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*Photo: E. Devenish-Nelson*

## An assessment of priority issues and capacity for conservation action of Caribbean endemic and threatened bird species

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Cover Page: BirdsCaribbean members searching for endemic birds in Dominica. Photograph by E. Devenish-Nelson, July 2019.

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### Abstract

Despite decades of conservation effort, Caribbean endemic and threatened bird species continue to decline and many are Critically Endangered. In 2022, the BirdsCaribbean Endemic and Threatened Species Working Group (ETSWG) conducted a survey of the organization's membership to assess avian conservation priorities and current capacity for conservation action in the Caribbean. Drought, climate change, fire, hurricanes, and pollution were perceived as key threats to Caribbean endemic and threatened species, while a lack of data on species or habitat, poor access to information, and a lack of collaboration were reported as barriers to effective conservation work. Species monitoring, recovery planning, data analysis, habitat management, and need for a regional database of projects were identified by respondents as key future ETSWG capacity development activities. We discuss the importance of these findings for understanding local perceptions of priorities, existing capacity development needs, and future resource allocation options.

### Keywords

Capacity, climate change, collaboration, data accessibility, drought, Small Island Developing States, species monitoring

### Resumen

**Evaluación de problemas prioritarios y capacidad para acciones de conservación de las especies de aves endémicas y amenazadas del Caribe** • A pesar de décadas de esfuerzos de conservación, las especies de aves endémicas y amenazadas del Caribe continúan disminuyendo y muchas están en peligro crítico de extinción. En 2022, el Grupo de Trabajo sobre Especies Endémicas y Amenazadas de BirdsCaribbean (ETSWG) realizó una encuesta entre los miembros de la organización para evaluar las prioridades de conservación de las aves y la capacidad actual para llevar a cabo acciones de conservación en el Caribe. La sequía, el cambio climático, los incendios, los huracanes y la contaminación fueron percibidos como las principales amenazas para las especies endémicas y amenazadas del Caribe; mientras que la falta de datos sobre las especies o sus hábitats, el difícil acceso a la información y la falta de colaboración se señalaron como barreras para un trabajo de conservación efectivo. Los encuestados identificaron el monitoreo de especies, la planificación de recuperación, el análisis de datos, el manejo del hábitat y la necesidad de una base de datos regional de proyectos como actividades clave del ETSWG para el desarrollo de capacidades futuras. Discutimos la importancia de estos resultados para comprender las percepciones locales sobre las prioridades, las necesidades existentes de desarrollo de capacidades y las opciones futuras de asignación de recursos.

### Palabras clave

accesibilidad de datos, cambio climático, capacidad, colaboración, monitoreo de especies, Pequeños Estados Insulares en Desarrollo, sequía

### Résumé

**Évaluation des questions prioritaires et des capacités en matière de mesures de conservation des espèces d'oiseaux endémiques et menacées des Caraïbes** •

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Malgré des décennies d'efforts de conservation, les espèces d'oiseaux endémiques et menacées des Caraïbes continuent de décliner et nombre d'entre elles sont en danger critique d'extinction. En 2022, le groupe de travail de BirdsCaribbean sur les espèces endémiques et menacées (ETSWG) a mené une enquête auprès des membres de l'organisation afin d'évaluer les priorités de conservation de l'avifaune et les capacités actuelles en matière de mesures de conservation dans les Caraïbes. La sécheresse, le changement climatique, les incendies, les cyclones et la pollution sont perçus comme des menaces majeures pour les espèces endémiques et menacées des Caraïbes, tandis que le manque de données sur les espèces ou les habitats, l'accès insuffisant à l'information et le manque de collaboration sont considérés comme des obstacles à un travail de conservation efficace. Le suivi des espèces, la planification de leur rétablissement, l'analyse des données, la gestion des habitats et une base de données régionale des projets ont été identifiés par les répondants comme les principales activités futures de développement des capacités de l'ETSWG. Nous discutons de l'importance de ces résultats pour comprendre les perceptions locales des priorités, les besoins existants en matière de développement des capacités et les options futures pour l'allocation des ressources.

