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DSA News

NOTE FROM THE EDITOR

By Amanda Whispell

he DSA's Executive Council and our Diversity, Inclusion, and Equity Committee have been discussing how we can foster greater overall inclusivity within our society. We're working to present our website in all major languages spoken across the Americas, for example. And as our president elect, Melissa Sanchez, discusses in the next article, we have partnered with the organization Entomologists of Color to offer free memberships to people underrepresented within the DSA.

As the editor-in-chief of ARGIA, I have decided to devote a section in subsequent issues to submissions from individuals who identify as a member of an underrepresented group within this publication. I am seeking contributions from all of the Black, Indigenous, People of Color, and LGBTQ2AI+ odonate-lovers out there. We want to read your articles, see your artwork and photographs, and make this a space dedicated to you. We kick off this new section with an article written by a group of Black odonatologists from around the globe who came together to share a bit about how being Black has impacted their careers. I'm so appreciative of the work these individuals put into this piece and I encourage you to read it.

Amanda Whispell, the editor-in-chief of ARGIA, is busy writing manuscripts related to her work on color change in Argia apicalis (Blue-fronted Dancer). She can be reached at editor@ dragonflysocietyamericas.org or on Twitter at @AmandaWhispell. For more information about Amanda's research visit www.amandawhispell.com.

DSA is Partnering with the EntoPOC Fund

By Melissa Sánchez Herrera

ur newly created DSA Diversity, Inclusion, and Equity Committee has partnered with the organization Entomologists of Color (EntoPOC), whose mission is to increase the participation of underrepresented groups in scientific societies (www.entopoc. org). DSA has donated to the EntoPOC Fund, offering 50 two-year memberships for students or enthusiasts who are interested in joining our society. If you are a student or enthusiast from an underrepresented group who is interested in applying for a free membership, please visit the following link to apply: www.entopoc.org/apply. The application forms are available in English, Spanish, Portuguese, and French. If you are interested in donating towards fostering more memberships, please donate to: www.entopoc.org/donate.



Melissa Sánchez Herrera, the DSA president-elect, is an associate researcher in the biology program at El Rosario University in Bogotá, Colombia. She is currently writing manuscripts related to her work among the Neotropical banner damselflies (Polythoridae), and going out to the field to perform eDNA protocols for Neotropical odonates. She can be reached at melsanc@ gmail.com or on Twitter at @melsanc. For more information about Melissa's research, please visit www. polythore.com.

The Black Odonatologist's Working Group

By Babasola Williams Adu, Owolabi Bibitayo Ayobami, Alafia Azeezat, Judicaël Fomekong-Lontchi, Kehinde Kemabonta, Ken Knapp, Sylvester S. Ogbogu, Ekpah Ojonugwa, Sévérin Tchibozo, Nene Ugbah, Gavin Campbell, Rhema Uche-Dike, Erasme Uyizeye, Jessica L. Ware, and Damion Whyte

e are a group of odonatologists from across the globe (Benin, Canada, Cameroon, Ghana, Jamaica, Nigeria, Rwanda, United States) who were invited to write about our perspectives as Black members of the odonatology community. We thank the editor of *ARGIA* for the opportunity to highlight the challenges and successes we have experienced in this field.

Studying odonatology while Black

Studying dragonflies and damselflies in nature allows us to travel to (often) remote areas to collect our favorite species. Collecting in the field has perils, from encounters with bears in northern New Jersey and the Yukon of Canada, large reptiles in Florida and Guyana, and snakes in Arizona, Namibia, and Nigeria, to scorpions in Costa Rica. Danger at field sites can be near universal in some countries, where the cause of danger is, for example in Nigeria, the fear of being kidnapped or robbed (Punch.com 2020). In many countries, however, including the United States, one of the perils faced by Black entomologists is anti-Black racism (this is an issue across nature disciplines [Tsent *et al.* 2020; Schell *et al.* 2020;



Jessica Ware, Nene Ugbah, Ken Knapp, Kehinde Kemabonta, and Melissa Sánchez Herrera at the World Dragonfly Association International Congress of Odonatology in 2019.



Erasme Uyizeye samples along the edge of the water in Akagera National Park. Photograph by Jens Kipping.

Samayoa 2020]). Collecting data at a river or stream often results in frequent stops by police or border patrols, either for being in a neighborhood that is mostly white or for looking suspicious for carrying nets or other collecting equipment. It is hard to know how often this happens, but each of us has experienced this, and it is likely a common phenomenon that other odonatologists may not experience, or at least not as frequently. When white odonatologists do get stopped at their field sites, they may not experience the same associated risk or fear that comes with these interactions as their Black (or other people of color) counterparts.

