Dear Florida AFS members and friends,

I am happy to introduce myself to you as the current Florida Chapter of AFS president, since the May 2023 chapter meeting in which Chelsey Crandall’s illustrious tenure as president ended, and Angela Collins was elected as president elect.

The first thing I should do is to thank everyone for making the 2023 FLAFS meeting such a remarkable success. The meeting this May was record breaking (well, at least to the best of our understanding) in terms of the greatest number of attendees and abstracts submitted. The executive committee was especially excited to have attendees from such a wide variety of institutions from across (and sometimes even beyond) the state, and generally feedback regarding the Guy Harvey Resort in St. Augustine Beach was very positive. I want to take a minute to thank a number of folks who were especially critical to the success of this meeting. The entire executive committee was very helpful, and I personally am super grateful to Steve Beck who shouldered a large burden in working out the details of our stay with the Guy Harvey Resort, and without whom I can’t imagine the meeting would have gone nearly as well. Also I’d like to thank the student volunteers who made our raffle a (mostly) chumless success. Along those lines I’d also like to thank the sponsors of the raffle (and overall meeting), especially Ron Taylor for their generous donation. Finally, I would like to acknowledge the award-winners from the meeting:

Venue Master Award: Ryan Henry (for finding/contacting Guy Harvey Resort)
Jack Dequine Student Paper Award: Tala Bleau
   Honorable Mention: Adam Searles
Best Professional Paper: Elizabeth Mansfield
   Honorable Mention: Julia Byrd
Best Professional Speed Talk: Earl Lundy
Best Student Poster: Matthew Bernanke
   Honorable Mention: Olivia Markham
Best Professional Poster: Kirk Dunn
   Honorable Mention: Brandon Barthel
Lampshade Award: Mark Rogers (based on numerous interruptions)

If we missed you this past spring, I hope you can join us next year. Save the date for May 14-16, 2024, as we will be returning to the Guy Harvey Outpost for the 2024 Florida Chapter AFS meeting. The final piece of news I should point out is that our fantastic FAFS logo will change ever-so-slightly to remain in the good graces of the parent organization. This renders the Tervis mugs you received at the spring Florida meeting a collector’s item, so sip with care. I hope you have a restful and enlightening summer!

Sincerely,
Ed Camp
Recognizing Contributions to Fisheries: The Florida Chapter takes great pleasure in acknowledging Ron Taylor for his invaluable support to both our chapter and the state’s fisheries, including a generous $1,000 donation to the chapter this fall. Over the course of his 35+ year career, Ron’s dedication and expertise has significantly advanced our understanding of critical species, notably snook. We encourage you to watch this staff spotlight video from FWRI, which provides deeper insight into Ron’s illustrious career: Found here
**Committees Seeking members:**

**Award Committee**
Rich Caiteux/Outstanding Achievement Awards  
Eric Nagid  
Eric.Nagid@myfwc.com

**Continuing Education Committee**
Planning future continuing education workshops  
Allison Durland Donahou  
adurland@flsouthern.edu  
Jason O’Connor  
Jason.Oconnor@myfwc.com

**Marketing and Membership Committee**
New membership ideas in recruitment, retention, and reactivation of members  
Kerry Flaherty-Walia  
KFWalia@tbep.org

**Policy Committee**
Keep members informed on local to national policy issues on aquatic resources  
Ed Camp  
Edvcamp@ufl.edu

**Diversity, Equity, and Inclusion Committee**
Providing members with information on DEI  
Chelsey Crandall  
Chelsey.Crandall@myfwc.com

**Feature your research:**

**Shellcracker Newsletter**
Feature articles or other AFS content  
Kyle Miller  
Kylea.Miller@myfwc.com

**Website**
Updates, articles, content  
Jason O’Connor  
Jason.Oconnor@myfwc.com

**Student Scholarships and Travel Grants**
Assistance with student scholarships and future scholarship opportunities:  
Rottman Scholarship  
Dennis Punches Memorial Scholarship (West Palm Beach Fishing Club)  
Chuck Cichra  
Cecichra@ufl.edu

**Student Sub-unit**
Swag sales, blog updates, student chapter involvement  
Karli Corey  
Kc2625@mynsu.nova.edu

**Raffle/Silent Auction**
Assistance with raffle collections, auction items  
Amanda Croteau  
ACroteau@uwf.edu

**Events**
Florida AFS sponsored aquatic clean ups  
Joining current aquatic clean ups or begin your own  
Nick Trippel  
Nick.Trippel@myfwc.com

**OR!**
Submit your awful fish–related pun to the newsletter editor to win a prize. I promise the corniest of the fish jokes will find their way into a future newsletter.

**Examples:**

Did you know that the NFL has an obscure rule preventing athletes from owning pet ducks?  
It’s considered a personal fowl.

What did the cell say when its sister stepped on their foot?  
Ow—mitosis!

What do you call an organic compound with an attitude?  
A-mean-o acid
Oysters, microplastics, citizen science, and the Indian River Lagoon

Estuaries have been identified as hotspots of microplastic pollution because they are transitional zones where coastal freshwater and oceans converge. Microplastics (MPs, Fig. 1) are transported through estuaries by a dynamic series of forces such as surface flow, tides, and currents which influence MP abundances and trends. Plastic ingestion in marine biota has been documented in hundreds of species at varying trophic levels though species of particular interest are filter-feeders such as oysters, clams, and mussels. The Eastern oyster, *Crassostrea virginica*, is an estuarine species known to ingest MPs and face negative impacts on physiology. In 2018, Waite et al. recorded high abundances of MPs in oysters and surface water from Mosquito Lagoon, the northernmost portion of the Indian River Lagoon (IRL). This prompted a team of researchers from the University of Central Florida, Marine Discovery Center, FDEP Aquatic Preserves, and Florida Oceanographic Society to develop a study assessing MP pollution and trends in the 156-mile long IRL.