### Mots clés

accessibilité des données, capacités, changement climatique, collaboration, petits États insulaires en développement, sécheresse, suivi des espèces

The Caribbean's birds are threatened by many anthropogenic pressures (e.g., invasive species, habitat loss, overexploitation, climate change), with approximately 25% of the region's 180 or more endemic species globally threatened and populations continuing to decline (Nelson and Devenish-Nelson 2022). While some Caribbean endemic and threatened species are receiving excellent conservation and research attention (e.g., Ridgway's Hawk *Buteo ridgwayi* in the Dominican Republic; McClure *et al.* 2017), many others need more effort (e.g., Jamaican Blackbird *Nesopsar nigerrimus*; Davis 2017). Some key factors influencing this variation in effective conservation include a lack of human and resource capacity, and knowledge gaps (Levy 2008, Latta 2012, Devenish-Nelson *et al.* 2017, Nelson and Devenish-Nelson 2022). Previous regional avian priority-setting workshops (Walker 1998, Wege 1999) have led to the development of successful regional education, awareness, and training programs (e.g., BirdsCaribbean's Endemic Bird Festival; Sorenson *et al.* 2004, Garcia-Lau and Gonzalez 2019). Yet, it is pertinent to ask why there has not been more progress in reversing the trend in declining species' populations. If we are to prevent future extinctions, we will need to scale up the effectiveness and responsiveness of successful conservation and monitoring activities (Nelson and Devenish-Nelson 2022). A dynamic environment (e.g., emerging threats and advances in knowledge and capacity; Nelson and Devenish-Nelson 2022) and a constantly shifting funding context (Veríssimo *et al.* 2014) suggests that answering this question requires ongoing evaluation of current capacity and priority issues for Caribbean bird conservation.

The BirdsCaribbean Endemic and Threatened Species Working Group (ETSWG) conducted a survey of the BirdsCaribbean membership in 2022 to assess current capacity for conservation action within the region and to identify emerging issues and capacity needs. The ETSWG includes researchers, practitioners, government agency and non-governmental organization (NGO) staff, funders, and amateur ornithologists who have a shared interest in conserving the Caribbean's endemic and threatened bird species. The ETSWG meets online approximately every quarter and has a designated listserv. The aim of the group is to "promote the conservation and recovery of endemic and threatened birds of the Caribbean, through collaborative monitoring, research, education, outreach, capacity-building and implementation of effective policy, legislation, and management." Here,

we report on the findings from this survey and discuss their importance for future conservation actions and their prioritization by the ETSWG and for bird conservation in the Caribbean more widely.

