



Winter 2024

Shellcracker Newsletter



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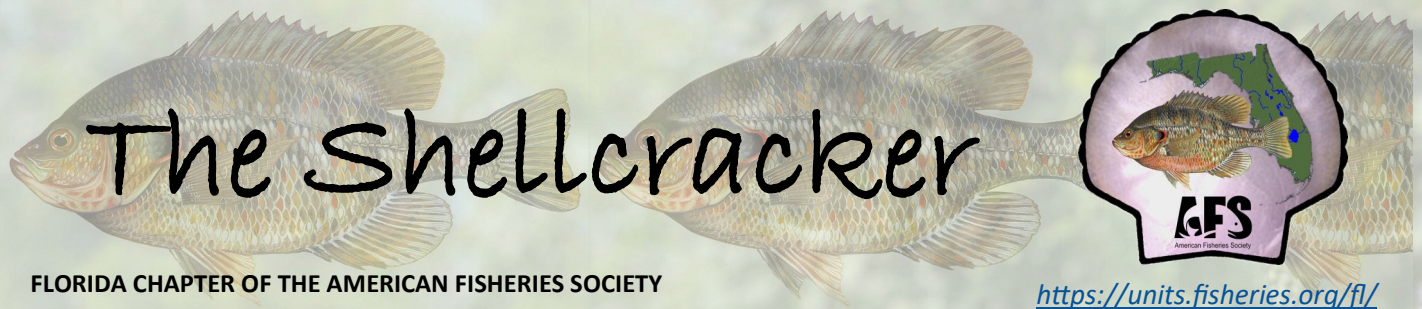
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FLORIDA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

<https://units.fisheries.org/fl/>

Winter 2024 President's Letter

Dear Florida AFS members and friends,

Welcome to (mostly) spring in Florida! Among other things, this means that the annual meeting of our chapter is coming up! There are lots more details in this issue, but here are some important information. The annual meeting will be held again at the Guy Harvey Resort in St. Augustine, Florida, this May 14-16th. The early registration deadline is coming up quickly (March 3rd), so register soon! This helps us get earlier, more accurate counts so we can iron out details on food, etc. It also may be worth trying to make reservations sooner than later, as these wound up becoming a bit tight last year.

About last year's meeting. I personally thought it was one of the best, if not the best Florida AFS meeting I'd been to. I am, obviously, quite biased because I was involved in planning it! But the primary reasons that I liked the 2023 meeting so much was actually not directly related to the venue. I thought the 2023 meeting was probably our most diverse meeting in terms of the types of talks we saw, from so many different institutions. Now, I don't think we actually track subject matter of talks (nor do I want to, for that matter), so it's possible that someone with much more experience than me here might be able to correct me. But what I remember was a pretty wide range of topics (including more marine ecology and management) and disciplines (more from the more anthropological side of fisheries human dimensions than before). I found the diversity of talks super informative and felt like I left the meeting having learned a lot (also tired).

I am hoping that we can repeat a similar diversity of talks at this meeting. Here is how I think we might all be able to help that happen. One way is, of course, to actually pass in abstracts about the projects we're working on. I'd especially encourage some of us more "senior" folks to consider giving a talk about something that they don't normally talk about! But the other main way I think we can encourage a range different fishy talks is by encouraging our colleagues to attend, especially if they aren't AFS members or regulars. I though that last year, the most productive thing I did for encouraging people to attend was personally inviting them. I mean, obviously everyone is invited, but you know how we sometimes just get in little habits about which meetings we go to, and which ones we don't. I think an email or text encouraging someone who does work related to fish—especially if they're someone who doesn't always attend FAFS—could be really helpful! It could wind up helping us again field a really nice group of diverse talks, and even maybe help you catch up with someone you haven't gotten a chance to for a bit!

Regardless of whether you feel like reaching out to anyone, I hope I'll wind up seeing you at the meeting. And, regardless of whether you come or not, I hope you are having a nice Florida spring!



Getting in Touch

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Upcoming Events

May 14-16, 2024: AFS Florida Chapter annual meeting Saint Augustine Beach

Deadline for symposia and papers: March 3, 2024

September 15-19, 2024: 154th AFS National Meeting: Honolulu, Hawaii

Interested in sharing content with the AFS Community?

For Florida Chapter AFS Website updates, articles, or content Email Jason O'Connor at Jason.OConnor@myfwc.com

Or Contact [Kyle Miller](mailto:kylea.miller@myfwc.com) with any articles or information that you would like included in the next AFS Shellcracker.

Getting involved!

Committees Seeking members:

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, retainment, 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

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Community and Engagement Committee

Providing members with information on DEI

Chelsey Crandall

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Shellcracker Newsletter

Feature articles or other AFS content

Kyle Miller

Kylea.Miller@myfwc.com

Website

Updates, articles, content

Jason O'Connor

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Student Scholarships and Travel Grants

Assistance with student scholarships and future scholarship opportunities:

Rottman Scholarship, PUNCHES Memorial Scholarship

David Kerstetter

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Student Sub-unit

Swag sales, blog updates, student chapter involvement

Karli Corey

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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:

How do scallops and oysters communicate?