Another issue Black odonatologists in parts of Africa face is that some sites that hold great biodiversity may be inaccessible due to cultural rituals. Across Africa, many towns and villages have forests that are separated (i.e., protected) for rituals and spiritists' activities (they are called evil forests or "Igbo oro" in Yoruba dialect); this is not common in western world, except those forests termed to be 'dangerous' because of the presence of wild animals. Most Africans believe in spirits and ghosts (evil or holy), and the majority of scientists in western world do not believe in such order (which they may refer to as superstitious). While these forests may be rich in odonate diversity-since human disturbance is restrictedthese cultural activities prevent one from collecting there. Cultural belief of some Black scientists in Africa could be a challenge since they will not want to face the wrath of the 'gods' for violating the laid down order.

Recently one of our post-graduate students went to a neighboring village for fieldwork and they were vehemently prevented from entering the forest. It took the intervention of the village king who provided a guard that guided them into the forest.

Another issue, assuming one gains access to collect the specimens, is returning to one's home institution with the samples. For example, Erasme Uyizeye has heard stories from peers of researchers being questioned by immigration officers at the airport for lengthy periods of time, despite having transport permits for specimens — the very same permits that our white counterparts use without issue.

Lastly, an issue is invisibility. Many of us noted that Black scientists in general were considered rare, and this left us feeling invisible. In Jamaica, co-author Damion Whyte asked kids in rural areas what came to mind when they heard the term "scientist." One of the popular responses was "White people," and when asked about what they thought of scientists who were Black, they responded that it meant that the person was a foreigner. In general, those of us from outside of North America have problems getting our research published in some journals as there is a view that we do "mediocre work" if we are not from North America or the United Kingdom.

How many Black odonatologists are there?

Black entomologists have always existed, as African people have been working with insects for centuries. In the United States, African Americans have had a historical interaction with agriculture and related entomology, first as enslaved people, then as sharecroppers, and then as entomologists, farmers, doctors, amateur naturalists, and nature lovers. As Black odonatologists, we are interested in describing new species, documenting odonate ecology and evolution, and advancing the study of the over 6000 dragonfly and damselfly species.

We attempted to gather data on when the first Black odonatologists earned their degrees. In the United States, Jessica Ware was the first Black odonatologist to earn a doctorate, in 2008. Also from the United States, Nene Ugbah received a master of science in 2016. In Canada, we were unable to find data on any Black odonatologists who had earned either master of science or doctorate degrees. In Nigeria, the first professor A.T. Hassan (now retired) of the Zoology Department at the University of Ibadan, pioneered odonatology with a doctorate in zoology (Entomology) in 1974 (Hassan 1974). Hassan and J. F. Adetunji subsequently carried out further studies on the taxon in the 1970s and early 1980s. Much later, renewed interest on the taxon led to a detailed study of Akure Forest fauna in the same southwestern Nigeria by B. W. Adu, making Adu the second odonatologist to earn a doctorate with a strict focus on Odonata in Nigeria. More recently, the record of Nigerian odonatologists also includes Ekpah Ojonugwa who obtained a master of science from the University of Lagos, Nigeria in 2020. Moreover, R Uche-

Dike carried out extensive work on the Odonata of Lagos, Nigeria for his bachelor of science in 2018. Additionally, Erasme Uyizeye from Rwanda earned a doctorate in 2020 and his thesis focused on Odonata. Going forward we would like to gather data on Black odonatologists from countries beyond the four listed here, so please contact us with your information should you have names to add to this list. We conducted a survey of Black odonatologists to assess field experiences. We had responses from several countries in Africa and from the United States (Table 1). Of the respondents, 18

Table 1. Countries from which we received survey responses

Country	Number of respondents
Ghana	1
Madagascar	1
Nigeria	13
Cameroon	1
Mozambique	1
USA	1
Kenya	1
Sudan	1
Uganda	1
Benin	1



researchers were academics working at universities or research institutes. Respondents also worked in national parks (1 person), NGOs (1 person), safari companies (1 person), and museums (1 person).

