionals Spotlight

Brian Galvez – Capital District



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

I currently work as an Environmental Review Coordinator for Delaware Fish and Wildlife. The primary responsibilities of my position are to review development projects – industrial, commercial or individual – and coordinate with the appropriate biologists within state and federal agencies to provide recommendations about how permittees can minimize their environmental impacts with regards to rare, threatened, and endangered species. Ultimately, the focus of this position is to scrutinize projects through an ecologist lens to help protect federally listed species under the ESA, Delaware species of greatest conservation need, and key wildlife habitat documented in the Delaware Wildlife Action Plan.

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

I received my BS in Marine Fisheries Biology in 2014 from Humboldt State University and my MS in Natural Resources in May 2019 from Delaware State University (DSU). Between degrees, I gained a great mix of experience in San Diego, CA as a marine scientist for the environmental consultant Tierra Data, and as a research technician for Hubbs SeaWorld Research Institute. In 2017, I found an excellent opportunity for a funded masters degree at DSU with the NOAA-Living Marine Resources Cooperative Science Center (LMRCSC). The LMRCSC proved to be an excellent opportunity to perform quality research, attend conferences, network with fisheries professionals, and gain relevant work experience via internships, workshops, and field work. I think the culmination of my education, work experience, and my graduate research helped put me in the position I have today.

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

Many of the projects that I review are permit applications for a variety in-water projects. For these projects, the recommendations that I coordinate with the state fisheries biologists are typically incorporated as stipulations of each permit, of which typically pertain to ASMFC managed species. I also comment on federal consistency projects under the Coastal Zone Management Act that relate to federal fisheries management activities such as NMFS fishery amendments and Army Corps state programmatic general permits.

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)?

In my opinion, U.S. fisheries management under the Magnuson-Stevens Act is functioning as it was intended, and I believe that the transparent stakeholder engagement process is essential to continuing the positive outcomes that the fisheries community has achieved.

At this point in my career, my professional outlook for fisheries management is that ecosystem based fisheries management (EBFM) is going to be well established and increasingly informed by technology. I envision a future where the toughest fisheries questions will be answered by eDNA, compound-specific stable isotope analysis, artificial intelligence, autonomously operated vehicles, and machine learning.

The future of fisheries management under the EBFM system is the logical next step to recovering depleted fish stocks and aquatic habitats around the country and the world. One of the ways to increase the efficacy of EBFM is through improving interagency and interdisciplinary fisheries research collaborations. However, even though fisheries investigations can inform management, I think that young fishery professionals need to get more involved in the regulatory processes of our local and state land use practices, as these are important but often overlooked contributors to fisheries resources.



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

Today, young fishery professionals face unique challenges unforeseen by the biologists who came before us. We carry with us the innovative solutions and ideas to face these challenges, bringing a modern point of view that I think will help answer the unsolved fisheries questions from previous generations. Nevertheless, it's our responsibility to continue the success of the MSA, increase its effectiveness, and dedicate our careers to advancing fisheries science.

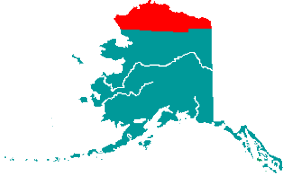
What drew you to AIFRB, and what does AIFRB do for you and what can it do for other young professionals in this field?

I learned about AIFRB at the 2018 AFS annual meeting in Atlantic City. I inquired about the organization at the trade booth and was quickly acquainted with AIFRB and the members who represent it. I joined for two important reasons: 1. it's potential for networking within the fisheries community and 2. because it's dedicated to promoting fisheries science and the individuals who advance it. Through its access, awards, and dedication to the fisheries community, young professionals can make a name for themselves through showcasing their achievements via AIFRB events and spotlights like these.

Please contact Brian (briangalvez427@gmail.com) to continue the conversation!

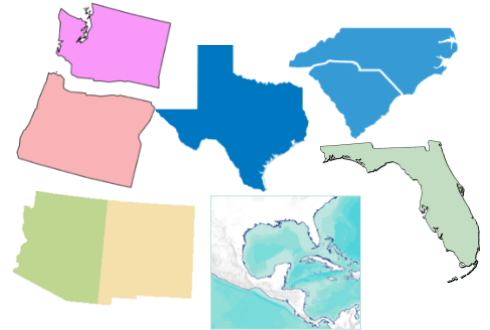
AIFRB Position Opening

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 [Kim Anthony](#) by March 1st, 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, Emily Slesinger, at slesinger@marine.rutgers.edu with a photo, description, and the names of the AIFRB local district and/or AIFRB members present.