A shell phone! (I hope someone appreciates this one, that joke is actually GOOD)

What do you give a sick lemon?

Lemon-aid

What do you call someone who abandons their diet?

A desserter



Dennis Punches in front of his boat:
"One Lucky Punch"

Increased Funds for Student Travel Grants!

By: Steve Beck

We would like to share with you the exciting news that the West Palm Beach Fishing Club (WPBFC) has offered a continuing donation of \$5,000 per year to help cover student expenses to attend American Fisheries Society meetings. This is made possible through the Punches Family in honor of Dennis G. Punches. This funding more than doubles our typical annual budget for student travel, therefore, these grants will now be known as the Dennis G. Punches Student Travel Grants. **Many thanks to the WPBFC and the Punches Family!**

A few words from the WPBFC:

"The West Palm Beach Fishing Club's charitable foundation is honored to provide these annual travel scholarships to graduate and/or undergraduate members of the Florida Chapter of The American Fisheries Society. Mr. Dennis G. Punches was an avid angler who cared deeply about the marine environment and had a sincere desire to help students pursue their educational goals. His upbeat and optimistic spirit served him well, both in personal relationships and in business ventures. He strove to make his dreams and the dreams of others come true. It is in this spirit that these awards are presented in his memory."

*Tom Twyford, President
Palm Beach County Fishing Foundation*

A little history of the Florida Chapter's funding of student travel: Back at the turn of the millennium, Chuck Cichra first proposed the idea of covering student costs to attend the annual Chapter meeting. The method chosen to raise funds was a raffle and silent auction. This required dedicated volunteers to organize the raffle/auction. A list of these organizers is below, and we all should acknowledge their numerous hours of service to the Chapter and students. These Chapter members, and many more not listed, track down donations for raffle prizes for months before the annual meeting, compile prize packages, assemble a team of students to sell raffle tickets at each meeting, and then run the raffle/auction. Raffle funds raised at each meeting create the budget for next year's student travel grants. Students apply for these grants, and Chuck Cichra has reviewed all applications since they began over 20 years ago. Now that Chuck has retired, the mantle has been passed on to Allison Durland Donahue and David Kerstetter. This event is one of the major highlights of the annual meeting, and everyone should be aware of the tremendous work that goes



into making them happen. **So a big thank you** to the current and former raffle/auction team members. Contact the current lead organizer (Amanda Croteau) if you are interested in helping out in the future. While we have typically been able to fund all student applicants with raffle/auction funds, with the addition of WPBFC/Punches Family funds, the Chapter will be able to fund more students than ever before and help advance their fisheries careers!

Past/Present Raffle/Auction Organizers (Cheers!...and credit to Andy Strickland for compiling):

2024 Amanda Croteau, Chelsey Crandall, & Geoff Smith
 2023 [Amanda Croteau, Chelsey Crandall, & Geoff Smith](#)
 2022 Amanda Croteau, Chelsey Crandall, & Geoff Smith
 2021 Amanda Croteau, Chelsey Crandall, & Geoff Smith
 2020 Amanda Croteau & Chelsey Crandall
 2019 Amanda Croteau & Chelsey Crandall
 2018 Andy Strickland & Alan Collins
 2017 Andy Strickland & Alan Collins
 2016 Andy Strickland & Alan Collins
 2015 Andy Strickland & Alan Collins
 2014 Andy Strickland & Alan Collins
 2013 Alan Collins
 2012 Janice Kerns & Alan Collins
 2011 Andy Strickland & Alan Collins
 2010 Andy Strickland
 2009 Andy Strickland
 2008 Andy Strickland
 2007 Bridgette Tiffany
 2006 Bridgette Tiffany
 2005 Tom Maher & Bridgette Tiffany
 2004 Tom Maher & Bridgette Tiffany
 2003 Tom Maher
 2002 Tom Maher
 2001 Tom Maher & Ron Taylor



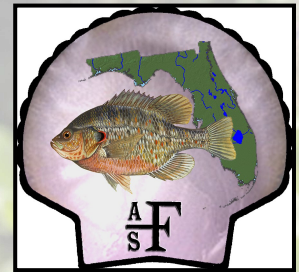
44th Annual Meeting of the Florida Chapter American Fisheries Society



May 14-16, 2024

Guy Harvey Outpost Resort

St. Augustine, FL



We invite you to submit abstracts for the 44th annual meeting of the Florida Chapter of the American Fisheries Society. The meeting will take place May 14-16 at the Guy Harvey Resort in St. Augustine Beach. We hope you can join us! **Registration is OPEN!** The meeting format will be similar to previous years, notable changes include: single occupancy lodging available, tiki-bar socials (sorry no bonfire, but there are multiple gas firepits), and a beach!

The symposium topic will be:

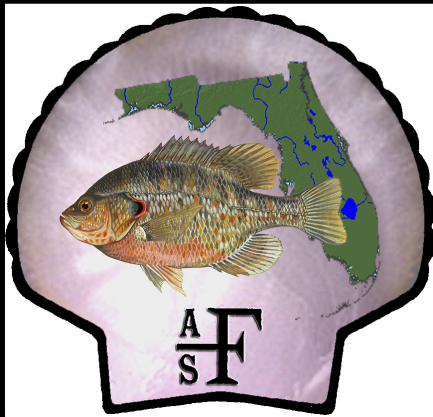
“Restoration: The Role of Fisheries Science in the Evolution and Evaluation of Restoration Initiatives.”