*Fig. 1. Microplastic fiber extracted from water (left) and bundle of synthetic and natural fibers extracted from an oyster (right).*
The project followed a year-long sampling design targeting IRL surface water and oysters. Water samples were collected monthly at 35 sites along the lagoon and oysters were collected quarterly from each of 12 reefs. All water samples were collected within 4 days and oysters collected within 1 week of each other to reduce spatial and temporal variation. To tackle this enormous task, researchers recruited citizen scientists from the community to aid in collecting the 2,090 1-L water samples needed for the study. Citizens were recruited through existing volunteer pools of agencies, social media posting, or word of mouth. Citizen recruits underwent MPs trainings where they were educated about MPs generation and pollution, scientific procedures used to sample MPs from surface water, and how to identify MPs once extracted. Trained citizen scientists were independently deployed to collect water samples each month at local sites.

Water samples were brought back to the lab and vacuum filtered to extract MPs for identification. Oysters were shucked to isolate tissue, chemically digested using potassium hydroxide, and vacuum filtered to extract MPs. Plastics were identified using microscopy and polymer composition was determined using ATR-FTIR spectroscopy on a subset of samples. Generalized linear models (GLMs) were used to determine trends in MPs abundance and determine which factors influence MPs abundance in oysters and water from the IRL.

Overall, 3,755 MPs were observed in 44% of lagoon surface water samples which had a mean density (± CI) of 1.47 ± 0.09 MPs/L. Central sites had the lowest MP abundance, on average, followed by the north, then south regions (p < 0.001 for all; Fig. 2). A total of 3,181 MPs were found in 70% of oysters from the IRL (n =1,402). Oysters had a mean abundance (±CI) of 2.26 ± 0.16 MPs/individual and density of 2.43 ± 0.52 MPs/g wet tissue weight. MPs abundance in oysters also varied between IRL regions as northern oysters contained less MPs than central and south oysters (p < 0.001; Fig. 2).
Models suggest tributaries are sources of MPs in the central and south lagoon, while the Sebastian and Ft. Pierce Inlets flush MPs out. These findings contribute to the ever-growing research suggesting oceans function as MPs sinks while coastal waters act as MPs sources. The south IRL is a hotspot for MPs, likely associated with proximity to urbanization, inlets, and the St Lucie River—the largest tributary to the IRL. Polyethylene terephthalate (PET) was the most abundant polymer (>50%) of MPs found in water and oysters from the IRL. PET, also known as polyester, is abundantly used in textile manufacturing and food packaging.

This research provides a more complete picture of MPs in the IRL and serves as a baseline for future studies investigating MPs. There is evidence of regional and small-scale spatial and temporal fluctuations in MP abundance in the lagoon. For more detailed information, the full publication is available at https://doi.org/10.3390/environments9100131. Over the period of this study, a total of 48 MPs trainings were held at partnering agencies and 84 citizens participated hands-on with water sampling, processing, and MPs identification. By the end of the project, citizen scientists contributed over 1,600 hours of their time to Indian River Lagoon MPs research.
President Chelsey Crandall called the meeting to order at 1600 hours and Steve Beck established a quorum with approximately 75 Chapter members in attendance.

Current officers, past-presidents, committee chairs, and several members of the Florida Chapter were in attendance: Dan Nelson, Chelsey Crandall, Ed Camp, Steve Beck, Jason O’Connor, Kyle Miller, Casey Murray, Amanda Croteau, Chuck Cichra, Chris Anderson, Kevin Johnson, Nick Trippel, Kerry Flaherty-Walia, Travis Tuten, Drew Dutterer, Summer Lindelien, Alexis Trotter and many more.

Chelsey then asked for and received approval of the agenda. After numerous membership requests to shorten the typical business meeting, as a time saving measure, a Chapter Business Update document was distributed to Chapter membership before the business meeting. That document is included as an appendix to these minutes.

**AFS and Southern Division AFS Business:**

Mark Rogers (President Elect, Southern Division AFS) commented on large meeting turnout relative to the SDAFS meeting and good job encouraging interaction among old new members.

**Chapter Business:**

Steve asked for and received approval of 2022 Business Meeting minutes.

Steve gave a brief update on the status of funds.

Past-President Dan Nelson then facilitated elections for chapter President-Elect. Candidates Angela Collins and Amanda Croteau. Each gave a bio about themselves and their vision as chapter president. Paper ballots were distributed, collected, and tallied by Dan Nelson.

**Committee Reports:**

Chelsey recognized committee members and briefly reviewed committee highlights (included in the Appendix below).
Awards:

Venue Master Award: Given to Ryan Henry for finding/initiating conversations with Guy Harvey Resort

Student Scholarships and Awards:

Chuck Cichra began his comments by mentioning that this is the 25th year the Rottmann Scholarship has been awarded. He also highlighted the increased student involvement over the years and how important it is for our Chapter. Chuck then gave the history of the Roger Rottmann Memorial Scholarship and summarized the recipient applications before announcing that Kaitlyn O’Neil (University of Florida) received the M.S. Rottmann award and Nicholas Castillo (Florida International University) received the Ph.D. Rottmann award. He went on to comment about how impressive students’ resumes and applications are these days, and how that (plus an increased endowment of the Rottmann fund) led to the separation of the award into a M.S. and Ph.D. level.