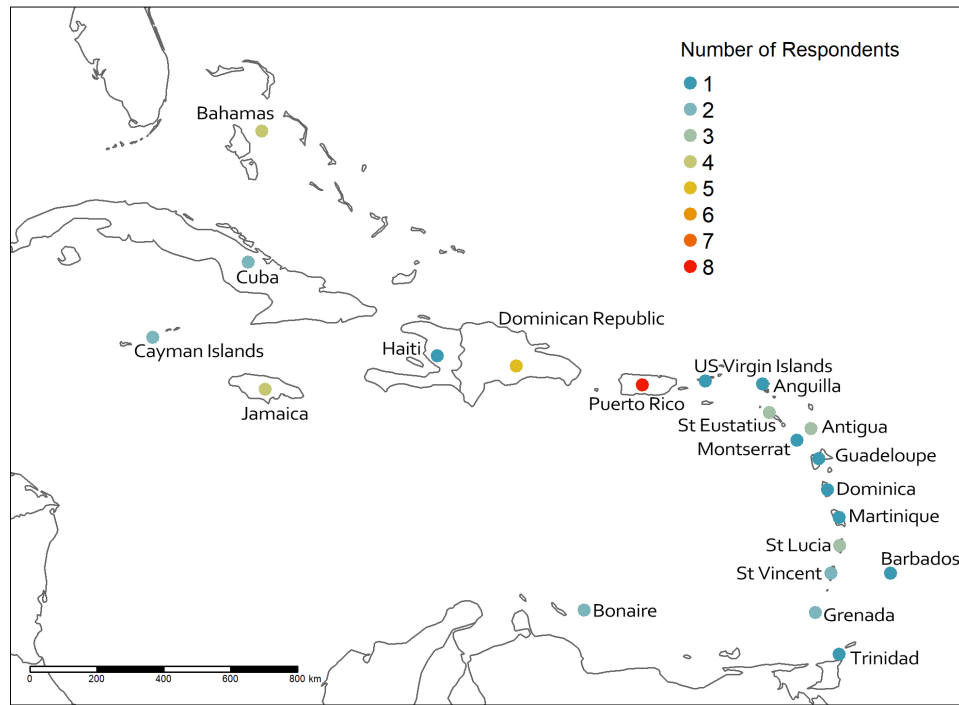
### Methods

We surveyed the BirdsCaribbean membership in January 2022 to assess current capacity for endemic and threatened bird conservation in the Caribbean. We asked respondents to answer questions about where they worked and lived, the species they worked on and the threats to those species, how much they collaborated regionally, and their training needs (Appendix 1). ETSWG members co-designed the survey, which consisted of a mix of quantitative and qualitative questions (Appendix 1). The survey was administered using Google Forms and was circulated in English and Spanish through the BirdsCaribbean mailing list. In developing and distributing the survey, we followed the Free Prior Informed Consent (FPIC) approach (FAO 2016) and the CARE (RDAIG 2019) and FAIR (Wilkinson *et al.* 2016) principles for data collection and management. None of the survey data collected was identifiable to any individual, and no personal data (i.e., names, dates of birth, or gender) were collected or stored. We adhered to the requirements of the General Data Protection Regulations as implemented in the United Kingdom. The survey was reviewed and approved by the University of Cambridge Department of Geography Ethics Committee (No: 2117 – November 2021).

### Results and Discussion

A total of 26 respondents completed the survey, representing ~3.3% of the membership of the BirdsCaribbean listserv (~800 people at the time of the survey). Despite the small sample size, many of those on the listserv are not or will not be actively working on endemic or threatened species. Yet, we believe that these findings are of value given the lack of up-to-date surveys on the perceptions of threats to and capacity for conservation of threatened and endemic birds in the region. In our survey, 61.5% of respondents lived in the Caribbean, and of these, 38.5% were originally from the Caribbean, indicating that a relatively high proportion of conservation activities on Caribbean endemic and threatened species are locally based, albeit with substantial external support. A key question that arises is whether this is an





**Fig. 1.** Location and number of survey respondents who are actively working on endemic and threatened bird species conservation in the Caribbean.

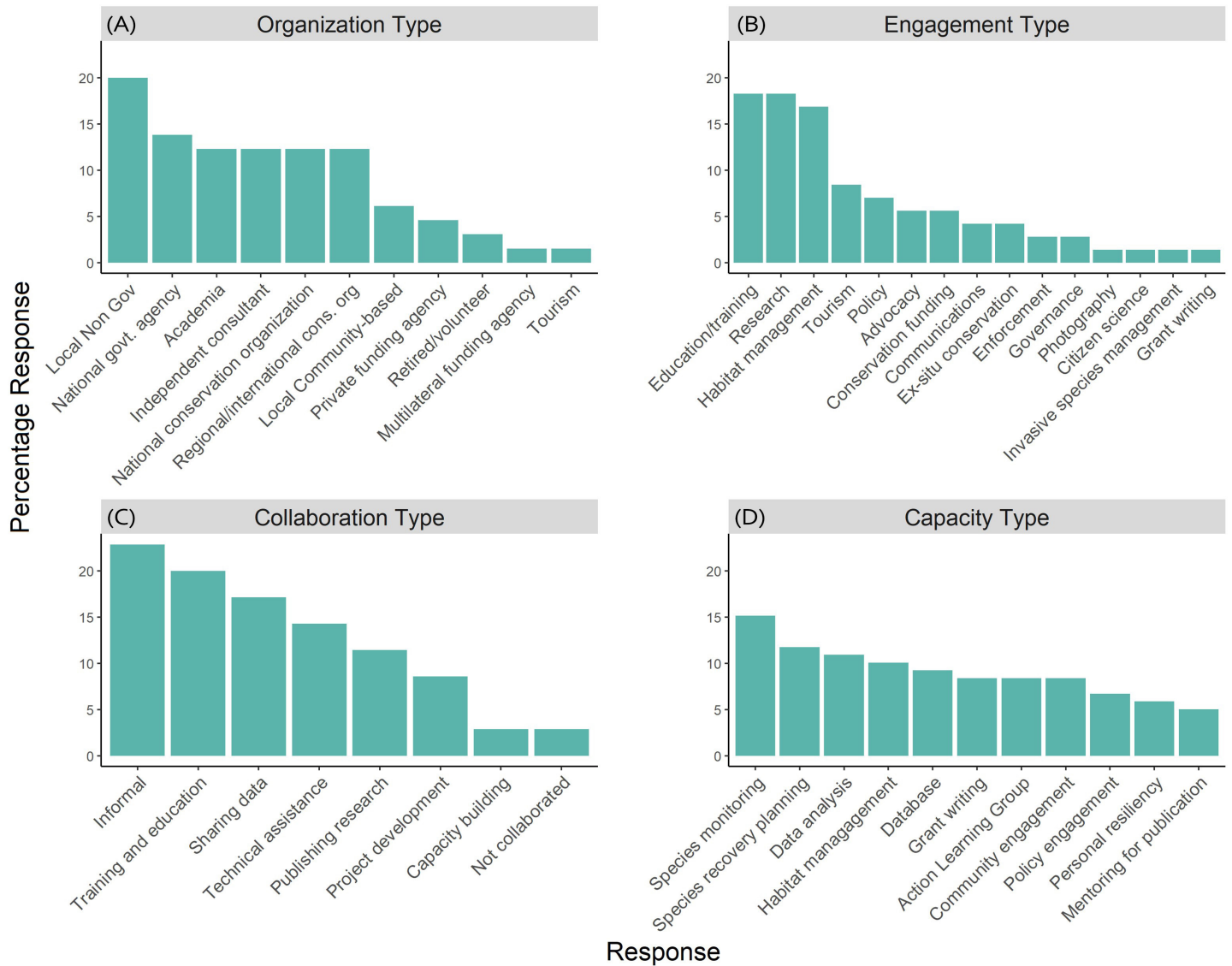
increase in local capacity that has translated into a transformational shift in the balance of power between internally versus externally driven conservation prioritization. Such a shift in perspective could have dramatic impacts on capacity development, which has historically been externally driven (Levy 2008, Nelson and Devenish-Nelson 2022), but this requires repeat surveys to determine temporal patterns.