The word “restoration” can be interpreted in a variety of ways. In aquatic environments, restoration initiatives are generally focused on “improving” something, generating questions that are of interest to fisheries science at almost every level. What are some of the tools being used to achieve a “restored” state? How are our tools evolving? Importantly, how are we evaluating restoration efforts – and what does success look like? The 2024 FAFS symposium invites a broad spectrum of talks related to any interpretation of this topic, but some example topics include restoration through management strategies, production (or removal) efforts, and evaluations of system responses to restoration efforts (through monitoring or other methods).

We encourage submissions relating to the symposium topic but also welcome and accept submissions relating to any other aspect of Florida fisheries.

Deadline for abstract submission and early registration:

Sunday, March 3rd, 2024



AMERICAN FISHERIES SOCIETY

FLORIDA CHAPTER

ANNUAL MEETING INFORMATION

MAY 14-16, 2024

Meeting Information

Meeting Details

The 2024 meeting will be held at the Guy Harvey Resort St. Augustine Beach. The address for the Resort is 860 A1A Beach Boulevard, St. Augustine Beach, FL 32080. Maps and directions will be available in the next issue of the Shellcracker or can be found on the Guy Harvey Resort Website at <https://guyharveyresortstaugustinebeach.com/>

The meeting's schedule of events will be similar to past meetings. We will begin in the afternoon on Tuesday, May 14th at 13:00 with the presentation of contributed papers. The poster session will take place following dinner on Tuesday evening. The **'Restoration: The Role of Fisheries Science in the Evolution and Evaluation of Restoration Initiatives'** symposium will start on Wednesday morning. The business meeting and raffle will follow dinner on Wednesday night. We will hear more contributed papers on Thursday morning, followed by lunch and the presentation of awards immediately following lunch.

Registration

Registration period opened Jan 1, 2024. The link for online registration will be provided via email and will also be in the January Shellcracker. Registration includes all meals. State employees can use P-Cards to pay for registration, but cannot request per diem during travel reimbursement. Registrations will still be accepted at the meeting (late fees applied). We can accept VISA, MASTERCARD, AMEX, DISCOVER, cash, or check at the meeting.

Registration Options:

Full Meeting Registration (May 14-16): \$235

Single Day Options (Select all that apply):

May 14: \$85

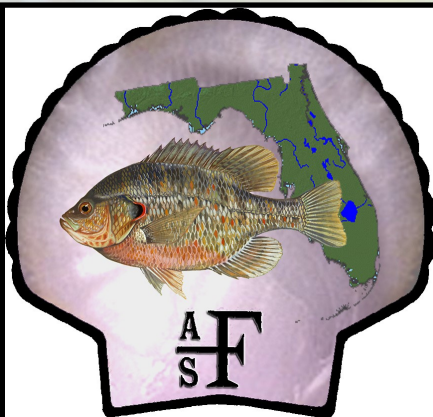
May 15: \$125

May 16: \$60

This link to the registration website will also be made available on our chapter's website at <https://units.fisheries.org/fl/>. There will be no mail-in registration forms this year, however, you can still mail a check for your meeting costs.

Lodging

A block of rooms has been reserved for this event and **you must make your own lodging arrangements with the Resort**. There are single or double bed options available for \$140 per night, and you must mention you are attending the American Fisheries Society meeting to get this rate.



AMERICAN FISHERIES SOCIETY

FLORIDA CHAPTER

ANNUAL MEETING INFORMATION

MAY 14-16, 2024

Meeting Information

Second Call for Presentations

Abstract Submission Process

Abstracts will be submitted online via the [Abstract Submission Form](#) on the Florida Chapter website. [Florida Chapter Meeting Abstract Submission | Florida Chapter \(fisheries.org\)](#)

Abstract Submission Form Open: January 1, 2024

Abstract Submission **Deadline** (Oral and Poster Sessions) : March 3, 2024

Oral Session:

Speakers will be given 20 minutes for talks (15 minutes for presentations and 5 minutes for questions and/or discussion). We will have PowerPoint on a laptop capable of accepting your presentation on a flash drive or other device.

Important note: Please use **widescreen PowerPoint slide format** for all presentations.

Poster Session:

All posters will be presented on Tuesday evening, May 14th and can be left up for the entire meeting. Posters should be no larger than 150 X 100 cm (60" X 40"), but they can be set up either as portrait or landscape format on an easel.

Opportunities for student support

As in previous years, student travel awards will be available for the annual meeting. The recipients will be notified by early February to allow for early registration. Master's and doctoral students are also eligible for the Roger Rottmann Memorial Scholarship. More information and the application materials are available on page 12 of the Newsletter.

2024 Student Raffle

We need your help to make this meeting's raffle a great one. If you are interested in helping or donating items, please email Amanda Croteau (acroteau@uwf.edu) or Chelsea Crandall (Chelsey.Crandall@myfwc.com). Remember all proceeds fund our student travel grants for the following year's meeting. Please contact us to get involved!

