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### STATEMENT OF CONTRIBUTIONS TO DIVERSITY, EQUITY AND INCLUSION

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I grew up in a working-class neighborhood in Baltimore, MD, with little exposure to conservation or ecological careers. I learned about nature not from protected areas but from playing in my backyard and local urban parks. I was privileged to meet mentors in community college that recognized my passion and encouraged me to continue my ecology education. These life experiences led me to realize that we can substantially improve ecology and conservation by increasing diversity, equity, and inclusion (DEI). To reach these goals, scientists must extend opportunities inside and outside of academia by **1) bringing science to people where they live, 2) increasing transparency and exposure of science careers 3) insisting that ecology and conservation be inclusive and just.** I demonstrate my commitment to increasing DEI by the variety of approaches I take to promote inclusion and accessibility at my university, my research discipline, and my outreach to local communities.

**Service-Related Contributions.** Within universities, faculty must take the lead, increasing exposure of diverse members of the scientific community. At University of Delaware, I worked with faculty and graduate students in the College of Agriculture and Natural Resources to organize the first DEI seminar series for ecology students. We initiated our efforts to highlight seminars from women in science, but after quickly recognizing the need for broader inclusion initiatives within our school, we rebranded our series as “*Growing Diversity in Science.*” We invited seminar speakers from underrepresented groups and organized workshops and panels to improve diversity initiatives within our student and faculty body, including topics like ‘implicit bias,’ ‘open science applications,’ and ‘Ecologists in policy.’ We received positive feedback from undergraduates describing how valuable the series was for exposing them to new ideas and scientists in the field. At UMass Amherst, I was introduced to an outstanding graduate-student led initiative called the “[BRiDGE Program](#).” This program provides a platform to invite early-career scientists from underrepresented groups to share their research and ideas for broader impacts. One of the first things I would do as faculty would be to initiate and secure funding for a similar program.

As a postdoctoral fellow, I continue to serve my institutions and disciplines by promoting DEI through committee work at my university and scientific societies. At UMass, I recently began serving on our DEI Committee to improve the culture of the Environmental Conservation Department. One of the first tasks I contributed to was consolidating information from an inaugural anti-racism community forum into an anti-racism action plan for the department. These efforts created a roadmap with short and long-term goals and explicit guidance, transparency, and accountability toward cultivating a more inclusive and anti-racist department. This exercise on self-reflection and action made substantial progress in our department, and I have no doubt would be beneficial for the other academic communities as well.

Although academic conversations around DEI often focus on universities, we can also make substantial progress through scientific society involvement. With the Wilson Ornithological Society and American Ornithological Society, I am involved in several committees to advance DEI and belonging of BIPOC members. Some ongoing projects I am contributing to include 1) organizing a BIPOC symposium for the next national conference, 2) increasing student representation on committees, 3) Providing free memberships for Black Ornithologists, 4) drafting a proposal for a new award designated for non-academic ornithologists and 5) organizing a storytelling event for our virtual international conference to share diverse voices in ornithology. Recognizing the need for more inclusive information on fellowship opportunities, as a new Smith Fellow, I also designed and facilitated the first pre-proposal webinar to share information and advice for applying to the fellowship, which was attended by >400 attendees and will be continued in the program.

To increase DEI, faculty must also expand service efforts outside universities to reach the public, extend outreach to underrepresented groups, and hear from broader audiences. Outside of academia, I frequently give public seminars for non-profits, special-interest groups, and schools and serve on Q&A panels to engage with, and listen to, the communities I work in. By listening, I ensure the problem-solving I tackle and solutions I provide are broadly used and inclusive. However, local outreach can only have so much reach; therefore, I also increase inclusion by using approaches that reach broader audiences, such as social media and public interest articles. I have also recently started organizing online webinars to expand the communities exposed to my research while reducing my carbon footprint. These inclusive outreach activities will continue to be a strong focus for my lab in the future.

**Teaching-Related Contributions.** I strive to expose ecology as a viable career path and encourage diversity in the sciences through mentorship and teaching. At my university, I make myself available to undergraduates, through workshops and one-on-one mentoring, with the hope that interacting with female leadership in the sciences will encourage them to pursue their own goals. From my experience, pursuing a career in scientific research was a confusing world to navigate, and my mentors were essential to help demystify the process and guide me toward opportunities I might not have considered. My goal is to be the same for my mentees now and give them support beyond their particular research topic. To date, I have mentored twelve undergraduates in independent research, the majority from underrepresented groups. Two undergraduates have turned their undergraduate work into published manuscripts, and three more are in the process of writing up their current projects. To my knowledge, almost all of them have continued in ecology by going to graduate school, the peace corps, and research internships.

I also recognize that faculty mentorship should not be confined within a university. To that end, I deliver bird banding and field demonstrations for schools and 'women in STEM' outreach programs to broaden the exposure of ecology and conservation as a tangible career path. Given my research program in urban and suburban environments, I also invite middle/high school students, undergraduates, and postgraduates to help in our data collection and open up a venue to answer their questions about pursuing science as a career. I have recently become involved with outreach and mentorship at a local community college, to introduce our research to the class, demonstrate data collection in the field, and make ourselves available to answer questions about ecology careers. Coming from community college myself, I understand how transformative this opportunity could be; many of the students I met were excited and shocked to learn about the different ecology opportunities. This experience also helped me recognize that even if a student chooses a different career path, it is still critically important that they are introduced to the concepts we study. A solid foundation in local ecology and science may positively inspire diverse involvement in other important aspects such as voting, conservation funding, and the education of children.

**Research-Related Contributions.** I also make progress in increasing DEI through my research by reflecting on how my field can improve and communicating with scientists to inspire change. For example, with members of the Ecological Society of America's student section, I worked on a collaborative paper to outline how ecology's culture must adapt to retain diverse scientists into the 21st century (Hansen et al. 2018). For this effort, we organized a horizon scanning exercise to pinpoint which issues were of primary importance to early-career ecologists. My primary input was to contribute to the section on how universities and societies can promote diversity and reduce implicit bias via formal mentorship, fair hiring practices, and outreach. I also contributed substantially to a section on translational ecology and the value of improving two-way communication between scientists and the public.

Through my research, I also broaden the inclusion of underrepresented groups and increase participants' access through community-science (i.e., citizen science) programs (Narango 2020). During my research with *Neighborhood Nestwatch*, I diversified recruitment efforts to reach more participants from diverse socio-economic backgrounds and underprivileged areas by targeting organizations that better represented the community (i.e., libraries, churches). I also used community list serves and prioritized specific neighborhoods rather than passively relying on volunteers because the participant base tended towards more affluent, white neighborhoods and did not represent the diversity of Washington D.C. This action improved the broad applicability of my science and the representation of people who benefited from the project. I was often told by homeowners that learning about my research was their 'first interaction with a 'real-life scientist' and that "your research changed the way I think about my yard." In the future, these are the experiences I aim to expand by connecting my lab with the surrounding community and increasing the diversity of people that learn and actively interact with local researchers.

In conclusion, as faculty, I will continue these activities, serve as a visible role model, and encourage inclusion in my research as an ecological imperative. There is much more work to do to increase DEI in STEM, and in my career, I will strive to cultivate interest and appreciation of ecology, conservation, and the pursuit of science with underrepresented groups through my service, teaching, and research. I will commit to making sure that my institution is advancing educational and professional opportunities for underrepresented faculty, students, and communities involved in our work and serves as an example for other universities to model themselves after.

Literature Cited

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