The majority (77%) of all respondents worked in just one independent country or dependent territory. There was widespread geographic representation of islands across the region where respondents were actively working (Fig. 1). The largest number of respondents worked on Puerto Rico, followed by Hispaniola, Jamaica, and The Bahamas (Fig. 1). The relatively high numbers for Puerto Rico and Hispaniola are consistent with geographic patterns in research effort, which are driven partially by high-capacity and psittacine-focused research that attracts both national and international conservation efforts (Devenish-Nelson et al. 2019). Strong representation from respondents from The Bahamas may reflect the success of long-term capacity training programs for “endemic” migrants (in particular work on Kirtland’s Warbler *Setophaga kirtlandii*; Carey et al. 2004, Ewert et al. 2009). While research effort in Jamaica has previously been reported as unexpectedly low (Devenish-Nelson et al. 2019), our study found a different pattern which we believe reflects the effect of surveying a broader diversity of conservation practitioners, since many of our respondents worked in a NGO or community-based organization (CBO) capacity.

Most respondents in our survey worked with local NGOs, followed by national government agencies and academia (Fig. 2A). The areas of greatest activity in bird conservation (Fig. 2B) were in education/training, research, and habitat management, which are consistent with the types of activities typically con-

ducted by the aforementioned organizations. Recent work has suggested that inter-island research collaboration is low in the Caribbean (Vallès et al. 2021). However, in our survey, the majority of respondents (97%) had collaborated with conservationists from other islands in some way (Fig. 2C), with the most common collaborations reported as informal (e.g., management advice, research ideas, advocacy support, informal network), training and education, or sharing data. Future work should investigate whether these collaborations extend to working within an interdisciplinary space, given the importance of cross-sectoral work for finding solutions to conservation problems (CANARI 2019, Nelson and Devenish-Nelson 2022, Agard et al. 2023). For example, in the case of the Grenada Dove *Leptotila wellsi*, the Grenada National Ecosystem Assessment explicitly identified the multi-sectoral nature of the threats and solutions associated with conservation of this species and its habitat (Agard et al. 2023). These included issues around agriculture, tourism and development, forestry, finance, civil service staffing, and cultural values (Agard et al. 2023).