We look forward to seeing everyone in St. Augustine Beach for our 2024 annual meeting!

ANNOUNCEMENT: The Diversity Equity and Inclusion (DEI) committee is now the Community and Engagement Committee (CEC). We made this name change to better reflect the goals and actions of the committee, but our mission of promoting inclusion and a safe and welcoming professional community remains the same.

Featured : Community and Engagement Committee (CEC)

Making a career in fisheries more accessible to people with disabilities through more inclusive job announcements: opportunity for reflection

Authors: Casey Murray, Kim Bonvechio, Chelsey Crandall, Amanda Croteau, Susanna Harrison, Kristie Perez, Michelle Shaffer, Quenton M. Tuckett

Florida Chapter of the American Fisheries Society Community and Engagement Committee

Abstract

Working in the fisheries profession can be physically taxing because these jobs often take place in adverse environments and can demand strenuous activity. The taxing nature of the fisheries profession can also be a barrier to entry for persons with physical disabilities. However, the fisheries profession is expanding, and the diversity of available jobs is increasing. Our objective was to examine job announcements on the Texas A&M Natural Resources Job Board to determine whether job descriptions can be a barrier to entry in the fisheries profession. We also give modest recommendations for how job announcements can be more inclusive to persons with physical disabilities. Most fisheries jobs included requirements that could limit entry for persons with physical disabilities, which was especially pronounced for positions that would be considered entry level. The most common requirement was heavy lifting, but other barriers also included the ability to work in adverse weather conditions and visual/auditory acuity. In some cases, these requirements may be practical, and even necessary, and therefore we don't expect they will be eliminated. We instead suggest that job descriptions be reviewed to only include skills that are truly required for the respective position and to utilize more inclusive language. We encourage all Florida Chapter of the American Fisheries Society (FLAFS) members to continue to reach out to the Community and Engagement Committee with suggestions on how to make our fisheries community more welcoming to all.

Introduction

The Community and Engagement Committee (CEC; formerly the DEI Committee) of the Florida Chapter of the American Fisheries Society (FLAFS) was created in April 2022. The CEC's mission is to understand the challenges affecting engagement and inclusion within our chapter and the fisheries profession, increase the awareness of our membership regarding these topics, and suggest strategies to address these challenges. Shortly after formation, the CEC requested anonymous feedback from chapter members as to what questions or concerns they may have and what the committee can do to make this FLAFS a more welcoming professional society. Specifically, we asked members to "Fill out our anonymous comment form and we will try to address common questions and concerns about diversity-related topics in a future Shellcracker article". Through this comment form we received feedback that disabilities in the fisheries profession may be ignored or not considered in diversity and inclusion efforts. This article is a response to this feedback from FLAFS membership.

Many people pursue a career in fisheries or natural resources because it provides ready access to the outdoors. Coincidentally, there is concern that there are constraints to participation in recreational fishing for people with physical disabilities (Freudenber and Arlinghaus 2009). Similar barriers to persons with physical disabilities might also limit entry for aspiring fisheries

professionals, as entry level positions may be more likely to be field-based and require strenuous activity. Thus, for some, it may be difficult to get their foot in the door.

According to the Americans with Disabilities Act of 1990 (ADA), a disability is defined as “a physical or mental impairment that substantially limits one or more major life activities.” Here, we focused on physical disabilities, but the disability community is diverse and includes those with impairments that are often not visible. It is also important to note that not all disabilities are permanent, and the degree of disability exists along a continuum. People with disabilities are often seen as “liminal” – in a space somewhere between health and illness – and viewed in many ways as “other” (Marks 1997). Yet, the disabled community represents the largest minority group in the United States. The ADA estimates that up to 27% of Americans have a disability, and that more than 30% of Americans over age 65 have a disability. The truth is that many of us will become disabled at some point during our working years. From vision and movement impairments to those that affect communication, social engagement, and learning, it is important that we educate ourselves, raise awareness, and work towards a more inclusive profession.

Given the expanding roles and opportunities in fisheries science and management, it is important to ensure that job postings clearly state accommodations for those with disabilities and limit certain words and phrases that could be exclusionary. Job postings for fisheries positions can be both welcoming and exclusionary depending on the usage of certain words or phrases. For example, job advertisements can indicate an applicant “must” have certain abilities; however, not all jobs in the fisheries profession require these abilities. Examining the prevalence of exclusionary language in job postings impacting persons with physical disabilities can reveal where we might do better with job descriptions to not push otherwise qualified persons away. Our specific objectives were to 1) determine whether job advertisements in the fisheries profession include language that might be a barrier to entry for persons with a physical disability and 2) provide guidance on job advertisements that can be both inclusive but also communicate reasonable expectations for the position. We examined job announcements posted to a popular natural resources job website to meet these objectives.