He also spoke about the student travel grants. Eight universities were represented by this year’s 21 applicants. All applicants’ meals and lodging were covered by the chapter. This will be Chucks last year doing travel grants and Rottman awards and suggested two people take over these duties.

Florida Chapter Awards – Eric Nagid presented the history of the Rich Cailteux Award, which is meant to recognize individuals for their career contributions to the fisheries profession and the Florida Chapter. Bob Heagey was then named the 11th recipient of the Rich Cailteux Award for his career with the Marine Fishery Independent Monitoring Offshore Program, koi aquaculture, and safety program development work with FWC and long history with the Florida Chapter (2 terms as President). There was no Outstanding Achievement Award this year.

Student Subunit Report:

Student Subunit President Nicholas Castillo began by promoting student research by discussing the Reefs to Rivers blog (most views in 2022), Shellcracker student highlight articles, and the Subunit’s Facebook and Instagram pages (most views in 2022). Nick discussed signing up for the 6th annual Sheepshead Shuffle. Nick then presented the newly elected officers for the Student Subunit: President: Karli Corey (NSU), Vice President: Cody Eggenberger (FIU), Secretary/Treasurer: Kelly Chase (UF), and University Liaison: Shakira Trabelsi (FIU).
Old Business:

Included in the Appendix below.

Installation of New Officers:

Dan Nelson congratulated Angela Collins on being elected as the new President-Elect. Ed Camp then presented a plaque to Chelsey Crandall for her time as Chapter President. A plaque will be sent to Nicholas Castillo for his time as Student Subunit President.

New business:

Surplus Funds:

Call for proposals for ideas of how we can spend money, after noting the Florida Chapter has roughly twice as much money as the entire Southern Division. Numerous suggestions were made, including: development of outreach materials, donations to other organizations/Southern Division AFS, construction of artificial reefs. It was noted that a sub-committee was formed in 2017 after hosting the International AFS meeting on how to spend surplus funds. The ExComm will review this material and decide on next steps, which will likely include a survey of membership to acquire new ideas.

Next year’s meeting venue/date:

Given that the 2023 meeting was in a new location, the ExComm has much to consider/evaluate and will notify Chapter membership regarding the 2024 meeting location.

Ed Camp thanked membership and adjourned the business meeting at 1700 hours.

Florida Chapter Meeting Statistics

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2023</th>
<th>Highest pre-2022</th>
</tr>
</thead>
<tbody>
<tr>
<td># Registered</td>
<td>77</td>
<td>162</td>
<td>132 (virtual 2021)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>97 (in person 2019)</td>
</tr>
<tr>
<td># Institutions</td>
<td>12</td>
<td>22</td>
<td>TBD</td>
</tr>
<tr>
<td>% students</td>
<td>40</td>
<td>33</td>
<td>TBD</td>
</tr>
<tr>
<td>Total Presentations</td>
<td>47</td>
<td>106</td>
<td>TBD</td>
</tr>
<tr>
<td>Oral</td>
<td>32</td>
<td>67</td>
<td>TBD</td>
</tr>
<tr>
<td>Poster</td>
<td>15</td>
<td>39</td>
<td>TBD</td>
</tr>
</tbody>
</table>
AFS and SDAFS UPDATES: Mark Rogers

Parent Society:
- Code of Ethics – there are consequences for misbehavior and everyone should feel safe and secure at AFS hosted conferences. Do not be intimidated to reach out to any officer, colleague, or mentor and report unprofessional behavior if something made you uncomfortable. That is unsustainable and unacceptable.
- New Officer voting will have concluded April 28, stand by for results
- Executive Director Doug Austen is retiring and AFS is conducting a search for the next leader
- Upcoming AFS meetings 2023—Grand Rapids, Michigan. 2024 - Honolulu, Hawaii. 2025 - Houston, Texas

Governing Board:
- Review of President-Elect Cecil Jenning’s draft for plan of work. Parent Society President’s vision.

Membership Committee:
- Same thing we struggle with in license sales: 3R’s (recruitment, retention, recession, and responsibility) I added a 4th (responsibility) related to Code of Ethics and DEI – Let Mark know if you want to engage
- Membership is in a decline… We need the next generation to step up or tell us why they aren’t.
- It’s a struggle because we don’t know how to reach non-AFS members at the Parent and Division levels. When you pay your Chapter dues at a meeting, it doesn’t make you an AFS Parent Society or Division member. Dennis Reicke’s emails from SDAFS don’t reach non-Division members even though there’s a ton he sends out from policy, to job announcements.
- I’m going to make an attempt to get a list from SDAFS Chapter Secretaries/Treasurers of all university attendees at State Chapter meetings over the last ~5 years so we can create a contact list of universities that may not have a subunit but have some form of fisheries program. Chapter membership is good, but Parent Society opens up a whole other level and network.
- Try to figure out where the gaps are for AFS involvement and commitment. Levels of interest and roadblocks.