Most (69%) respondents worked on more than one endemic or threatened species. Respondents self-reported the species, subspecies, or other taxonomic groups they worked on (e.g., passerines, or all of their island’s endemics), and 42 species or subspecies were named in total. While Passeriformes was the dominant order (46%), the families most worked on were the Psittacidae (17%), Columbidae (12%), Parulidae (12%), and Thraupidae (10%) (see Fig. 3 caption). That parrots are well-represented is consistent with high research effort in this group, but Columbidae, Parulidae, and Thraupidae are all under-represented in published literature (Devenish-Nelson et al. 2019). Our findings may suggest recent focus on these groups or a mismatch between academic research interests and broader

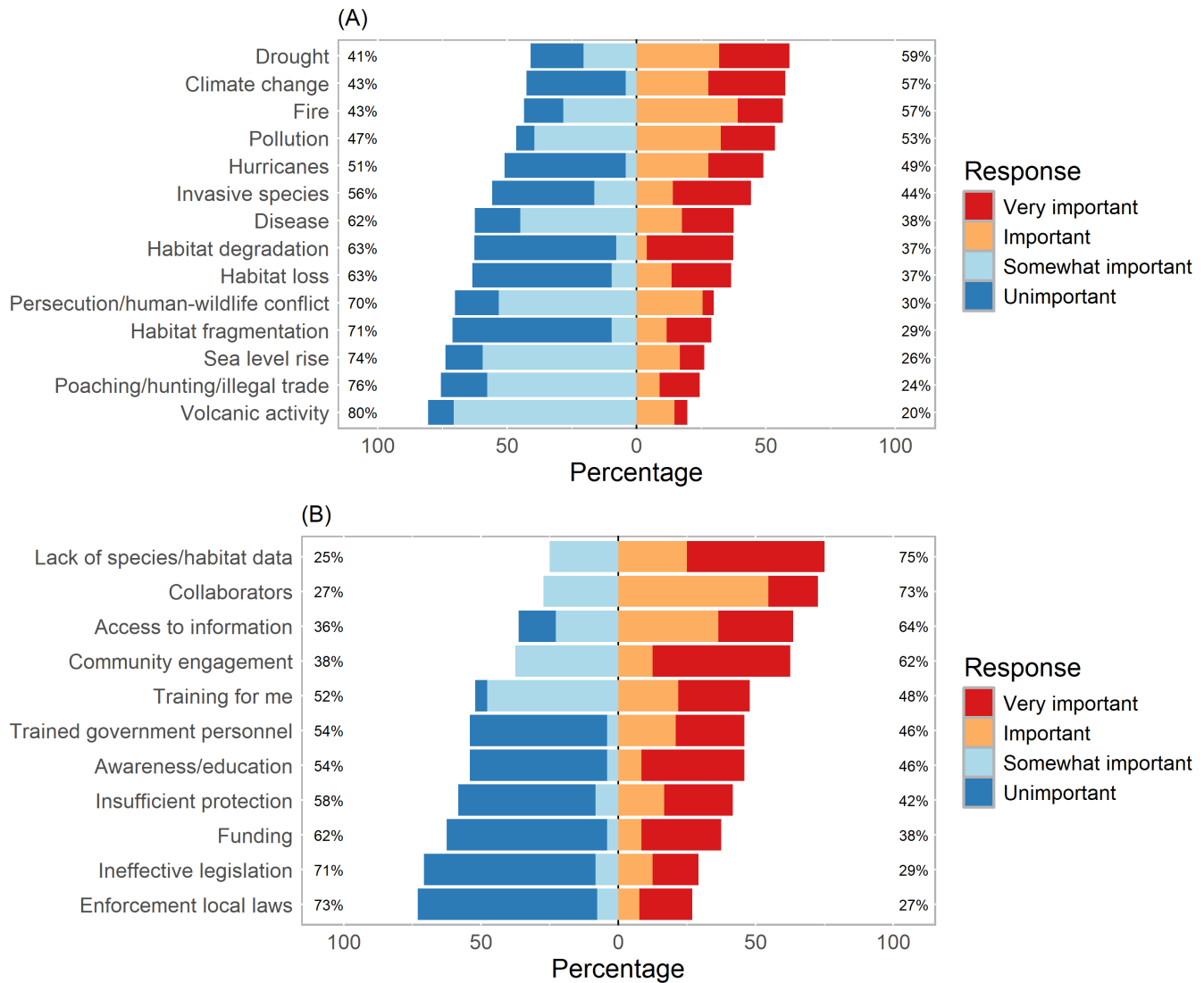


**Fig. 2.** Responses of 26 BirdsCaribbean members surveyed in January 2022. (A) The type of conservation organization or institution they worked or volunteered for; (B) the main capacity in which they engaged in bird conservation; (C) the types of collaborations they have undertaken with conservationists from other Caribbean islands; and (D) the types of activities the BirdsCaribbean Endemic and Threatened Species Working Group could undertake that would be most helpful to respondent’s conservation work. Respondents could select as many answers as relevant for all these questions.

conservation action on these groups.