Methods

We reviewed the job openings posted to the Natural Resources Job Board, which is hosted by the Rangeland, Wildlife, and Fisheries Management Department at Texas A&M University (jobs.rwfm.tamu.edu). The Natural Resources Job Board is a free job hosting service and the job announcements are created by the hirer (i.e., they are not aggregated from other sites). According to the posting guidelines, the job board hosts jobs related to “aquaculture, wildlife, fisheries, environment, ecology, natural resources, conservation, biological sciences, life sciences, and outdoor recreation”. Posts included a variety of headings, such as date posted, location, employment category, salary, and a description of the position. Job postings on the Natural Resources Job Board were examined because the posts are easily accessible, the site is a very popular job hosting site for natural resource jobs (typically > 1,000 jobs openings), and posts are retained for up to one year. By comparison, just 35 job openings can be found on the American Fisheries Society (AFS) website as of November 27, 2023 (jobs.fisheries.org). Basic job posts at AFS, which are carried for 30 days, cost \$150.

We used the keyword “fisheries” as a search term on the Natural Resources Job Board on March 20, 2023. This search returned 347 job postings, some of which were duplicate posts. After removing duplicate job posts, we evaluated approximately half of the remaining posts (159) due to time constraints on the part of the researchers. From a recent search (November 27, 2023) using the same search term (“fisheries”), jobs in the fisheries profession were approximately 13% of the total job postings (191 of 1,450).

After copying the job postings, we examined the job postings individually for several key words and phrases which could affect employment of people with disabilities. We focused on the following categories: 1) lifting heavy objects 2) operating heavy equipment (e.g., boats, trailers, snowplows, etc.), 3) familiarity with weapons and explosives, 4) visual and/or auditory acuity, 5) ability to swim, 6) ability to hike, possibly long distances, 7) outdoor camping, 8) working long hours, 9) primarily field based, and 10) adverse weather conditions. Because the job postings

utilized different language to describe the job requirements, we classified the phrasing for each of the categories into a three-point scale where 0 = not mentioned or indicated, 1 = mentioned or inferred but not required, and 2 = specifically mentioned to be required.

We then determined whether entry level positions with fewer educational requirements included more physical barriers. The sum of physical requirements (number of categories with score = 2) was analyzed using analysis of variance separately for employment category (e.g., temporary/season; faculty) and education requirement (e.g., high school; PhD) as independent variables. For analysis of employment category, post-doctoral associate was indicated for just one job and was removed from the analysis. Jobs where the requirement for education was not indicated (11 total jobs) were removed from analysis of education requirements. Tukey's Honest Significant Difference was used as a post-hoc test and significance was set at $\alpha = 0.05$.

Results

Most jobs were classified as full-time; a significant minority were classified as temporary or seasonal (Fig. 1A). There were few job openings for internships, graduate assistantships, post-doctoral researchers, or faculty. Job opportunities were dominated by the western U.S., including the states of Idaho (27 opportunities; Fig. 1B), Washington (13), California (12), and Oregon (OR). There were just four job opportunities located in the state of Florida.

Most job opportunities (130; 82%) had at least one requirement that could be a barrier to entry; a total of 29 job opportunities (18%) had no requirements that might be a barrier to persons with disabilities. All categories were represented in at least one job posting, including the requirement for experience with weapons or explosives (Table 1). A significant minority of job postings required heavy lifting (44%; Table 1), followed by expectations for adverse weather (43%) and hiking (34%). Jobs that required heavy lifting often specified up to 50 pounds, but several also indicated a requirement for lifting up to 100 pounds.

There were more physical requirements for temporary employment than other employment categories ($F_{4,153} = 8.29$; $P < 0.001$; Fig. 2A), and, in general, physical requirements were greater for employment categories that required less experience. The relationship between physical requirements and educational requirements followed a similar pattern, jobs with fewer educational requirements also had more physical requirements ($F_{4,143} = 5.11$; $P < 0.001$; Fig. 2B).

When examining the larger dataset (347 job postings) for only those located in Florida, most job announcements originated from FWC and 5 of 18 included one or both of the following statements: "The State of Florida is an Equal Opportunity Employer/Affirmative Action Employer, and does not tolerate discrimination or violence in the workplace" and/or "Candidates requiring a reasonable accommodation, as defined by the Americans with Disabilities Act, must notify the agency hiring authority and/or People First Service Center (1-866-663-4735). Notification to the hiring authority must be made in advance to allow sufficient time to provide the accommodation".

Discussion

Our review of job announcements on the Natural Resources Job Board found that most announcements had one or more requirements which could be considered a barrier to entry into the fisheries profession for people with physical disabilities. In particular, and perhaps unsurprisingly, entry level positions had more physical requirements. We could not determine whether these requirements follow actual job duties for the position, or, instead, boilerplate language used for a variety of jobs. Fisheries professionals can be found in potentially dangerous situations where safety and ability are critical (Berry 1996). Thus, these requirements can often be practical, born of experience working under challenging conditions. We don't argue for the elimination of requirements, which may ultimately affect inclusion. We instead suggest that the hirer review job descriptions to determine whether the requirements are still necessary. Our strongest suggestion is one that is simple: we should take a moment to reflect on the requirements and language used in job descriptions.