Mark Roger’s goals as SDAFS President:
- Continue and follow up with engaging in communications with agency leaders regarding support for participation and activity in Technical Committees, meeting attendance, AFS participation, etc.
- Continue the quarterly meetings with Division Chapter leadership so we can explore if there are any needs from the Division or from AFS HQ. We want to know how we can help.
- Request that Chapters please look at Briefing Book to see what other Chapters are doing. There are some small things that can have big impact.
- Appoint a Liaison to Southeast Fishes Council – let Mark know if you have a nominee

Appendix to the Minutes of the 43rd Annual Business Meeting of the Florida Chapter American Fisheries Society
May 10, 2023

Membership

2022 Membership Report (Larry Connor):

<table>
<thead>
<tr>
<th>Membership Category</th>
<th>2021</th>
<th>2022</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>253</td>
<td>168</td>
<td>-85</td>
<td>-15.9%</td>
</tr>
<tr>
<td>Student</td>
<td>76</td>
<td>68</td>
<td>-8</td>
<td>-10.5%</td>
</tr>
<tr>
<td>Society</td>
<td>163</td>
<td>133</td>
<td>-30</td>
<td>-18.4%</td>
</tr>
</tbody>
</table>

Treasurers Report

2022 Account Balances (Steve Beck):

<table>
<thead>
<tr>
<th></th>
<th>Cash (MS, WF, PP)</th>
<th>Mutual Fund (Morgan Stanley)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2022</td>
<td>$ 38,530.42</td>
<td>$ 39,326.46</td>
<td>$ 77,856.88</td>
</tr>
<tr>
<td>December 31, 2022</td>
<td>$ 39,416.67</td>
<td>$ 28,024.50</td>
<td>$ 67,441.17</td>
</tr>
<tr>
<td>Difference:</td>
<td>$ +886.25</td>
<td>$ -11,301.96</td>
<td>$ -10,415.71</td>
</tr>
</tbody>
</table>

Rottman Memorial Scholarship Fund Report (Larry Connor): The Fund lost 4.0% in 2022; however, since its inception has shown a 5.9% annual rate of return.

Roger Rottmann Memorial Scholarship Fund
Balance Sheet 31 December 2022
Accrual Basis

Assets:

Franklin Income Fund A: $28,164.52
Morgan Stanley Dividend Growth Fund B: $12,287.49
Cash: $9,800.61

Total Assets: $50,252.62

Liabilities:

Unfunded 2022 Scholarship: $2,000.00

Total Liabilities $2,000.00

Total Assets – Liabilities $48,252.62
Committee Updates
May 10, 2023

Website
Committee Chair: Jason O’Connor
Action Items Completed:
• Added a DEI page
• Created a webform for the student travel grants
• Routine maintenance
Action Items in Progress/Pending:
• New page needed for the Dennis Punchers Memorial Scholarship
• Create a webform for Rottman Scholarship
Announcements:
• Committee pages? If any committees would find it valuable to have a dedicated page on the website to share information, let me know. We can also set up unlisted/password protected pages to facilitate storing and sharing files/documents among committee members.
• It would be nice to have a web committee rather than a single webmaster. This would allow the website to respond to chapter needs more rapidly and provide some measure of organizational resiliency in the event of turnover (to be clear, I’ve got no plans to step down, just looking to improve the way we’re doing things). If interested in serving on the website committee, contact Jason.

Newsletter continued
Committee Chair: Kyle Miller
Action Items Completed:
• Anyone that would like to share their research projects or volunteer efforts with the newsletter, I’d love to hear from you - Kyle

Continuing Education
Committee Chair: Jason O’Connor
Committee Members: Allison Durland-Donahou, Nick Trippel, Carissa Gervasi, Kerry Flaherty-Walia, Dan Nelson, Michelle Shaffer, Brittany Hall-Scharf, Josh Beaulaurier, Bridgette Froeschke, Rachel Liebman
Action Items Completed:
• Organized workshop for the 2023 Chapter Meeting – Introduction to Open Science for Fisheries Professionals – presented by Dr. Marcus Beck, Tampa Bay Estuary Program.
Announcements:
• THANK YOU, Dr. Beck for putting together and leading the workshop!
• All meeting participants are encouraged to attend (tomorrow, May 11th, 12:30-3:30), workshop is included with registration. Check website for link to workshop page which has more information.
• The Continuing Education Committee will be immediately following the conclusion of the business meeting. If anyone is interested in joining the committee for the upcoming year, please stick around.
• Reach out to Jason O’Connor or Allison Durland-Donahou for more information.
• Have a skill or information that other chapter members may benefit from? Please consider hosting a future workshop (either at the annual meeting or virtually)? Pitch your idea to the CE committee! We’ll help make it happen.
**Diversity, Equity, and Inclusion**

**Action Items Completed:**
- Initiated the new committee
- Created DEI page on the Chapter website
- Shellcracker articles published
- Created anonymous question and idea suggestion link

**Action Items in Progress/Pending:**
- Drafting manuscript on disability inclusivity in the field
- Initiating a “spotlight” series for the Shellcracker
- Drafting a Florida Chapter Dialogue Agreement

**Announcements:**
- Committee wants to remind members about the anonymous comment or suggestion form, available in the DEI section of our website

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**Marketing and Membership**

Committee Chair: Kerry Walia

**Questions or proposals for the Chapter:**
- Motion to merge this committee with the regular Membership committee
- Need for new chair
- Progress on new logo?

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**Policy Committee**

Committee Chair: Ed Camp

**Action Items Completed:** None

**Action Items in Progress/Pending:**
- Ongoing discussion and pending information pieces regarding potential changes to regulatory structure related to aquaculture

**Announcements:**
- Be aware that there are political discussions (senate and house bills) that if approved in some form would alter the structure for how aquaculture decisions are made within the state of Florida, leading to changes in both how FDACS and FWC operates.

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**Policy Committee Continued**

The policy sub-committee is asking some additional input from people especially well-versed in this issue, including Bob Heagey, Jeff Hill, and others to help us do a decent job describing these changes as they become more identifiable. Any outputs will be purely informative and the policy sub-committee does not intend to make recommendations for or against any measures being considered.