AIFRB Positions Filled

Treasurer – Sean Lucey



The Board of Control is pleased to announce that Dr. Sean Lucey, our former AFS Liaison will remain on the board as our new treasurer. Sean will be replacing Dr. Cate O’Keefe as she transitions into the Presidency. Sean works for NOAA’s National Marine Fisheries (NMFS) at the Northeast Fisheries Science Center as a member of the Ecosystem Dynamics and Assessment Branch. His primary duties include developing ecosystem models and working on integrated ecosystem assessments (IEAs). He received his Master’s degree in Wildlife and Fisheries Conservation from the University of Massachusetts Amherst and last year completed his PhD in Marine Science and Technology from SMAST. His dissertation centered on developing an open source version in R of the popular Ecopath with Ecosim modeling software which he also extended to add functionality for management strategy evaluations. Sean has served on multiple regional, national, and international working groups. He is currently a member of the New England Fisheries Management Council’s Ecosystem-based fisheries management (EBFM) plan development team and the national NMFS EBFM working group. He is also the US co-chair of an ICES working group building capacity for IEAs, as well as the northeast representative on the NOAA National IEA program. Sean is currently working from home in East Falmouth, MA alongside his wife Alyson and his two sons, Declan and Connor.

Interim W.F. Thompson Chair – Lynn Waterhouse



Lynn Waterhouse is a research biologist at the Daniel P. Haerther Center for Conservation and Research at the John G. Shedd Aquarium. Her research focuses on mesopredators in the Bahamas and Caribbean, specifically population assessments of groupers and snappers. Waterhouse teaches a college course in the Bahamas aboard Shedd’s research vessel, the R/V *Coral Reef II*. Before coming to Shedd, Waterhouse completed her Ph.D. in biological oceanography at Scripps Institution of Oceanography at the University of California San Diego in December 2018. As part of her Ph.D., Waterhouse worked on Nassau groupers in the Cayman Islands with REEF (Reef Environmental Education Foundation) and the Cayman Island Department of the Environment. Waterhouse also completed the first stock assessment of white seabass for the State of California with Dr. Juan Valero of CAPAM (Center for Advancement of Population Assessment and Methodology). Waterhouse also holds a Master of Science degree in statistics from Pennsylvania State University and a Master of Science degree in fisheries sciences from Virginia Institute of Marine Sciences at the College of William and Mary. She has a Bachelor of Science degree in biology with a minor in economics from the University of Dayton. Waterhouse has been a member of AFS since 2007 and joined AIFRB in 2013 at the encouragement of then labmate Lyall Bellquist. Waterhouse began volunteering as a reviewer for the W. F. Thompson Award in 2014 and also received the Clark Hubbs Award in 2014. AIFRB has also been a supporter of the “Monsters of ...” events at 3 past AFS meetings – which Waterhouse has helped organize. These events are fundraisers for future student travel award for the Marine Fisheries Section and Estuaries Section of AFS (and in 2017, the Fish Habitat Section).

Award Nominations

W.F. Thompson Award for Best Student Paper

Published in 2019

Nominations are open for the W.F. Thompson Award, which will be given by the American Institute of Fishery Research Biologists (AIFRB) to recognize the best student paper in fisheries science published during 2019. An award shall consist of a check for up to \$1,000 as determined by the Board of Control, a certificate and a one-year membership in AIFRB at an appropriate level. The requirements for eligibility are as follows:



- (1) The paper must be based on research performed while the student was a candidate for a Bachelor's, Master's, or Ph.D. degree at a college or university in the Western Hemisphere
- (2) The results of the research must have been submitted to the recognized scientific journal in which it was eventually published, or to the editor of the book in which it was eventually published, within three (3) years of termination of student status. The year of publication is the first date of either e-publication or print publication for the paper being nominated
- (3) Papers that are nominated for the award must be concerned with freshwater or marine biological resources and/or fisheries science
- (4) The paper must be in English
- (5) The student must be the senior author of the paper

Nominations may be submitted by professors or other mentors, associates of the students, or by the students themselves. The submission package should include a letter of nomination, the student's curriculum vitae and a copy of the publication. Submissions in MSWord or as pdf documents are required.

The deadline for receipt of nominations is August 31st, 2020.

The nominations should be sent to the Interim Chair of the W.F. Thompson Award Committee, Dr. Lynn Waterhouse

E-mailed submissions to: waterhlz@gmail.com are preferred.

Award Nominations

Clark Hubbs Research Award

Due to COVID-19, no Clark Hubbs awards funds will be distributed in 2020. We will resume the distribution of these awards in the future.

Upcoming Events



AMERICAN FISHERIES SOCIETY VIRTUAL ANNUAL MEETING SEPTEMBER 2020

Learning from the Past, Meeting Challenges of the Present, Advancing to a Sustainable Future

The American Fisheries Society will host its 2020 Annual Meeting virtually, tentatively scheduled for September 14 – 25, 2020. This meeting will celebrate 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.

Upcoming Events

Title: Marking, Tagging, and Tracking*

ID number: 9391

*AIFRB sponsored

Abstract: 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



AMERICAN FISHERIES SOCIETY VIRTUAL ANNUAL MEETING SEPTEMBER 2020

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 will share technologies, methodologies, findings, analytical approaches, and troubleshooting tips to highlight more recent developments and encourage collaboration. Talks will focus 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

Symposium Organizers: Jeff Heindel (heindel@mcmjac.com), Michelle L. “Mick” Walsh, Quinton Phelps, Kim Anthony, Paul Venturelli and Richard D. Methot Jr.