Drought, climate change, fire, and hurricanes were ranked as top threats (‘very important’ and ‘important’) for the reported species (Fig 3A). This reflects a consistency between what practitioners perceive as the priority threats likely to affect many of the region’s endemic and threatened species, and the growing technical literature highlighting the risk of extreme weather events and climatic variability to the region (Wunderle 2008, Latta 2012). The impacts of drought on endemic and threatened species in the Caribbean remain poorly understood. However, a Puerto Rican study suggests that severe drought can cause steeper and more enduring population declines among specialist endemic species than hurricanes (Campos-Cerqueira and Aide 2021). While there is substantial natural resilience in Caribbean systems to hurricanes, increasing intensity due to climate

change (Knutson *et al.* 2019) challenges the ability of species and habitats to rebound between events. The risk to endemics is exemplified by Hurricane Dorian’s contribution to the extinction of the Bahama Nuthatch (*Sitta insularis*; Bagwyn *et al.* 2020). Fire in the Caribbean is almost entirely anthropogenic, and, apart from northern Caribbean native pine forests (Wunderle 2008), is not part of the natural cycle, so historically was the most significant human impact shaping Caribbean landscapes (Fitzpatrick and Keegan 2007). One example from the Dominican Republic predicts that 50% of the old-growth pine forest habitat of the Hispaniolan Crossbill *Loxia megaplaga* will be lost within 50 years at the current fire frequency (Latta *et al.* 2000). Across the region, fire events are being exacerbated by drought and climate change-induced changes in precipitation patterns (e.g., 2009/2010 drought and fires in Grenada; Peters 2015).



**Fig. 3.** (A) Importance of threats to the species that respondents actively worked on (reported for each individual species or group of species); and (B) importance of specific barriers to the respondents' conservation work. Percentage of families represented in (A): Psittacidae (17%); Columbidae (12%); Parulidae (12%); Thraupidae (10%); 5%: Accipitridae, Icteridae, Procellariidae, and Turdidae; and 2%: Alcedinidae, Anatidae, Caprimulgidae, Charadriidae, Cracidae, Cuculidae, Mimidae, Momotidae, Passerellidae, Picidae, Troglodytidae, Tyrannidae, and Vireonidae.

Our survey respondents reported the increasing need to prioritize understanding climate change in managing Caribbean species. This is particularly important given current shifts in the framing of biodiversity funding to use a climate change lens (Veríssimo et al. 2014).

Pollution was also viewed as a substantial threat (Fig 3A). Pollution encompasses a diverse range of sources and impacts, such as from light (e.g., mortality of migratory warblers following impact with cruise ships; Bocetti 2011), noise (e.g., changes in song structure in Grenada Wren *Troglodytes grenadensis*; Cyr et al. 2020), mercury (e.g., in Black-capped Petrel *Pterodroma hasitata*; Simons et al. 2013), pesticides (e.g., chlordecone-degraded habitat of Ringed Kingfisher *Megaceryle torquata* in Guadeloupe; Villard et al. 2021), and plastic (e.g., in seabird nests in the Grenadines and anthropogenic material in passerine nests in St. Eustatius; Coffey 2022, Madden and Danielson-Owczynsky

2023). A more detailed inventory of the types of pollution of concern to our respondents is needed, given that our survey did not distinguish among different forms of pollution. Furthermore, the multi-dimensional complexity of pollution impacts is little understood in the Caribbean (CANARI 2019), e.g., the effects of food availability on seabirds and upland pollution (Gilmour et al. 2019).