Here is a short summary of some of our results:

- 76% Experienced difficulty accessing literature for their work
- ~19% Found sample collections inadequate (48% listed them as "occasionally adequate")
- >52% Found it more than occasionally difficult to assemble a research team
- 75% Experienced inadequate safety in the field (such as having access to security guards)
- 90% Indicated that funding is more than occasionally lacking
- 76% Indicated that field sites are often inaccessible to them
- 85% Experienced difficulty in their ability to collect specimens

Despite these potential challenges, 80% replied that they rarely or very rarely lost focus of their research goals and 52% said that they rarely or very rarely suffered from a lack of motivation or interest. Indeed, of the 22 respondents, a majority (81%) continue to conduct research on Odonata



more than occasionally. Mentorship was not something that many respondents listed as lacking (less than 40% listed this as a more than an occasional problem). Most were introduced to odonatology by a supervisor, while others listed an inherent self-interest that inspired them to join this field. This suggests that efforts for diversity, equity, and inclusion should be put toward retaining Black odonatologists, as it is not a lack of interest but rather a lack of resources for continuing to work in the field that is deficient. Indeed, 95% of people who replied indicated that they wished to continue working in odonatology if opportunities and funding were available to do so. Forty six percent of respondents had not yet been able to publish their work, while 25% had more than 10 papers published; 52% had received prior funding for their research projects.

How can we make odonatology accessible for all? Different needs on different continents

We can be mindful as odonatologists about making meetings accessible to all. Having a diversity, equity, and inclusion committee can help scientific societies with initiatives to recruit and retain a diverse cohort of members; this is especially important on continents that have undergone colonialism such as North America, Europe, and Australia. Inviting entomology students from local, historically Black colleges and universities to United States regional meetings can open doors to lifelong participation. As in our personal lives, speaking out against comments that are exclusionary or biased against minority groups can create a community that thrives.

Advocacy has the potential to help facilitate diversifying the field of odonatology—you cannot become what you do not see. Going into high schools and middle schools to give Odonata talks will definitely pique the interest of some of these inner-city children. Seeing other Black odonatologists will motivate them to be like, 'the professor I saw at my school' or the 'dragonfly person' etc.

In Africa, people are interested in odonates but there is a scarcity of opportunities to study them. Holding odonatological conferences in African countries often will help increase the number of Black odonatologists. This will connect odonatologists from around the globe with Africans who are interested in odonates — trust us, they are there. Holding a few conferences in Africa will help to make odonatology accessible to these African people and this will simply increase the Black odonatology family.

We had an interesting discussion about the experience of racism in the field when writing this article, and in trying to develop solutions to this for Black members of our community. While this is a frequent issue in North America, in Africa, (Nigeria in particular, where many of us are located) very little or no evidence exists in regards to exclusionary practices linked to gender or people of color. Indeed, in



Ekpah Ojonugwa collecting Zygoptera in Nigeria. Photograph by Clifford Omonu.

most African countries, the population is predominantly Black. Even religious affiliation that is occasionally a factor in policy implementation has no noticeable negative effect in odonatology across, for example, Nigeria.

The critical issue here is the general underfunding of research institutions. What is needed is to increase public interest in the subject (for recruitment) and funding of projects (for retention). There are additional barriers that varied across continents, such as unequal access to resources which limits involvement. For example, many researchers outside of the United States and Canada have difficulty accessing proper taxonomic identification guides and publications and this limits a student's ability to participate. This can be a more difficult challenge to tackle, given copyright laws that prevent making all papers open access, but as we are able to freely share our own author copies perhaps creative solutions exist. Mentorship was considered important by many respondents, but we could do better at providing mentorship opportunities globally. Importantly, mentorship should focus on training the next generation of researchers in an area rather than colonialistic-style mentoring that leaves little knowledge in the home country and instead works to simply benefit a researcher from a host institution in North America, or Europe, for example.

We thank the Dragonfly Society of the Americas for inspiring us to form this working group. Our first step was coming together to form the Black Odonatology Working Group, and to introduce ourselves to the community. Next, we will work to enhance participation globally by Black odonatologists, training the next generation of researchers. We look forward to continued collaboration with odonatologists globally, and are eager for the future!

References

Punch.com. 2020. Bandits, kidnappers, operating in national parks, says senate. Available at https://punchng.com/bandits-kidnappers-operating-in-national-parks-says-senate/

Tseng M, El-Sabaawi RW, Kantar MB, Pantel JH, Srivastava DS, Ware JL. 2020. Strategies and support for Black, Indigenous, and people of colour in ecology and evolutionary biology. *Nat. Ecol. Evol.* (2020).