Upcoming Events

Title: Spill Your Guts: Understanding Diet Data and Its Utility for Ecosystem and Fishery Modeling and Management **ID number:** 9358



AMERICAN FISHERIES SOCIETY
VIRTUAL ANNUAL MEETING
SEPTEMBER 2020

Abstract: Diet data (e.g., gut contents) have a broad range of possible uses, from the presence/absence of prey taxa to informing end-to-end ecosystem models. The ecological relevance and subsequent utility of diet data can be unclear,

however, because diet data are often sparse and/or only collected for certain species, seasons, or years. As management agencies transition to ecosystem based fisheries management (EBFM), an improved understanding of the utility of diet data for modeling and management would be beneficial. This symposium will coalesce researchers experienced and interested in all aspects of diet data, from collection to end users. The symposium should broaden our understanding of the physiological factors that affect diet observations (e.g., digestion and evacuation rates), spatial and temporal variation in diet data, robust use of diet data in assessment and ecosystem models, and how managers can use diet data to advance EBFM. Diet data are collected from a range of fresh and marine systems globally; thus, this symposium should garner widespread interest among scientists and managers. The methods and application of diet data have also evolved through time and will continue to do so, making the general topic fitting for the Meeting theme, “Past, Present, and Future”.

Symposium Organizers: Jonathan J. Deroba (jonathan.deroba@noaa.gov), Justin J. Suca (jsuca@whoi.edu), Sean M. Lucey (sean.lucey@noaa.gov), Elizabeth Ng (elng@uw.edu)

Upcoming Events

Title: Fish Welfare **ID number:** 9479

Abstract: Fish welfare is an aspect of fish husbandry that is often overlooked. Fish can sense and react to noxious stimuli, often displaying similar aversive responses to the ones we observe in mammals, including stress. Chronic and



AMERICAN FISHERIES SOCIETY
VIRTUAL ANNUAL MEETING
SEPTEMBER 2020

acute stress can cause anorexia, weaken the immune system, and induce other physiological abnormalities. Stressed fish may display abnormal behaviors or show abnormal swimming patterns. In the aquaculture of food fishes, pre-slaughter stress can cause changes in the texture and quality of fish fillets. In the ornamental fish industry and for fishes cultured and/or transported for stocking, shipping stress may be an important cause of mortality. Thus, fish welfare is not only a matter of ethical debates but a relevant issue for anyone that works with fish from fishermen and fish growers to researchers using fish as animal models. This symposium will aim to explore a variety of aspects of fish welfare, including: how welfare can be assessed, the use of naturally derived compounds to reduce shipping and handling stress, and the effects of fish welfare in the overall health of fish.

Symposium Organizers: Jose Reyes-Tomassini (jreyes-tomassini@francis.edu), Jeff Heindel, Michelle L. “Mick” Walsh and Benjamin R. LaFrentz

Upcoming Events

Title: How Citizen Science and Non-Traditional Data Sources can be better incorporated into fisheries stock assessments and management **ID number:** 9377



AMERICAN FISHERIES SOCIETY
VIRTUAL ANNUAL MEETING
SEPTEMBER 2020

Abstract: Sustainable fishery management relies on stock assessments and effective management measures. Fisheries scientists strive to use the best available information to provide managers with past,

present, and future information on a fish stock. Management and scientific institutions have developed systems for data collection and analysis to support fisheries stock assessments and management decisions. Data are typically collected by government agencies and academic partners via fishery-dependent catch monitoring and statistically-designed, fishery-independent surveys. However, data gaps remain largely because programs are expensive and time and labor intensive. This symposium will explore how non-traditional sources, including non-governmental organizations, academia, and increasingly, citizen science could benefit stock assessments and management. We will explore questions, such as “How can citizen science projects be designed to provide data that will improve stock assessments and management?” and, “What is needed to improve coordination between governmental and non-governmental groups so that non-traditional data sources can be made available for use in the management process?” Presentations will cover challenges and successes associated with incorporating citizen science and other non-traditional data sources into the fisheries stock assessment and management process. We hope to identify common themes and best practices to guide future use of these data sources.

Example topics include:

- Survey and sampling design for citizen science projects so data can be incorporated into assessments
- Collaborative survey projects among multiple partners and agencies
- Facilitating greater incorporation of “external” data into assessments and management
- Effective communication between governmental and non-governmental groups on data gaps and project design

The organizers anticipate sharing case studies from federal, state, international, and academic perspectives. A discussion will be held at the close of the symposium to discuss challenges and successful methods. **If you are interested in providing an oral or poster presentation in the session, abstracts must be submitted via the meeting website by April 20.** For further info, please visit the Meeting website at <https://afs.confex.com/afs/2020/cfp.cgi>.

If you have any questions about the symposium, please feel free to contact the organizers listed below.