The fisheries profession has become increasingly interdisciplinary due to the types and breadth of skills required to address the complex problems in aquatic ecosystems today. No single

person can or should master all these skills, and teams benefit from a more diverse perspective and professional background. Jobs in the fisheries profession thus require skills in a variety of areas including those that predominantly take place in the laboratory and office, including sample processing, designing, and managing fish surveys, and scientific communication. Emphasis on skills beyond field work was revealed by a survey of AFS members (McMullin et al. 2016). Instead of field work experience, respondents indicated critical thinking skills and experience with written and oral communication were the most important skills. However, many of these jobs may not be at the entry level, and employers in the fishery profession indicate that entry-level hires were less prepared for the job when compared to survey responses from students and the faculty that train them (McMullin et al. 2016). Fisheries job advertisements could emphasize the importance of critical thinking and communication more in their entry-level jobs to limit focus on phrases and skills that could be exclusionary.

Many of the job advertisements required some form of physical demand, with the most prevalent requirements including lifting heavy objects (44% of listings) and being able to work in adverse weather conditions (43%). These requirements may not come as a surprise since much of the work in fisheries takes place outdoors, often on boats. These aspects of fisheries jobs are probably a major influencing factor for entry into this field. However, placing these physical limitations on job applications may also be a major deterrent for entry into fisheries. Employers that write these job descriptions must consider the true requirements of these jobs; does every employee need to be able to lift over 50 pounds? Can the work environment be adjusted to accommodate a variety of people? What skills are truly necessary for this job? The language used in these job descriptions may act as an additional barrier to entering the fisheries workforce due to the use of exclusionary and uncompromising words. We suggest that employers thoroughly review their job descriptions and only include skills that are truly necessary for a particular position.

Categories	0	1	2
Heavy lifting	55% (87)	1% (2)	44% (70)
Operate heavy equipment	67% (106)	5% (8)	28% (45)
Weapons/explosives	99% (157)	0% (0)	1% (2)
Visual/auditory acuity	44% (70)	23% (37)	33% (52)
Swimming	84% (132)	6% (10)	11% (17)
Hiking	59% (94)	8% (12)	34% (53)
Camping	77% (122)	6% (9)	18% (28)
Long hours	52% (82)	16% (25)	33% (52)
Field based	28% (45)	42% (67)	30% (47)
Adverse weather	39% (62)	18% (29)	43% (68)

Table 1. Categories of physical requirements assessed from job postings at the Natural Resources Job Board. Categories were scored on a three-point scale where 0 = not mentioned or indicated, 1 = mentioned or inferred but not required, and 2 = specifically mentioned to be required. Values are shown as percent in 0, 1, or 2, and number of jobs in parentheses.

The question remains, however, do our chosen job boards provide guidance on how job announcements might be more inclusive? Specifically, what language is included on job posting websites and are physical disabilities mentioned? The Texas A&M Natural Resources Job Board provides the following guidance in a section titled “What We Believe”:

“Texas A&M University is committed to enriching the learning and working environments for all visitors, students, faculty, and staff by promoting a culture that

embraces inclusion, diversity, equity, and accountability. Diverse perspectives, talents, and identities are vital to accomplishing our mission and living our core values. We do our best to make sure all jobs posted on the Job Board adhere to these standards.”

This language is quite general, mentioning perspectives, talents, and identities, but doesn’t specifically mention physical disabilities. While we did not review job announcements from the American Fisheries Society job board, it is worth examining recommendations because of our affiliation with the society. The AFS job board includes the following language regarding job postings:

“Job submissions with language that may be perceived as discriminatory on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, and/or veteran status will not be approved”.

Here the AFS job board mentions disability, generally, and also notes that job announcements that may be discriminatory will not be approved. However, job announcements can be both non-discriminatory and non-inclusive.

Marks (1997) challenges us to change our focus from the disability to the disabling environment and to learn to live (and work) in an environment with a larger range of differences. In this same vein, we can commit to taking steps to adapt our environment to make fisheries more accessible to people of all abilities, rather than expecting people to change to meet the traditional working environment. Significant advances in technology provide promising avenues for inclusion of people with disabilities to fulfill many fisheries roles. We can ask ourselves, “Are there ways to make our fieldwork, lab work or computer work more accessible?” By embracing technology, such as text-to-speech software, AI applications for virtual data collections (e.g., video, sound), and alternative working arrangements (e.g., remote work, virtual meetings), we can open the door to people with disabilities. We can be open to learning and listening to people with disabilities in our field and never assume we know what they can or cannot do, even when it involves traditional fieldwork. Often, potential barriers can be identified and addressed, so by opening our minds to alternative ways of doing things, we can all benefit.

We recommend the following updates and considerations for fisheries job advertisements to help promote a more inclusive job culture that does not discourage people with physical disabilities from applying. It is often the case that job advertisements are recycled for posting convenience, so it is important to take a moment to reflect on the template used for a job posting. Important aspects of that template to consider include; 1) Are the physical requirements for that job included in the template still critical to that position?, and 2) Does the template include general language on the protection of worker rights for people with physical disabilities (see paragraph 2 in discussion)? Some job requirements may exclude people with physical disabilities, such as ‘lifting 100 lbs’. However, these job positions evolve over time and a skill requirement may no longer be critical to the position. Our final recommendation to help make job advertisements more inclusive for people with physical disabilities is to make some minor changes to the language used in that job posting. Specifically, try to avoid words that imply a physical demand, such as carry, lift, speak, hear, stand, or type if it is not necessary to the job or can be addressed with employer accommodations. Instead substitute words with more inclusive language such as transport, operate, communicate, signal, stationary position, or record. For example, instead of using the phrase, “must lift 100 lb objects at the job site” use “must transport large objects at the job site”. Finally, some terms and phrases should be totally avoided in job advertisements, such as handicapped or crippled, and “seeking able-bodied individuals”. Considering these few aspects in a fisheries job advertisement can help create a more inclusive work culture for people with physical disabilities.