Threats identified as less important by respondents (Fig. 3A) may reflect a restriction to specific locations (e.g., volcanic activity on St. Vincent or Montserrat), a smaller number of species (e.g., hunting/poaching, human-wildlife conflict), or affected species that were not well represented in this survey. For example, few cage bird species were reported in this survey but some are known to be heavily harvested in some islands (e.g., Trinidad and Cuba; White et al. 2015, González et al. 2020). Habitat degradation was perceived as 'very important' by over 30% of

respondents (Fig. 3A), which likely reflects the significant threat to many island species from physical development (e.g., Davis 2017, Buckmire *et al.* 2022). However, the fact that habitat-related threats were not identified as being of greater importance (Fig. 3A) was unexpected, given that land-use change is reported as the biggest threat to Caribbean ecosystems (CANARI 2019). Further work is required to understand stakeholder's assessments of the underlying drivers of land-use change, and the relationships between threat categories and which species are most impacted by habitat loss.

Key barriers to effective conservation work reported by respondents were a lack of data and a lack of access to data on species or habitats (Fig. 3B). These findings reiterate the persistence of knowledge gaps and the perceived importance by stakeholders of the need for more knowledge to achieve effective conservation (Nelson and Devenish-Nelson 2022). Examples of such gaps include the impacts of mercury on Black-capped Petrel reproduction (Simons *et al.* 2013) or range shifts on interspecific interactions between endemic species (Campos-Cerqueira *et al.* 2017). Nonetheless, on some fronts, our understanding of species demography and distribution is improving; for instance, improving translocation survival rates in Ridgway's Hawk (McClure *et al.* 2017) and the role of citizen science in locating avian populations previously thought extinct in The Bahamas (Bagwyn *et al.* 2020). However, even where knowledge exists, our survey highlights pervasive information access issues across the region, with journal paywalls, unpublished data, international researchers as gatekeepers, and protectionism within local institutions/governments often preventing access (Agard *et al.* 2023).

Our survey revealed interesting patterns in perceived barriers. Collaboration was viewed as a key barrier (Fig. 3B), suggesting that the existing levels of informal collaboration are not perceived as being sufficient for effective conservation. For example, one survey participant's request for more joint effort on major issues (e.g., addressing the challenges of development and mining) speaks to this need for more organized coordination. That legislation and law enforcement were not viewed as significant barriers is interesting, given that this is frequently cited as a substantial threat to species in the region (Simons *et al.* 2013, Davis 2017, Buckmire *et al.* 2022). This may reflect that respondents view the existing legislative framework as adequate, but this contradiction highlights the need for refinement of our survey instrument to separate these issues. Similarly, it was unexpected that funding was not viewed as a substantial barrier, given multiple funding challenges reported in the region (Nelson and Devenish-Nelson 2022). Reasons for this may include the high response rate from Puerto Rico where some species are comparatively well-funded (e.g., psittacines) or it may reflect a lack of capacity to use the existing funding opportunities.

Respondents identified species monitoring, species recovery planning, data analysis, habitat management, and a database of regional conservation projects as key future ETSWG activities (Fig 2D). Monitoring efforts were identified as a top capacity need, perhaps reflecting why respondents identified data gaps as a key barrier. In the time since this survey, significant progress in building monitoring capacity has been made by BirdsCaribbean with the 2022 launch of their Landbird Monitoring Network training program (BirdsCaribbean 2024). The ETSWG's activi-

ties at the 2022 joint American Ornithological Society–BirdsCaribbean (AOS–BC) Conference were informed by the results of this survey, including a successful roundtable on “Action Learning for Building Resiliency in Island Endemic Species Recovery” and symposium on “Planning for Resiliency of Caribbean Island Endemics” (BirdsCaribbean 2022). Provision of support for data analysis is complex since it requires a substantial time investment and incentives for both trainers and trainees (both pre- and post-training interventions), a certain degree of pre-existing capacity in trainees, and development of a supporting institutional framework. However, opportunities for such support are increasing such as through the Landbird Monitoring Network and workshops at BirdsCaribbean conferences. The ETSWG has also formed a data subgroup to explore potential avenues for providing support for data sharing and analysis, including working with the Journal of Caribbean Ornithology. Yet we also identified a potential mismatch between what people see as threats and what they see as capacity needs. For instance, community engagement was identified as a significant barrier (Fig. 3B), but few reported needing to develop their (individual or organizational) capacity for engagement (Fig. 2D). This may reflect the limitations of using surveys to explore complex questions about emergent patterns in human judgment, e.g., how respondents define and assess capacity needs when faced with specific human resource, financial, and organizational deficiencies.