Symposium Organizers: Abigail Furnish (abigail.furnish@noaa.gov), Laura Oremland (laura.oremland@noaa.gov), Richard Cody (richard.cody@noaa.gov), and Julia Byrd (Julia.Byrd@safmc.net)

Upcoming Events

Title: Getting it Right: A Guide to Successful Supplementation for Recreation, Restoration, and Recovery
ID number: 9380

Abstract: Captive rearing and supplementation has been a common tool in fisheries management in North America for over 150 years. Applications include support for recreational and harvest-based fishing, restoration and recovery of declining populations, and genetic banking of valuable genotypes. Techniques are changing, and success stories are increasing. This symposium aims to build bridges within the fisheries community and demonstrate that new approaches are yielding improved success. Talks will focus on the following topics: 1) Strategies or tactics to reduce domestication of captive animals and increase survival and/or fitness post-release, including efforts to target fitness or adaptive variation in captive breeding programs; 2) Efforts to incorporate a holistic approach to conservation goals through coordination with habitat restoration and evaluation to ensure strong phenotype-habitat matches to improve outcomes; 3) Adaptive approaches to evaluating impact or success of release programs through connections between rearing, supplementing, and monitoring; 4) Descriptions of advancements in rearing techniques fostering improved outcomes including genetics, nutrition, pathogen management, and operations; 5) Descriptions of means to improve supplementation success through adapting release strategies or improving monitoring; 6) Means to manage, diagnose, treat, or prevent disease outbreaks and pathogen exchange with novel approaches to operational techniques, feed regimes, or low-impact surveillance.



AMERICAN FISHERIES SOCIETY
VIRTUAL ANNUAL MEETING
SEPTEMBER 2020

Symposium Organizers: Nathan Wilke (nathan_wilke@fws.gov), Michelle L. “Mick” Walsh and Jeff Heindel

Upcoming Events

Title: AFS/Sea Grant Best Student Podium & Poster Presentation
ID number: 9230

Abstract: The Education Section of the American Fisheries Society (AFS) sponsors this Best Student Podium & Poster Symposium each year to recognize outstanding presentations by finishing students. This symposium highlights the “best of the best” student research at the annual meeting. To apply to this competitive process, students first submit a standard abstract (200-word limit) to the symposium through the online registration system. This standard abstract must be followed by a letter of support from the student’s advisor which indicates the relevance and rigor of the student’s research and that the research is at a stage appropriate for award consideration. For podium presentations, an additional extended abstract must be submitted. The extended abstract (limited to three pages) includes Background, Methods, Results (including up to five tables or figures), Discussion, and References. Authors of accepted presentations will be notified; submissions not accepted to this Symposium will be assigned to appropriate contributed paper sessions. All letters of support and extended abstracts should be sent to afs_bsp@googlegroups.com. Send questions to Dr. Melissa Wuellner at wuellnermr@unk.edu. Complete details and additional resources can be found [here](#).

Symposium Organizers: Melissa Wuellner (wuellnermr@unk.edu), Dan Shoup and Kyle Hartman

Upcoming Events

Title: Incorporating Socioeconomic Data and Methods in Stock Assessments

ID number: 9473



AMERICAN FISHERIES SOCIETY
VIRTUAL ANNUAL MEETING
SEPTEMBER 2020

Abstract: Socioeconomic analyses are one of many tools which inform the fisheries management process to optimize fishery performance. However, there is a growing body of evidence suggesting that expanding the

considerations of feedback mechanisms between humans and fish stocks in stock assessment models could increase their accuracy. Developing stock assessment models that consider socioeconomic data and interactions will help fishery managers to better match fishing capacity with available resources and develop harvest policies that consider the economic resilience of their fishing industries. This could be especially useful as we consider possible distribution shifts based on changes in environmental conditions and the impacts to commercial and recreational fishing.

In February 2020, NOAA Fisheries held an interdisciplinary workshop to develop recommendations for when and how to incorporate and/or consider socioeconomic information in fisheries stock assessments. This symposium will share initial findings and provide an opportunity to broaden the discussion on this cutting edge science. Presentations can focus on research related to the use of socioeconomic information (e.g. prices, illegal fishing behavior, fishing fleet competition, changing fishing practices) and analyses in the stock assessment process, which includes stock assessment data collection, data processing, population modeling, forecasting, and methods for communicating scientific advice to managers.

Symposium Organizers: Andrea Chan (andrea.chan@noaa.gov), Jeffrey Vieser and Abigail Furnish

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 a reimbursement, please notify Stephanie (Stephanie.Flores@noaa.gov). IATTC's registrations have already been 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!



AMARE-MED 2020

Second advanced school
on quantitative methods
for ecosystem approach
to fisheries application



Multidisciplinary ecosystem management approaches using spatial modelling with addressing socio-economic and environmental issues

WHEN
20-25 July 2020

WHERE
Split (Croatia)

INFO & REGISTRATION
<http://echo.inogs.it/amare-med>

APPLICATION DEADLINE
15 March 2020

CONTACTS
UNIST Group
E-mail: fairsea.summer.school@unist.hr

DESCRIPTION
The 2nd FAIRSEA advanced school on quantitative methods for EAF application will include i) in-depth investigation of single and multispecies spatial models using GADGET and SeaPopDym with focus on the technical interactions and overview of the management strategy evaluation; ii) use of ECOSPACE of the Ecopath with Ecosim suite to address multidisciplinary dimension of ecosystem management including both socio-economic and environmental issues. The course is highly technical, with practical hands-on computer activities, assignments and programming. Candidates must apply online and maximum 25 students will be selected based on their expertise in fisheries and related fields, programming and quantitative skills and interests. Selection process will be conducted under the principles of non-discrimination, equal opportunities and equality for men and women. Links with the CBC Italy-Croatia programme area will be considered in the selection. Fellowships are available for a few selected applicants that will be supported by the Project.