**Questions or proposals for the Chapter:**
- Provide additional background status of MS 222 as sedative for LMB

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**Raffle**

Committee Co-Chairs: Amanda Croteau, Geoff Smith, and Chelsey Crandall

**Action Items Completed:**
- Over $6,280 of items from 41 businesses and individuals were donated to this year's raffle and silent auction.
- The silent auction has a total estimated value >$3580
- The raffle has a total estimated value >$3200

**Action Items in Progress/Pending:**
- 100% of money raised by the raffle and silent auction, fund student travel awards so thank you for supporting our students!
- Buy raffle tickets!
- Remember the silent auction closes after the business meeting, so make sure to place your final bids!

**Announcements:**
- If you would like to be part of this committee, reach out to Amanda or Chelsey

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**Aquatic Cleanup**

Committee Chair: Nick Trippel

**Action Items Completed:**
- 6 cleanup events in the Fall 2022
- total trash removed this year: 3,214 lbs
- total trash removed since 2019: 9,691 lbs

**Announcements:**
- How much do we fund each year?
- Limit reimbursement/event, or limit number of events per year
2023 Raffle & Silent Auction

Thank you raffle and silent auction donors!

Thank you!

We received approximately $6,300 in donations from artists, guides, attractions, hotels, restaurants, businesses, and chapter members. We had 11 silent auction packages which included original artwork, fishing charters, and getaway packages valued at over $3,200. Congrats to all of our winning bidders!

Thank you to all our of donors and volunteers!
Together we raised $4276 to support future student travel awards to our annual meeting!

Raffle Committee: Amanda, Geoff, & Chelsey

Interested in volunteering or donating? Contact us acroteau@uwf.edu
Thank you to everyone who attended this year’s annual FAFS meeting in St. Augustine Beach, it was great to see the work being done by students around the state! President Nick Castillo welcomed new students and reminded the chapter of ways that they can support the Student Subunit, such as purchasing merchandise and the annual Sheepshead Shuffle. He then presented the newly elected officers for the Student Subunit: President Karli Corey, Vice President Cody Eggenberger, Secretary/Treasurer Kelly Chase, and University Liaison Shakira Trabelsi. Learn more about the new Student Subunit officers in this edition of the Shellcracker.

If you are a student and publish a paper, receive a fellowship/scholarship/award, have a story to share, or cool pictures from the field/lab – we want to hear about it! We are always looking to showcase student accomplishments and experiences through the FAFS newsletter, our Reefs to Rivers blog, and our Instagram. This is a great opportunity to bring attention to your research, provide guidance to other students, or just tell a story that you think is fun or interesting! If you have any updates/materials you'd like to share, please email flafsstudent@gmail.com at your convenience. Feel free to use flafsstudent@gmail.com as a repository for any accomplishments or other cool materials you would be willing to share!

Make sure to check out our student blog, Reefs to Rivers, which can be found at the link here:

https://flafsstudentsubunit.wordpress.com/
President
Karli Corey
MS Student at Nova Southeastern University
kc2625@mynsu.nova.edu

I am a relatively new addition to Florida and the fisheries community. I grew up in land-locked states, only having brief interactions with the ocean but it has always been the place I loved the most. In 2021 I completed my BA in Biology at Lewis & Clark College, where I worked in a neuroscience laboratory. I am currently a MS of Marine Science student at Nova Southeastern University in Dr David Kerstetter’s Fisheries and Avian Ecology Laboratory. My thesis will be assessing the physiological sensitivity of the Code Goby, a residential forage fish found in Florida Bay, to projected climate change conditions. Specifically, I am interested in determining if this species displays a higher tolerance to high water temperatures and low oxygen levels. This work may help to refine forage fish conservation targets within Florida Bay in the future.

Vice President
Cody Eggenberger
Ph.D. candidate at Florida International University
coeggenb@fiu.edu

I am a Ph.D. candidate at Florida International University in the Department of Earth and Environment under Dr. Jennifer Rehage. Broadly, my research interests involve the synthesis of movement, trophic, predator, and community ecology. More specifically, my dissertation research utilizes passive acoustic telemetry, stable isotope analysis, and fisheries independent monitoring sampling to assess the potential impacts that varied freshwater inflow regimes may have on recreational fishes in the coastal Everglades. During the mid-20th century, the development of South Florida (i.e. the C & SF project) resulted in significant alterations to the natural North to South flow of freshwater throughout the Everglades. Today, as efforts to restore the freshwater flow regimes throughout the Everglades continues via the Comprehensive Everglades Restoration Plan, an opportunity presents itself to further elucidate the relationships between recreational fish behavior and the dynamic environmental, prey, and predation risk landscapes they experience. Through my dissertation research I ultimately hope to add to the development of a predictive framework for how hydrologic variation, restoration, and climate change affect economically important fisheries.
Secretary/Treasurer
Kelly Chase
MS Student at University of Florida
kchase1@ufl.edu

Kelly is a Florida native who at a young age discovered his passion for the outdoors, especially all things fish. After graduating with his B.S. in marine science from Florida Gulf Coast University, Kelly began working as a fisheries biologist out of the Florida Wildlife Research Institute’s Charlotte Harbor field lab where he studies fish community dynamics and juvenile sportfish ecology. In 2022, Kelly began pursuing his M.S. in Fisheries and Aquatic Sciences at the University of Florida, examining the effects of habitat alteration on fish communities and the feeding ecology of juvenile Common Snook. When he’s not at work, studying, or conducting his research, Kelly can usually be found polling is skiff for tarpon and snook or driving around the state in the pursuit of a decent wave to surf.

University Liaison
Shakira Trabelsi
MS Student at Florida International University
strab002@fiu.edu

I am a South Florida native, born and raised. Spending most of my summers in Colombia as a child, my love for the outdoors especially aquatic creatures and habitats began early. I graduated in the spring of 2020 with a BS in Environmental Studies from FIU and worked in the Rehage Coastal Fisheries Ecology lab before deciding to pursue my masters. I’m passionate about ecotoxicology and the repercussions to fish from environmental contaminants.