Schell CJ, Guy C, Shelton DS, Campbell-Staton SC, Sealey BA, Lee DN, Harris NC. 2020. Recreating Wakanda by promoting Black excellence in ecology and evolution. *Nat. Ecol. Evol.* (2020). https://doi.org/10.1038/s41559-020-1266-7

Samayoa M. 2020. Racism In The Great outdoors: Oregon's Natural Spaces Feel Off Limits To Black People. Oregon Public Broadcasting. Available at www.opb.org/news/ article/oregon-northwest-racism-outdoors-nature-hiking/

Hassan AT. 1974. "Studies on the Ecology, Behaviour and Life History of Libelluline Dragonflies." PhD diss. University of Ibadan, 332pp.

Dr. Alafia Azeezat is a lecturer in the Department of Zoology and Environmental Biology at Lagos State University. Alafia uses insects in the study of forensics, toxicology, and pollution management. Current research is on the diversity and molecular identification of Odonata species and using Odonata as bioindicators of water pollution. Contact at azeezat.alafia@ lasu.edu.ng or honeylafia@yahoo.com.

Erasme Uyizeye is adjunct faculty at Keene State College and a research fellow at the Center of Excellence in Biodiversity and Natural Resources Management at the University of Rwanda. Uyizeye studies the ecology of odonates and uses odonate adults to understand how landscape and climate change impact habitat integrity. He has developed an odonate-based index for monitoring freshwater ecosystems in Rwanda with the goal to better inform policy and decision making for the strategic management of ecosystems. Contact him at euyizeye@gmail.com.

Kehinde Kemabonta is an associate professor in the Department of Zoology at the University of Lagos in Lagos, Nigeria. Kehinde has digitized over 11,000 (263 species) Nigerian Odonata specimens in the GBIF website (IPT) and studies the molecular characterization and taxonomy of Odonata of Nigeria. Kehinde also identifies Nigerian odonates using their wings, is creating a manual or book of Odonata of Nigeria, and organizes training on prospects of studying Odonata. Contact at kkemabonta@unilag.edu.ng.

Sylvester S. Ogbogu is a professor at Obafemi Awolowo University in Ile-Ife, Nigeria. Sylvester studies Nigeria's Odonata, Trichoptera (Caddisflies), and Plecoptera (Stoneflies). Sylvester also studies impoundments, river, and stream ecosystem dynamics as well as the impacts of contaminants and land use on aquatic macroinvertebrates in tropical aquatic ecosystems. Contact at slyd58@yahoo.com or sogbogu@oauife.edu.ng.

Babasola Williams Adu is a senior lecturer in the Department of Biology at Federal University of Technology in Akure, Nigeria. Adu studies the bio-ecology of caddisflies, does biodiversity assessments of dragonflies and damselflies in forest water bodies, does water quality assessment in streams and rivers using biotic indices, and studies the conservation of freshwater insects and other macroinvertebrates. Contact at bwadu@futa. ed.ng or williamsadubabs@yahoo.com.

Ekpah Ojonugwa is a conservatist at the Nigerian Conservation Foundation in Lagos, Nigeria. Ekpah studies the conservation of insects of ecotourism importance, the ecology of Odonata and Lepidoptera, and systematics and phylogenetic classification of Odonata and Lepidoptera. Contact via davisugwa@gmail.com.

Owolabi Bibitayo Ayobami is a lecturer in the Department of Wildlife and Ecotourism Management at Osun State University Osogbo. Owolabi works on the identification and distribution of Nigeria's Odonata (Dragonflies and Damselflies). Contact via bibitayo.owolabi@uniosun.edu.ng.

Judicaël Fomekong-Lontchi is a researcher with the Ministry of Scientific Research in Cameroon. Judicaël studies the diversity and community ecology of Odonata in Southern Cameroon. Contact via judicaelfomekong@yahoo.fr.

Jessica L. Ware is the Curator of Invertebrate Zoology at the American Museum of Natural History in New York, New York. Jessica studies global Odonata systematic and taxonomy. Contact via jware@amnh.org.

Nene Ugbah studies embryonic development and larval behavior of Odonata and climate change. Contact via nenekumashe@gmail.com.

Ken Knapp studies the systematics of Aeshnidae and phylogenetics of Macromia.

Rhema Dike-Uche is a student and research assistant at the University of Lagos in Nigeria. Rheme studies the diversity, distribution, and taxonomy of Odonata in Southwestern Nigeria. Rhema also studies odonates as indicators of water quality. Contact via rhemadike@gmail.com.

Gavin Campbell is a PhD Candidate in environmental biology at the University of the West Indies. Gavin studies temporary waters, insect life cycles, and biological control of mosquitoes. Contact via gavinrcampbell@outlook.com.