KEYNOTE SPEAKERS
André PUNT (School of Aquatic and Fishery Sciences, Seattle, USA)
Kim de Mutser (Department of Environmental Science and Policy, George Mason University, USA)

VENUE: University of Split, University Campus Visoka (Z3F building)

ORGANIZING COMMITTEE
Simone Libralato, Svjetlana Krstulović Šifner, Jure Brčić, Mirela Petrić

SCIENTIFIC COMMITTEE
Simone Libralato (OGS), Angelo Bonanno (CNR), Roberto Carlucci (CONISMA), Piera Carpi
Francesco Colloca (SZN), Fabio Fiorentino (CNR), Tomaso Fortibuoni (ISPRA),
Saša Raicevich (ISPRA), Giuseppe Scarcella (CNR),
Svjetlana Krstulović Šifner (UNIST), Cosimo Solidoro (OGS)
Maria Teresa Spedicato (COISPA)
Nedo Vrgoč (IOF)

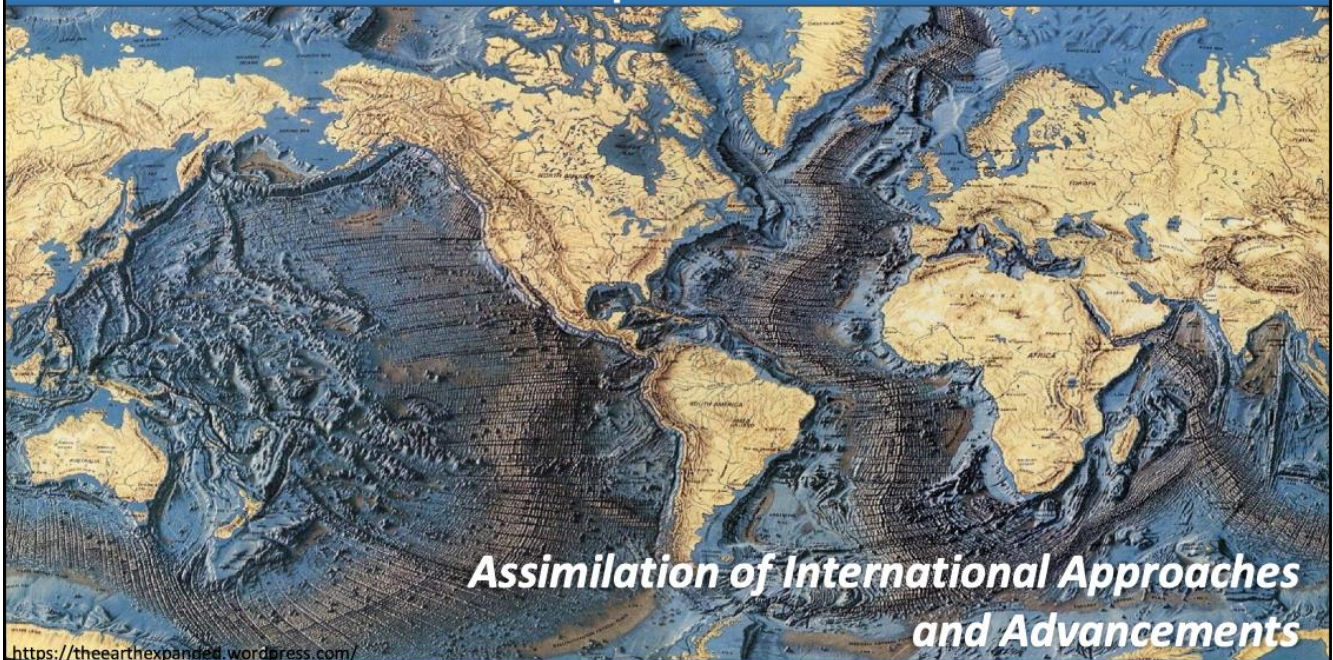


European Regional Development Fund

www.italy-croatia.eu/fairsea

Spatial Stock Assessment Methods

Workshop October 2020



**WORLD FISHERIES
CONGRESS**
ADELAIDE • AUSTRALIA

Workshop – Early Notification and Call For Interest

A three-day spatial stock assessment methods workshop will take place following the 2020 Adelaide World Fisheries Congress. The workshop will evaluate methods for incorporating spatial complexity into stock assessments and will focus on, but not be limited to, the application of different assessment modeling platforms to simulated spatial data for two important international stocks (Antarctic toothfish and Indian Ocean yellowfin tuna).

We are currently looking for analysts to implement spatial population dynamic models using the modeling framework of their choice (generalized software packages or specific applications), examine the assumptions in their approach, and provide feedback on performance and potential improvements at the workshop. Simulated data and biological parameters will be provided well before the October 2020 workshop, along with a general study design.

