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Institute of Food and Agricultural Sciences
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25 September 2020

Gulf and Caribbean Fisheries Institute

Dear GCFI Board of Directors and Membership,

The GCFI group and conference is particularly special to me. As a former commercial fisherman and SCUBA instructor, I appreciate the holistic and inclusive approach that GCFI utilizes to further sustainable, participatory marine resource management. This group and conference has helped me develop as a scientist and communicator, providing a means to connect and collaborate with researchers, managers, and stakeholders in my field. Indeed, the work I presented at the last two GCFI conferences were published this year. One paper on testing innovative traps for controlling deepwater lionfish that was presented at GCFI-71 is now in *PLoS One* (doi.org/10.1101/2020.03.16.993543). The other reports precipitous declines in lionfish populations following the emergence of a new disease was [presented at GCFI-72 and](https://doi.org/10.1101/2020.03.16.993543) is now in *Scientific Reports* ([nature.com/articles/s41598-020-58886-8](https://doi.org/10.1101/2020.03.16.993543)). It is a point of pride for me that the latter received GCFI-72's Best Student Oral Presentation. I've since graduated and, last June, was given the opportunity to share my experiences and advice about graduating and finding a job during a pandemic in [GCFI's first virtual student check-in](#). I look forward to continuing to participate in, contribute to, and learn from GCFI in the years to come.

I'm truly honored to have been nominated to serve on the GCFI Board of Directors. My CV herein details my work in research, teaching, leadership, extension, and outreach relevant to this position. Collectively, I aim for my research to provide scientific contributions that have real-world applications to policy and stakeholders. In my recent PhD research, I examined the ecological and socioeconomic conditions for developing a commercial fishery for invasive lionfish. This included projects to study population and community effects from lionfish removals, lionfish removal efficiency, the emerging pathogen in lionfish, the potential for lionfish traps to harvest deepwater lionfish, and the bioeconomics of commercialized invasive species harvest and the developing lionfish fishery. The questions I've sought to answer appear to resonate with management priorities, and my work has been supported from >\$700k in research grants and wards, including the National Science Foundation Graduate Research Fellowship, the Melnick Foundation Endowment, and a Guy Harvey Ocean Foundation Scholarship. As a postdoctoral researcher at the University of Florida [Nature Coast Biological Station](#) (NCBS), my current foci include (i) continued work on lionfish using long-term data sets to forecast their economics and test ecosystem resilience, (ii) research on reducing recreational fisheries discard mortality through gear innovation and management strategies, and (iii) developing ecosystem models to value coastal reef restoration and forecast the effects of land-use and climate changes to estuarine communities. The latter work, funded by the National Academy of Sciences, largely supports my current appointment and involves cross-disciplinary integration of hydrological, ecosystem, and economic models. My work directly meets goals of the NCBS 2021-2026 National Academy of Sciences, largely supports my current appointment and involves cross-disciplinary integration of hydrological, ecosystem, and economic models. My work directly meets goals of the NCBS 2021-2026 National Academy of Sciences, largely supports my current appointment and involves cross-disciplinary integration of hydrological, ecosystem, and economic models. My work directly meets goals of the NCBS 2021-2026.

It will be clear, however, that my work to date cannot compare with that from senior GCFI Directors. Indeed, the prospect of sitting on the same board with them is quite humbling. Nevertheless, I believe I can contribute valuable work, perspectives, and ideas. I know that there's a great amount of work that gets done behind the scenes where I believe I can be of service. Considering the meaningfulness that this position would have for me and my career, as well as the returns I've already received from GCFI, dedicate time and energy towards this work will be beneficial for me. Simply put, I'm excited to help and ready to get to working. Moreover, I believe that fresh perspectives will be particularly needed to plan and implement new technologies and practices during this current period of unprecedented changes, and I can already envision several novel programs that I would like to lead or assist. Specifically, I think I could serve as an asset to the following areas and committees:

Students. GCFI dedicates considerable efforts to help its students. Student awards provide financial opportunities and demonstrable validation of merit, and the Board-Student Social specifically helps students integrate, network, and quickly become comfortable in the GCFI family. While I hope to support these, I also see potential for GCFI to assist students' career development more directly. The GCFI conference and listserv already serves as a *de facto* forum between employers and employees. Further work could help GCFI serve as an explicit mechanism to help these connections. Given the regional reach of GCFI, this is particularly timely as faculty initiatives at the University of Florida—and many institutions right now—are trying to increase institutional diversity and find ways for their student and employment opportunities to reach a wider audience.