We were pleased to receive feedback that encouraged us to delve further into the topic of disabilities in fisheries, an issue which we as a committee had previously overlooked. We encourage all FLAFS members to continue to reach out to us with suggestions on how we can continue to make our fisheries community more welcoming to all. Please feel free to reach out to the committee members individually or click [here](#) to provide anonymous feedback. **This work is**

not a comprehensive consideration of all aspects of job postings that could be exclusionary toward people with disabilities. Rather, our goal was to communicate observations of job announcements to our colleagues that could be considered exclusionary toward people with disabilities. This work is also not the creation of experts in disability accommodations and therefore is a very introductory discussion of the topic. Further, we do not consider how job postings exclude neurodivergent individuals. Be on the lookout for a follow-up article that more thoroughly discusses accommodations employers can include for people with disabilities, and what language can be used in job announcements to communicate these accommodations.

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Figures

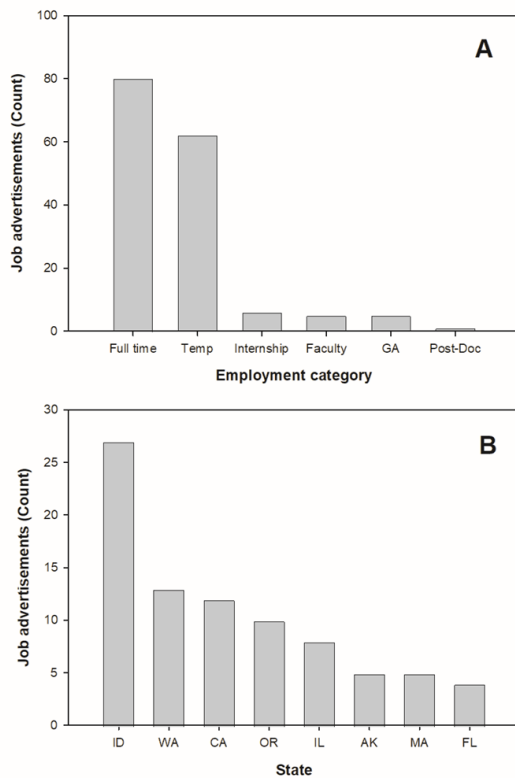


Figure 1. Job advertisements evaluated by employment category (A; top panel) and state (B; Bottom panel).

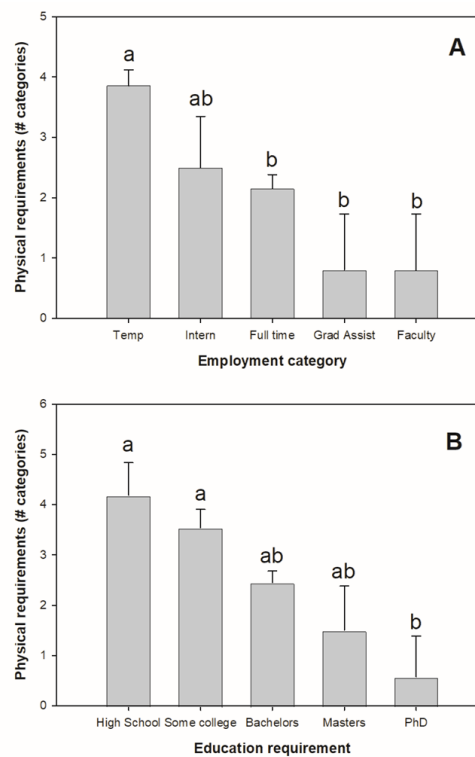
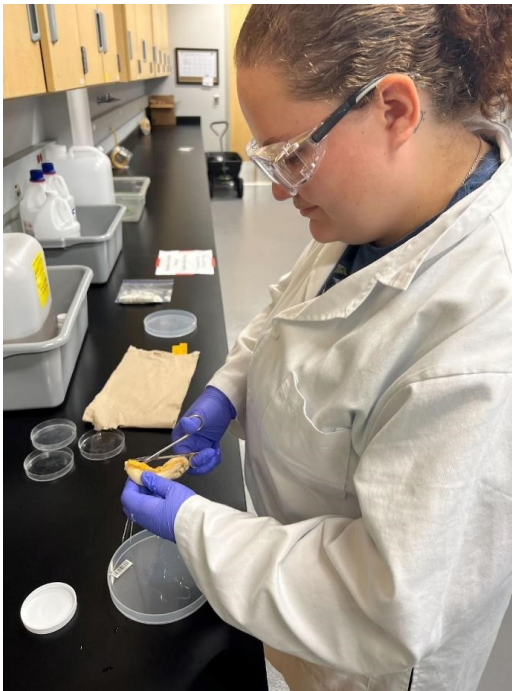
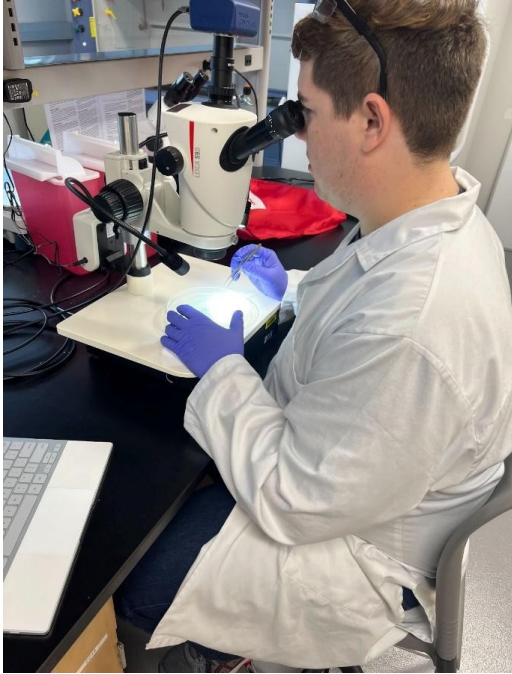