Contact Aaron Berger (aaron.berger@noaa.gov) or Dan Goethel (daniel.goethel@noaa.gov) for more information.

A full workshop announcement and a general call for presentations will be forthcoming.

Steering Committee

Aaron Berger (NOAA)
Dan Goethel (NOAA)
Simon Hoyle (NIWA)
Jeremy McKenzie (NIWA)

Pamela Mace (FNZ)
Mark Maunder (IATTC)
Rick Methot (NOAA)
Patrick Lynch (NOAA)

Rich Little (CSIRO)
Paul DeBruyn (IOTC)
Rosemary Hurst (NIWA)
Andrea Chan (NOAA)



Upcoming Events

Dear Flatfish Colleagues,

After much deliberation, we have decided to postpone the 11th 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 the 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 SMASST

scadrin@umassd.edu

Cate O'Keefe

AIFRB

cokeefe@umassd.edu



Made Possible by a Grant from the Guy Harvey Ocean Foundation

[Click here to download this eNewsletter as a PDF](#)

[ABOUT US](#) | [GET INVOLVED](#) | [DONATE](#)

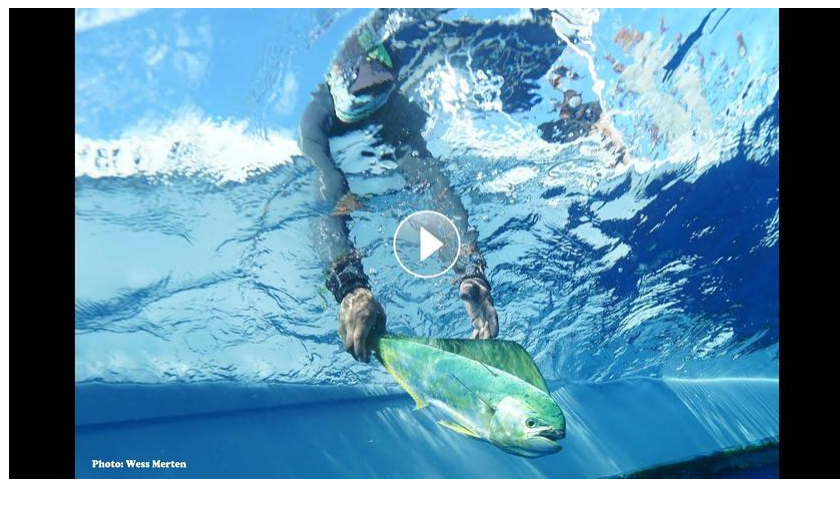
Take your Tagging to Another Level - Build a Fish Tagging Station



Whether you design an integrated tagging station on your vessel or have all of your tagging supplies stored in one location, being prepared to tag with some sort of plan for when the fish come onboard will make tagging more enjoyable and your contribution to our research more valuable. In this month's edition of the **Dolphinfish Research Program (DRP)** eNewsletter, we compiled a comprehensive guide to improve your field tagging methods by gathering footage and notes from **Captain Don Gates** and the *Killin' Time II* fishing team, one of the top tagging teams for the **DRP**. **Captain Gates** provides an overview of how and his team utilizes a fish tagging station to handle fish properly, tag more efficiently, and make tagging more enjoyable. With many still under social distancing and stay at home orders, now may be a good time to take on some projects to improve your fishing program on your vessel. A fish processing table will add additional functionality to your vessel, and if you participate in the **DRP**, take your tagging and contribution to our research to another level. [Click here](#) to learn more. [Click here](#) learn why it's important to tag dolphin in order to compile information that will help address the **DRP's** research objectives.

[Visit Tagging Methods - Webpage](#)

[How to Tag Dolphinfish Video Short](#)



Check out our latest video (click image above) that details how the *Killin' Time II* fishing team, one of the top tagging teams for the **DRP**, tag dolphin so efficiently. For more tagging tips visit dolphintagging.com/how-to-tag.

[Subscribe](#) to our YouTube channel to receive updates on when new videos are posted about the Dolphinfish Research Program as well as our FAD and seafood traceability research at the Beyond Our Shores Foundation.

[Subscribe to Our YouTube Channel](#)

New Performance Gear!

AFTCO - DRP Performance Fishing Shirts



The **Dolphinfish Research Program (DRP)** is thrilled to offer our anglers and supporters an **AFTCO** favorite – the Hooded and Regular Samurai Heathered Performance Fishing Shirt **DRP** style! The **AFTCO** **DRP** Performance Fishing Shirt provides a high quality garment to keep you even more protected while out on the water and also allows you to represent the world's largest fishermen-driven tagging program to quantify the movements and life history traits of dolphin in the wild. Proceeds from your purchase of this performance fishing shirt go directly to expanding the Dolphinfish Research Program.

[Click to Here to Support](#)

Request Your Tagging Kit

Participation in the **DRP** helps collect information on many [research objectives](#).