Damion Whyte is a PhD student in the Department of Life Sciences at the University of West Indies, Mona, Jamaica, West Indies. Damion performs evaluations of a Goat Island, a Cay in Jamaica, for the reintroduction of the critically endangered Jamaican Iguana and collects baseline information on animals on the Island, including odonates. Contact via damion. whyte@mymona.uwi.edu or dl_wbyte@yahoo.com.

OdoNews

Introducing Entomologists of Color, a Collective for Diversifying Entomology

By Manpreet Kohli

cientific communities neither exist nor operate in isolation and are very much influenced by world events. The racial inequality present in our society is also prevalent in the scientific community. On 10 June 2020, my colleagues and I participated in a global movement, #ShutDownAcademia and #ShutDownSTEM, in an effort to acknowledge the fact that some members in our scientific community are disenfranchised because of their race or ethnicity. Most importantly, we were motivated to take action towards diversifying our scientific communities, so everyone is fairly represented. Being that I love and study dragonflies and insects in general, as do my colleagues, we decided to specifically work on diversifying entomology. Thus, we formed the collective "Entomologists of Color." Our mission is to support Black, Indigenous, and People of Color (BIPOC) in entomology through recruitment, retention, and advocacy.

Natural science majors such as ecology and evolution have been shown to have low numbers of BIPOC, and entomology is similarly affected. The National Science Foundation reports that of all graduate students in entomology/parasitology, only 1.99% are Black, 5.4% are Hispanic/Latinx, and 0.23% are American Indian or Alaska Native (NSF Demographic Report, 2016). These numbers are not representative of the general population. It is unfortunate that the community that studies the most diverse group of organisms on Earth-and therefore understands the importance of diversity-itself lacks in diversity. This is likely the result of systematic inequalities affecting access to education or a lack of institutional support that BIPOC face when pursuing a career in entomology. In recognition of these challenges, Entomologists of Color strives to make entomology a more inclusive field by removing barriers to participation.

We have started by taking some simple yet important steps that can help increase the participation of BIPOC in entomology. Being a member of professional societies is integral to career development. Memberships in such societies allow participation in networking events, provides access to publications and other member-restricted scientific content, and reduced meeting costs, but perhaps most importantly, it offers eligibility to apply for society specific research grants. As part of our recruitment and retention efforts, Entomologists of Color, provides membership fees to various entomological societies including Dragonfly Society of the Americas (DSA). Any student interested in getting memberships for any of the entomological societies need only fill out a simple form available in various languages (including Spanish and French) on our website. So far Entomologists of Color has provided memberships to 134 students from across the world to over 14 different entomological societies. You can read about these students on our website.

You can also participate and contribute to our mission in several ways. Spread the word widely within all departments, lists-serves, or organizations that you are associated with. Share and like our social media posts to reach as many students as possible who can take advantage of this opportunity. You can find and follow us on various social media platforms: Twitter, Facebook, and Instagram. Support us by becoming a mentor for our students. We are regularly in need of mentors who can volunteer to guide our new recruits through the world of entomology. We advertise these opportunities through our website and social media. Lastly, donate to our initiative. We rely on your donations to continue providing memberships to students and supporting our mission through other activities. Donations can be made through our website. If you would like to get touch and contribute in other ways, please email us at entopoc@gmail. com.

Manpreet Kohli, the DSA treasurer, has recently started as a postdoctoral assistantat the American Museum of Natural History. There she continues to pursue her research on (and love of) arctic dragonflies. Contact her at treasurer@ dragonflysocietyamericas.org.

ARGIA

and

Bulletin of American Odonatology

Call for Submissions

The DSA welcomes proposals for articles on most any topic related to Odonata for our quarterly news journal, *ARGIA*, or our occasional peer-reviewed journal, *Bulletin of American Odonatology* (BAO). Topics should be generally consistent with the DSA mission.

Inquires about ARGIA proposals should be directed to its editor, Amanda Whispell, at editor@dragonflysocietyamericas.org. For BAO proposals, contact its editor, Steve Hummel, at editorbao@dragonflysocietyamericas.org.

Authors preparing articles should consult our Submissions Guidelines and include a completed Submission Form when submitting your articles; both are available on the DSA website: www.dragonflysocietyamericas.org/instructions-to-authors.

Back cover:

Rhionaeschna californica (California Darner) nymph

Photograph by Steve Valley Haiku by Ken Tennessen

lil' dragonfly nymph, cute, looking like a sweetheart, yet looking to kill



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