Figure 2. The relationship between the total number of physical requirements noted on job advertisements and employment category (A; top panel) and education requirement (B; bottom panel). Error bars are represented by the standard error and different letters above the employment category and education requirement indicate differences (Tukey HSD).



Featured CEC, Continued



Featured CEC, Continued



Featured CEC, Continued



The State of Florida is an Equal Opportunity Employer/Affirmative Action Employer, and does not tolerate discrimination or violence in the workplace.

Candidates requiring a reasonable accommodation, as defined by the Americans with Disabilities Act, must notify the agency hiring authority and/or People First Service Center (1-866-663-4735). Notification to the hiring authority must be made in advance to allow sufficient time to provide the accommodation.

Figure 4. Example language that can be inserted into job advertisements for state of Florida hiring.



REEFS TO RIVERS: FLORIDA FISHERIES SCIENCE

Florida Chapter of the American Fisheries Society Student Subunit

Don't forget to stay up to date with the activities of the Florida AFS Student Subunit, by checking out the R2R Blog @ <https://flafsstudentsubunit.wordpress.com/>

This issue we feature the research of our chapter member, Mariah France. Mariah is a second-year graduate student in Dr. David Kerstetter's Avian and Fisheries Lab at Nova Southeastern University. She is originally from Knoxville, Tennessee but going to NSU in Fort Lauderdale to obtain a master's in marine science. Her thesis is the understanding the life history, reproduction, and diet of bigeye scads (*Selar crumenophthalmus*). The whole goal of her project is to collect life-history data to see if this species can be aquaculture to help overfished wild populations restore. She is working with Dr. Nicole Kirchhoff at Live Advantage Bait LLC with the aquaculture aspect. She also works with local bait shops and anglers through donations or buying bigeye scads. She enjoys her time in Dr. Kerstetter's lab and NSU, and has gotten to make great connections and friends.

About Mariah's thesis:

Sportfishing and catching large gamefish are very popular activities in the Florida region. Although large gamefish species like tarpon and billfish are the main targets of recreational fisheries in Florida, many so-called "baitfish" species are essential from an economic standpoint as a source of live bait and an ecological perspective as a component of the gamefish forage base. Bigeye scad (*S. crumenophthalmus*), or "goggle-eye" locally, is a small carangid highly prized as live bait for fishing large offshore species and sportfishes. These unusual baitfish can take a lot of work to come by during certain seasons. They are susceptible to their environment



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and being handled, which can be fatal to them. Due to these factors, a dozen live can sell for close to \$100 at bait shops. Although the situation with the stock in southeast Florida is unknown, bigeye scad populations have begun to decline in the wild due to overfishing, pollution, and habitat degradation.

Bigeye scad (*Selar crumenophthamus*) is a popular marine bait for targeting Sailfish (*Istiophorus platypterus*) and other large sportfishes in southern Florida. They are particularly well-known for their market price of over \$100 per dozen live. Although highly sought-after, there needs to be more understanding of Atlantic bigeye scad, particularly in Florida. Many articles have mostly covered bigeye scads in the Pacific Ocean but very few from the Atlantic. It is unknown if the bigeye scads in the Atlantic Ocean bigeye scads have age-growth, diets, and reproduction similar to their Pacific Ocean relatives. My project will obtain a better understanding of the species' life history, including age-growth, reproductive parameters, and diet. I work with local anglers and bait shops around Pompano Beach and all the way down near the Florida Keys to get samples. The preliminary findings that I have collected were that length, weight, and GSI values were high in the summer, indicating spawning seasonality. Stomach contents suggest seasonality in the diet, with some months having polychaetes and others containing mollusks, but all months favored euphausiids. Understanding the life history of wild bigeye scad makes aquaculture production more feasible to help continue the baitfish fishery while assisting in restoring wild stock populations.