Greater tagging activity helps boost data collection, and in

2019, anglers tagged the 3rd highest amount of dolphin ever for the program. Request your kit today to help us maximize data collection in 2020. [Click here](#) to request a kit. This year we are excited to include two circle hook jigs, provided by [Bird of Prey Fishing Tackle](#), in every kit to promote the use of circle hooks while trolling, sight-casting, or bailing dolphin. To purchase a kit to support the **DRP**, [click here](#).



The **Beyond Our Shores Foundation** is the official **501(c)(3)** founded to support and expand the **DRP**. In 2020, we are working to surpass 30,000 tagged dolphin for the program. Help us exceed this significant milestone by supporting our tagging program. Your donation will advance the expansion of the **DRP**, a leader in the conservation and research of dolphin, by helping to

purchase more tags to distribute to anglers, support our education programs, and improve fisheries data collection among recreational, for-hire, and small-scale commercial fishermen. [Click here](#) to donate today.

[Click to Donate](#)

Past Newsletters



Share this email:



[Manage](#) your preferences | [Opt out](#) using TrueRemove™

Got this as a forward? [Sign up](#) to receive our future emails.

View this email [online](#).

Dolphinfish Research Program, Beyond Our Shores Foundation PO BOX 3506 Newport, RI | 02840 United States

This email was sent to .

To continue receiving our emails, add us to your address book.

emma

[Subscribe](#) to our email list.

Platinum Sponsor



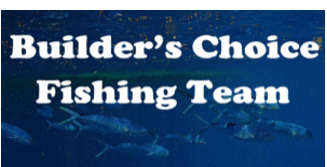
Gold Sponsors



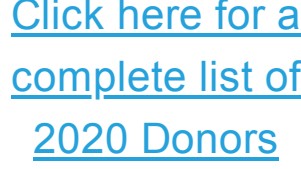
Silver Sponsors



Bronze Sponsors



Year-End Award Sponsors



Job Postings



The College of the Environment fosters existing and new collaborations between outstanding faculty, staff and students who are engaged in the study of: the solar system and Earth's dynamic land, water and atmosphere; the development and application of environmental engineering and technological advances; and the impact of policy and human actions on the environment, and the management of natural resources.

The School of Aquatic and Fishery Sciences (SAFS) is dedicated to sustaining healthy marine and freshwater environments. Our school comprises one of the largest and most diverse academic aquatic and fisheries sciences program in the United States. Our faculty conduct innovative research from the organism to the ecosystem scale, and are recognized leaders in aquatic biology, sustainable fisheries management, and aquatic resource conservation.

The School of Aquatic and Fishery Sciences values the strengths and professional experience that students, faculty, and staff bring to our community. We are committed to providing excellent education to all of our students, regardless of their race, gender, class, nationality, physical ability, religion, age, or sexual orientation. We are proud of the different roles that our students, staff, and faculty play in the community of the School and in the College of the Environment. We recognize that science is richer and the SAFS community is more vibrant when a diverse group of people participate the SAFS community.

The Gulf of Alaska (GOA) is a large and geographically complex region of the North Pacific Ocean, which has undergone regime shifts leading to persistent changes in environmental forcing and hence ecosystem reorganization. It is an area where major impacts of climate change are expected. Some of the projected impacts include warming of the surface water, ocean acidification, changes in sea level, and an overall reduction in ecosystem productivity. Further development of ecosystem models for the Gulf of Alaska is a priority for both evaluating climate change impacts and addressing other issues associated with ecosystem-based fisheries management. A spatially-explicit approach is considered necessary because spatial complexity occurs at multiple scales in the region. The GOA is characterized by a complex shoreline, a mosaic of benthic habitats, significant freshwater input from glacial run-off, and a shelf with multiple canyons and gullies.

The selected postdoctoral scholar will have a primary role in development of an Atlantis model for the Gulf of Alaska. The Atlantis model is a spatially-explicit, coupled physical-biological oceanographic model developed by Dr. Elizabeth Fulton (CSIRO, Ocean and Atmosphere Flagship). As an end-to-end ecosystem model, Atlantis is forced by high resolution physics and includes detailed representation of biogeochemistry, plankton and benthos dynamics, and growth, movement, and age-structured stock dynamics of fish and other higher-trophic-level species. The selected post-doctoral candidate will work closely with researchers at University of Washington and the Alaska Fisheries Science Center to synthesize available information for ecosystem modeling in the Gulf of Alaska. The Atlantis model will be calibrated and tested to meet performance standards. The Atlantis model will be used retrospectively to elucidate critical aspects of ecosystem structure and function, including the effect of the 2013-2016 marine heat wave, and to evaluate the system-level optimum yield for Gulf of Alaska groundfish, an important ecosystem reference point. Finally, the Atlantis model will be used to project ecosystem

structure and productivity under scenarios of future climate conditions in the Gulf of Alaska. This position is a 12-month position with the possibility of extension. Responsibilities Include:

- leading the development of an Atlantis model for the Gulf of Alaska.
- working closely with researchers at University of Washington and the Alaska Fisheries Science Center to synthesize available information for ecosystem modeling in the Gulf of Alaska.
- using the Atlantis model retrospectively to elucidate critical aspects of ecosystem structure and function
- evaluating the system-level optimum yield for Gulf of Alaska groundfish; and
- projecting ecosystem structure and productivity under scenarios of future climate conditions in the Gulf of Alaska.
- working collaboratively in a team setting and participate in group meetings; and
- preparing results and leading writing efforts for peer-reviewed publications and presentations at scientific conferences.