My research focuses on investigating the health of Red Drum (Sciaenops ocellatus) throughout Florida’s estuaries and determining if pharmaceuticals are deteriorating the health of exposed Red Drum. We predict that fish exposed to higher concentrations and quantities of pharmaceuticals will have notable physical effects that can be seen through certain blood analytes. The results will help identify areas needing improvements in wastewater treatment, determine if these contaminants are deteriorating the health of species that are exposed, and inform stake holders on the true health of this valuable sportfish population.
In 1998, the Florida Chapter AFS established a memorial scholarship in memory of Roger Rottmann, one of the first fisheries biologists ever hired by the State of Florida University System. This scholarship was established to recognize outstanding students enrolled in Florida universities and colleges. Any student working toward a graduate degree related to the freshwater or marine fisheries sciences, is encouraged to apply. Scholarships were awarded this year: one at the Masters level and one at the PhD level. Below are the winners of the 2022 Scholarships.

Masters Level: 
Kaitlyn O’Neil  
University of Florida

PhD Level:  
Nicholas Castillo  
Florida International University

2023 Rich Cailteux Award

The purpose of the Rich Cailteux Award is to recognize individuals who have maintained a long-term commitment to research, management, and/or conservation of Florida fisheries and aquatic resources. This award aims to honor individuals for their career contributions to the fisheries profession and enhancing the visibility of the Florida Chapter. The Rich Cailteux Award is the highest honor Florida AFS may bestow upon an individual member or collaborating group.

Bob Heagey was named the 11th recipient of the Rich Cailteux Award for his career with the Marine Fishery Independent Monitoring Offshore Program, koi aquaculture, and safety program development work with FWC and long history with the Florida Chapter (2 terms as President).
Although Women’s History Month has passed, we want to acknowledge its importance in highlighting the achievements and contributions of women in fisheries science and research.

In this issue, we are spotlighting four women who work in FWC-FWRI’s freshwater fisheries long-term monitoring (LTM) program. Like many jobs in freshwater fisheries, the LTM field team has historically been male-dominated. However, for the first time in its 17-year history, women now make up the majority. We interviewed four of these trailblazing women, Jennifer Moran, Rachel Liebman, Destiny Beltran, and Chelsea Buescher, to discuss their journey in fisheries and their thoughts on how we can continue to broaden participation in our discipline.

First, let’s meet our interviewees:

Jennifer Moran is one of two crew leads for the FWC Freshwater Fisheries Research Long-Term Monitoring (LTM) team.

Destiny Beltran received her degree in Wildlife Biology from Humboldt State University. She has worked across the country in both wildlife and fisheries research and management.

Rachel Liebman has always loved all things water related and discovered her passion for fisheries back in college. She brings her enthusiasm across Florida while working on the LTM crew.

Chelsea Buescher worked as a full-time member of the LTM team from November 2017 to September 2022 and now works part-time. She assists field labs across the state with a variety of freshwater fisheries field sampling methods.
DEI Spotlight: The Superwomen of FWRI’s Freshwater Fisheries Long-Term Monitoring Team

Authors’ Note: We interviewed Jen and Rachel simultaneously via video conference – their answers are paraphrased from that interview and are NOT direct quotations. Destiny and Chelsea were not able to participate in that interview, so they submitted their answers to us in written form, which were copied directly into this article.

Tell us about your job in fisheries.

Jennifer Moran (JM): Our job on the long-term monitoring crew is to travel throughout Florida to help other offices collect fish and aquatic plant data. Our sampling methods cycle throughout the year. It starts in January, trawling for Black Crappie followed by collecting sportfish electrofishing samples (mainly Largemouth Bass) through April. We’ve also recently begun electrofishing in coastal rivers which vary throughout the year. May through September is our vegetation mapping season where we collect aquatic plant data using boat mounted transducers. October through December we do our community electrofishing sampling and some Black Crappie trawls.

One of the cool parts of our job is we get to work with a variety of offices. We were in Miami this past week, and we travel all the way up to Pensacola when they ask for help. We do a lot of work in central peninsular Florida too. We get to do some other projects in between and some report writing, but most of our work is field based.

Describe how you got to your position- what has been your education and career path?

Destiny Beltran (DB): I graduated from Humboldt State University with a B.S in Wildlife Biology. During my undergrad, I became a Natural Resource Volunteer with the California Department of Fish and Wildlife for two years. As a volunteer, I helped a local scientist with salmon and steelhead snorkel surveys. After I graduated, I was hired to continue to conduct salmon and steelhead snorkel surveys. From there, I worked a few seasonal positions for Colorado Parks and Wildlife. I worked as a boat inspector for aquatic nuisance species, and I worked as a fisheries technician. As a fisheries technician, I helped field spawn endangered trout species and conducted electrofishing surveys to estimate trout populations. I moved back to California and worked as a biologist to monitor and conserve endangered giant kangaroo rats in the Carrizo Plain. Before moving to Florida, I was a biologist for an environmental consulting firm and worked with endangered San Joaquin kit foxes on California solar farms.

Chelsea Buescher (CB): I received a Bachelor of Science in Fisheries and Wildlife with minors in Biology and Captive Wild Animal Management from the University of Missouri Columbia in 2015. I worked for the Missouri Department of Conservation for a year and a half before beginning my career with FWC.