I also think it may be valuable for us to develop a GCFI Student Chapter. This would be specifically for and run by students, with assistance from Board members. As a recently graduated post-doc, I'm certainly in a good position to think about and assist what may best help students. If the Board and membership agree this is a worthwhile pursuit, something I would like to lead or help implement. I envision the GCFI Student Chapter helping to develop or bring-in services and workshops geared towards students and early-career scientists: e.g., to educate them about grant opportunities, networking, budget writing, imposter syndrome, work-life balance, mental health, and finding work after graduating.

Media, social media, and communications. The editor-in-chief of *Science*, H. Holden Thorp, recently stated the need for research to partner with media for amplification:

"Our little journal is, yes, it's very, very important in the world of science. But if a lot of people read one of my editorials, that's 100,000 people. Ben Shapiro's getting 50 million people to look at his Facebook posts. We don't have the kind of reach into the public consciousness on our own. So we're going to have to partner." The impact of research largely depends on the ability to transfer relevant information to the stakeholders who will benefit most from it. My goal here would be to leverage media and non-profits to assist widescale information dissemination for GCFI members working on research and projects that attract intense public interest: e.g., marine litter, *Sargassum* beachings, marine protected areas, climate change, coral bleaching, and SCTL. To demonstrate, in the past year I've collaborated with communications specialists, videographers, and reporters to disseminate my research on the lionfish disease (e.g., apnews.com/lionfish-sores, divemagazine.co.uk/lionfish-disease) and lionfish traps. Our publication on this last month (August 2020) resulted in a substantial amount of popular press (e.g., apnews.com/lionfish-traps, tcpalm.com/story, upi.com/lionfish), video (youtu.be/TFSrLuVGE14), and radio reporting (npr.org/trap-to-control-lionfish). I've been told from NOAA Communications officials that these were picked up in over 5,000 news outlets. I've concurrently worked with a number of non-profit organizations working on lionfish control (e.g., REEF, CORE, Lionfish Alliance, SEALEG, Lionfish Divers) and serve as a science advisor to the Lionfish University group. These non-profit groups amplify electronic and digital information dissemination through their own network, media, and social media broadcasting.

Program. I'm interested in helping with the event planning, organization, and logistics of the conference. In the past few years, I've served on steering committees for the *Florida Fish and Wildlife Lionfish Summit* (2018) and *North West Florida Lionfish and Artificial Reef Conference* (2019). Recently, I've also helped found and coordinate the *Lionfish Universe* collaborative group that

connects Mediterranean and Western Atlantic lionfish researchers and activists. For GCFI, I'm particularly interested in helping to implement innovative meeting strategies emerging from new communications and remote-work technologies.

Publications and collaboration via remote conferencing technologies. This year, of course, GCFI will be conducted 100% online. While this presents substantial and unprecedented challenges, I believe these changes to our *status quo* present exciting and worthwhile opportunities. The now ubiquitous use of remote working platforms and their rapid technological evolutions are making distanced communication more effective, and two-way communication between scientists, managers, and stakeholders is getting easier. This increased dialogue furthers GCFI's core mission to provide a comprehensive and inclusive network, and this facilitates the international collaboration between the 25+ nations represented by GCFI members. For example, a few others and I have recently discussed plans to conduct a remote regional lionfish workshop to inventory and categorize lionfish citizen science strategies, with the goal of producing a research article for a special topics issue in *Diversity*. As a Board member, I hope to help lead, coordinate, trouble-shoot, and assist GCFI special topics workshops. In particular, I'd like to plan and utilize remote conferencing platforms and culminate our work into final products and publications. These technologies will help us address the broad geographic issues in the GCFI region.

Remote participation. The new platforms and practices we incorporate into GCFI during this time will make participation more accessible to those who may not normally be able to attend an international conference. These include (but are not limited to) undergraduate students, citizen scientists not supported by an institution, fishers, small non-profit groups, and researchers lacking travel funds. We certainly hope to return to in-person conference meetings as soon as possible; the family nature of GCFI is what makes it special and that simply can't be replicated online. However, I also foresee that all symposia will be fundamentally changed after this pandemic. I believe these changes offer opportunities to reach and include more individuals into the GCFI family.

My overarching goal, in part, as a GCFI Director will be to help us capitalize on emerging opportunities during the next five years. I hope help conduct the necessary work to run GCFI and potentially lead or help develop initiatives for students, media extension, and remote work technologies. I really believe that the fundamental changes we're currently undergoing in how we communicate will allow us to increase inclusion and access among our membership. This, in turn, will help foment and translate research to inform sustainable management, conservation, and equitable use of our marine resources. I'm exceedingly grateful for this nomination and excited for the chance to serve GCFI during this monumental period.

Thank you for your consideration,



Holden Harris