Postdoctoral scholars are represented by UAW 4121 and are subject to the collective bargaining agreement, unless agreed exclusion criteria apply. For more information, please visit the University of Washington Labor Relations website.

Required Qualifications

- PhD or foreign equivalent in Quantitative Ecology, Applied Statistics or a related field.
- Experience with ecosystem modeling.
- Analysis of spatial datasets, analysis using R.
- Superior written and oral communication skills.
- Ability to work in a collaborative setting.

Instructions

To apply please submit your application through Interfolio (<https://apply.interfolio.com/76343>) with the following: (1) A letter of interest detailing your skills and experience. (2) A curriculum-vitae including publications. (3) Three letters of recommendation. For questions about this position, including potential disability accommodations, please contact Katie Effert, at keffert@uw.edu or 206-685-6083.

Equal Employment Opportunity Statement

University of Washington is an affirmative action and equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, creed, religion, national origin, sex, sexual orientation, marital status, pregnancy, genetic information, gender identity or expression, age, disability, or protected veteran status.

Commitment to Diversity

The University of Washington is committed to building diversity among its faculty, librarian, staff, and student communities, and articulates that commitment in the UW Diversity Blueprint (<http://www.washington.edu/diversity/diversity-blueprint/>). Additionally, the University's Faculty Code recognizes faculty efforts in research, teaching and/or service that address diversity and equal opportunity as important contributions to a faculty member's academic profile and responsibilities (<https://www.washington.edu/admin/rules/policies/FCG/FCCH24.html#2432>)

Post-Doctoral Research Opportunity: Spatio-Temporal Analyses of New England Fish Species with VAST

PIs: Liz Brooks, Chris Legault, Charles Adams, Deborah Hart, Charles Perretti (Population Dynamics Branch at the Northeast Fisheries Science Center)

Salary: \$60,000/year

Duration: 2 year research opportunity, second year funds contingent on federal budget and satisfactory progress

Contact: For additional information, send email to: Liz.Brooks@noaa.gov

Summary: An opportunity to research the utility of VAST for combining multiple fishery-independent surveys and spatial covariates for use in stock assessment models through simulation and case studies. Particular emphasis on surveys and stocks in the Northeast U.S. region.

Research Problem: Fishery-independent indices play an important role in stock assessment, and inform the model of relative trends in the fish population. There are a variety of fishery independent surveys conducted in the Northeast region of the US: spring and fall bottom trawl surveys conducted by the Northeast Fisheries Science Center (NEFSC) with a spatial footprint from the mouth of the Bay of Fundy, New Brunswick (CAN) to Cape Hatteras, NC; a spring bottom trawl survey conducted by DFO on Georges Bank; invertebrate surveys that sample areas in the Mid-Atlantic Bight, Georges Bank, and the Gulf of Maine; and the NEAMAP and other state surveys which sample primarily inshore waters. For any given stock assessment, multiple fishery-independent indices may be incorporated, despite differences in spatial coverage and survey timing. Depending on the season and the stock, the small state surveys may provide information on recruitment and/or juvenile trends, while the larger scale NEFSC surveys inform on trends of mature biomass. The index trends have traditionally been design-based estimators from the stratified random sampling survey design (depth defines the strata), often scaled up to swept area and including experimentally derived catchability coefficients for some species. An alternative approach to deriving indices is model-based, which effectively ignores the survey stratification and attempts to standardize the annual trend by accounting for factors that explain significant amounts of variance, given assumptions about the statistical distribution of the data. Recent work has led to development of spatial modeling tools to estimate abundance (or biomass), with the ability to account for spatial and/or temporal autocorrelation, and to distinguish between habitat and catchability covariates (program [VAST](#)). This modeling tool has seen increased application in recent years at several science centers, and we aim to explore applications to survey data for fish stocks managed by the NEFSC, including simulation studies to develop best practice guidelines for this region. Topics for consideration include: use the simulation capability of VAST to explore the impact of combining indices with different catchability, selectivity, timing, and degree of spatial (or temporal) overlap; provide guidance on how to standardize for those differences; and explore whether the inclusion of additional covariates collected on the surveys (e.g, bottom temperature, habitat information where available, abundance of other species, salinity) improves index standardization and interpretation of big-picture trends that may not be observable when focusing on one species at a time in a stock assessment meeting.

Contact Information

President

Kim Anthony
5000 Old Pacific Coast Hwy
San Clemente, CA 92673
kim.anthony@aifrb.org

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

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

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
ISSN-8755-0075

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

Keystone

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

New England

Greg DeCelles
Stock Assessment Specialist
MA Division of Marine Fisheries
836 South Rodney French Blvd.
New Bedford, MA 02744
gregory.decelles@mass.gov

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



Donate to AIFRB via Amazon
Smile
Just follow the link!
[Donate today](#)