Rachel Liebman (RL): I guess I’d like to think I’ve always been drawn to the water. My summer job in college was as a river rafting guide in North Carolina. But it didn’t really click with me until later in college that fisheries was my path. I randomly signed up for an ichthyology class and I did really well in the class. I was surprised that I liked it as much as I did. I also had no idea that fisheries was a career.

After graduating, I was looking for a job in fisheries or wildlife and got a position with the Louisiana Department of Wildlife and Fisheries (LDWF) doing fisheries outreach and education and I really enjoyed it. I learned a lot and got to travel throughout Louisiana. I helped with various freshwater and saltwater sampling and was able to see fisheries in the state as a whole. It was through that experience, helping other
fisheries sections that I knew I wanted to do fieldwork. That led me to look for jobs doing fieldwork and my current job really aligned with those interests.

JM: I have a bachelor’s in wildlife biology from a very small college in Maine. I really liked research and I wanted to get into that, but I didn’t want to confine myself to a box with wildlife, so I made an effort to take some fisheries classes. I did my undergrad thesis on fisheries and survivability of sunfish species in a local pond after tagging the sunfish in different ways.

Post-graduation, I worked at a call center for roadside assistance in Tennessee. In June 2015, I happened to get a call from a friend asking me if I was interested in a 3-month stint down in Florida setting fyke-nets with gators, snakes, fish, and other creepy crawlies. Two weeks later, I took a leave of absence to come down to Florida to start working on this fyke-netting project. After that seasonal position was over, they were like, “Well, is there anything else we can get you to do?” and three months turned into six months which turned into a full time OPS (i.e., non-salaried employee) position. I was the first female of the LTM crew and last year I became one of two crew leads. It was supposed to be three months but now I am going on eight years, so you can’t get rid of me that easy!

*What would you tell a young person (high school age) interested in pursuing a career in fisheries?*

DB: Don’t be afraid to ask for help and try to be a part of as many experiences as you can. So many people are willing to help whether it’s a ride along for the day, answering questions, or offering advice. There isn’t one path to take and learning what people do daily in their job will allow you to really understand the position and what you want to do! There are so many options, and the fun part is finding which one you like the most!

CB: I would say to get involved in fisheries-related activities in any way that you can and as early as possible to gain experience and knowledge about what fisheries scientists do. Volunteer your time with a beach or river cleanup, fishing event, citizen science events, or become an intern.

RL: Stay open-minded and do as many internships in college as possible. I didn’t know about fisheries until my last year of college. I loved my summer job being a rafting guide, and in a way, I wouldn’t trade those experiences for the world because I had the most fun. But I think a lot of opportunities would have opened up for me earlier if I had an internship. There are so many internships and seasonal positions, and some of those seasonal positions don’t require a degree. They just need people to help.

I recommend that if you see a job, even if you’re just in high school and you’re not necessarily going to apply for it, you can call the hiring manager and just ask, “How can I get to this job? What do I need to do in my life to get to this position?” I’ve done that a few times and it was very helpful!

JM: I think that interning or volunteering and networking can really help get your foot in the door. A master’s degree is something many jobs are looking at too. A lot of us on the LTM crew don’t have a master’s, so it doesn’t mean that you won’t have those opportunities, but it definitely does create more.

*Jen and Rachel had some additional comments here that we felt were relevant, particularly to people who are new to or considering entering the fisheries field:*

RL: Before I got this position, I interviewed for several field positions that I didn’t get. When I asked the hiring managers what I could do to improve, most of them said I needed boating experience. I didn’t grow
up boating. My family didn’t have a boat. Rafting is not considered boating. That was something that really held me back for a while. Even in this job, when I was hired, I had limited boating experience. I’ve learned a lot and I’ve gotten a lot more comfortable with the stuff that we do, but I don’t necessarily know what the answer is on how someone can get boating experience because I personally never found that until I got hired onto the LTM crew. But if you have an opportunity to get boating experience, you should absolutely jump at that, because I think it would make you a more marketable candidate.

JM: Yeah, I think there’s also patience involved with teaching anybody to do it. I know that I have been at boat ramps, and someone else at the ramp would be upset that there is a woman or another person struggling to back up in one go and it takes them a couple tries to get it down. And that person will make comments like, “Well, the guy should have just done it” or “They should have taught her better.” I think it’s that kind of mentality that really holds back a lot of people from learning how to do new things, because now you have the eyes of someone who is pressuring you into doing it. I know when I’m pressured, I just sit down and take a break. I do not like to be pushed, yelled at, or put on the spot. But it’s hard when you’re just starting and trying to show people that you’re competent and you feel like you have something to prove. I think for those that don’t have as much experience at the boat ramp, giving them that extra time is appreciated.

RL: We see a lot of couples out, and the husband will do everything. I think they don’t trust their wives to do it. And I’m like, “Wait, you could just teach them.” And they’ll come up with excuses like, “Oh, they’re a bad listener.” It seems like everyone is capable of it if they have the opportunity.

Tell us about a mentor who helped you get to your current position in fisheries.

DB: A mentor that really helped me was Sara. She was the Environmental Scientist for the California Department of Fish and Wildlife. I volunteered for her during college and after graduation was hired. She was so easy to talk to and made it easy to ask questions! I met her when I was still pursuing my B.S. She had also gone to school for Wildlife Biology and ended up in her fisheries role. We shared a similar background, and it made my transition into the real world after college easier. Her belief in me jump-started my career and I don’t think I would be where I am now if it wasn’t for her. She was my mentor, my supervisor, and will always be my friend.

CB: I don’t think I can pick just one individual who I consider as a mentor because many people have contributed to the knowledge and experience, I have gained in college, internships, volunteering, and in my previous fisheries positions that have helped me get to where I am today. All of them have helped me grow to understand and appreciate the diversity and importance of what it means to be a scientist in the world of fisheries.

JM: I’ve had a lot of mentors throughout my time here. I think when every person starts, sometimes you can feel inadequate or that the job is different than what you expected. And I remember that there was a biologist in a leadership position, Jay [Holder]…he had thoughts and opinions, especially about our crew. He’s seen the inception of the LTM crew and he and our old project leader, Eric [Sawyers], were best buds. Jay would call Eric and he would just complain about who came to help. It was all good-natured complaining, but one day, when I was volunteering between my seasonal stints, Eric was like, “Hey, I need to talk to you about something. Jay called, and I’ve never had a conversation like this with Jay before. He said that he really liked you. He thinks you’re a hard worker and he wouldn’t mind having you on the boat again.
At the time, it was high honor and praise. And I think I needed that because, as an OPS, you don’t get a lot of feedback. You just do your job and go home. And I was always waiting for criticism and wondering if I was doing a good job. I think that I came out of my shell after hearing that from someone I respected.

Through time, you get more mentors. I would say Kim Bonvechio is probably the most notable one for me. I think that I’ve now been a part of three publications with Kim. She’s always been encouraging, and she knows what to say because she’s been there. She is really great at offering advice and is always so encouraging and motivating. She also has so much on her plate, and she still has time to call and check in.

There are so many others I can call a mentor, I take a little piece of something from everyone I’ve worked with.

RL: Oftentimes in our regular duties, we don’t get a lot of feedback, and I can be very critical of myself. There was that one day where I was working with Susanna [Harrison] and I missed a bass and then ripped the net all at the same time. I’m like, “Oh my God, I’m such a screw-up.” We weren’t seeing that many fish at all, and so to see a big bass and miss it and get the net stuck and ripped, it was a lot. However, Susanna had a perfect response, “Oh, it doesn’t matter. It’s fine. It’s not a big deal. There’s more important things.” And I liked working with her because of that attitude. It is nice to get feedback, even when you mess up. Also, Jen is someone I look up to because she is on top of everything all the time. And she’s really trying to make everything as easy as possible for those of us on the LTM crew. She makes cheat sheets and gives us tips and tricks on everything.

Chelsea Buescher was also someone I looked up to because she had a really upbeat, positive attitude. She’s also this really petite girl who could do everything and make it look really easy. She was just so comfortable and confident in everything she did.

Why are efforts to make fisheries research and management more accessible to a wider group of people so important?

DB: Conserving and managing fisheries will always be important if we want our fish populations to continue to survive. It takes a lot of people to get that job done. The more accessibility there is to this field of study, the more people we have to continue this work. Our world and resources are for everyone, and everyone should have a chance to be a part of preserving it. Having different backgrounds and experiences just makes your team stronger. It offers a chance to look at problems and solutions in a different way than what you might have thought.

CB: Making fisheries more accessible to a wider group of people is so important because like the fish we study, we are all different in the ways we think, the way we act, and the way we interact with others around us, that can really help us understand and appreciate the complexity of not only our relationships with colleagues but also with our whole environment. When we relay fisheries research and management to different public groups, we can nurture their interest and curiosity of fisheries by promoting ways in which they can also be a part of research and management efforts.

JM: Everyone has a different view. The people who use these systems are not just one specific group of people. There are a lot of different users and stakeholders and being able to connect with them or provide information they need is very important. Not everything is one specific fish. There are plenty of fish in the
water, so to speak. So having unique viewpoints from different groups can be very beneficial in managing the relationships with these stakeholders.

**RL:** I think ultimately what we do is help manage fisheries for the public, not just a particular group of people. Maybe bass fishermen use the bass data more than everyone else, but it’s not just catered to them. It’s to help the fishery and to help the public best utilize the resources that we have. And having people from different backgrounds providing different perspectives helps to broaden our horizons, not just with the data we collect, but how we use the data. I think it’s important that those voices are represented.

Something I really took with me from my last job was that different cultures will also utilize resources differently. For example, people in Okeechobee view their resources differently than people in the Panhandle. The culture is different across the state, so I think having different voices included in fisheries management is important.

*What is your approach to understanding the perspectives of colleagues from different backgrounds?*

**DB:** I am a very social person who likes to create a comfortable and approachable environment for anyone I meet. I love getting to know new people, understand where they came from and learn about the experiences they have had. It is what makes each person so unique. The more you understand a person, the easier it is to understand how they work and how they view things. You are never alone in this field and having a strong foundation with those you work with will not only improve the relationships you have but build a stronger more well-rounded team.

**CB:** When interacting with colleagues from different backgrounds I like to keep an open mind by listening and asking questions to facilitate the conversation further. Diversity brings a uniqueness to fisheries that can allow us to think differently about our science in a way that we may not have realized before.

**RL:** I try to be observant, as much as I can. Each of us on the LTM crew works kind of differently and we’re a good blend of personalities. Our manager, Dan Nelson, has often mentioned how he picked people for this crew based on our personalities in addition to our skillsets to build a crew that would work well together, and I think it really shows. We do work well together. There haven’t been any real issues. It’s interesting because everyone has different experiences in our crew. I think it’s really cool to bring us all together and see value in the experience everyone brings to the table.

**JM:** Asking questions and trying to be patient with different personalities and backgrounds is very important. We all have something in common. We all have this enthusiasm and passion for the outdoors and enthusiasm and passion for fieldwork. But there are a lot of differences, too. To be able to learn from those different strengths that others have is really important. A lot of the approach is just asking questions, trying to learn, and trying to continue to grow as an individual as well as a team. Communication is key.