Only 23.8% of respondents had previously attended an ETSWG meeting, with over half saying they did not know the group existed, suggesting that the group needs to do more to encourage BirdsCaribbean members to actively participate. ETSWG membership has increased since this survey due to increased efforts to promote the group at the AOS–BC conference. During the BirdsCaribbean 2024 conference in the Dominican Republic, the ETSWG and its members hosted three sessions that focused on key priorities identified in the survey: “Red List, ACAD (Avian Conservation Assessment Database) or ? Are prioritization assessments fit for Caribbean birds?”; “Assessment of BirdsCaribbean's Capacity Building Initiatives and identification of Priorities for the Future”; and “Landbird and Endemic Monitoring—Challenges, Solutions, Needs, and Results”.

This survey provides an opportunity to reflect on 25 years of progress in building regional capacity for Caribbean bird conservation since the previous regional avian priority setting workshops (Walker 1998, Wege 1999). Some key priorities raised in those workshops (Walker 1998) remain pertinent to the Birds Caribbean membership today, e.g., the need for a regional database of projects and experts, and stronger collaboration and knowledge sharing. Our findings also indicate that the overarching threat of climate change and synergies with other regional pressures are now at the forefront of endemic and threatened bird conservation. We recommend that an essential next step is to implement a comprehensive effort to monitor the long-term impacts of existing capacity development programs. This will enable us to identify lessons for scaling up our conservation efforts—particularly those related to climate threats—to ensure our skills development programs are matching the actual needs on the ground and ultimately lead to more cost-effective resource allocation.



### Further recommendations and priority activities

(1) Climate change and related impacts should be a priority of the ETSWG, informed by a climate change vulnerability assessment of Caribbean endemic species and their habitats. (2) Initiate and support research and monitoring of the effectiveness of current and potential management and restoration actions to ameliorate the impacts of climate-induced stressors, in particular drought and fire on endemic birds and their habitat. (3) Promote species recovery planning and habitat management through more stakeholder-driven on-the-ground conservation, such as through developing standards for species recovery plans. (4) Repeat surveys to monitor conservation capacity and priorities for Caribbean endemic bird conservation. (5) Provide opportunities for fostering collaboration such as supporting Action Learning Groups for Caribbean endemic bird conservation. (6) Provide a hub to enable systematic sharing of published and unpublished information on the research and management of Caribbean endemic birds.

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**Appendix 1.** Questions from the BirdsCaribbean Endemic and Threatened Species Working Group Survey.

Section	Question	Response Option
1: Personal information	Where in the Caribbean are you actively working?	Island nation/territory/dependent name
	Do you live in the Caribbean?	Yes/No
2: Caribbean capacity	Are you originally from the Caribbean?	Yes/No
	If you have collaborated with conservationists from other Caribbean islands, what kinds of collaborations have these been? (check all that apply)	<ul style="list-style-type: none"> <li>• Informal</li> <li>• Training and Education</li> <li>• Sharing data</li> <li>• Publishing research</li> <li>• Project development (e.g., proposal writing, fundraising)</li> <li>• Technical assistance (e.g., consultancy, field assistance, funding support)</li> <li>• I have not collaborated with others from Caribbean islands</li> </ul>
3: About your work	What conservation organization or institution do you work for, or with? (select as many as relevant)	<ul style="list-style-type: none"> <li>• Community-based organization</li> <li>• Non-government organization</li> <li>• National conservation organization</li> <li>• Regional/international conservation organization</li> <li>• National government agency</li> <li>• Private funding agency</li> <li>• Multilateral funding agency</li> <li>• Academia (university)</li> <li>• Independent consultant</li> <li>• Retired and/or volunteer</li> <li>• Other</li> </ul>
	In what capacity do you mainly engage in bird conservation?	<ul style="list-style-type: none"> <li>• Education/training</li> <li>• Research</li> <li>• Policy</li> <li>• Enforcement</li> <li>• Habitat management</li> <li>• Ex-situ/captive species</li> </ul>
	Tell us about the kind of conservation activities that take up the most of your time, when you work on threatened/endemics in the Caribbean.	<ul style="list-style-type: none"> <li>• Conservation finance/funding</li> <li>• Advocacy</li> <li>• Communications</li> <li>• Tourism</li> <li>• Governance</li> <li>• Other</li> </ul>
4: Conservation action	Are you working on one endemic/threatened bird species or more than one species?	One species/more than one species
5: Conservation of your species	What threatened and/or endemic bird species are you working on?	Open response

Section	Question	Response Option
6: Threats to your species	In your view, how great are the following threats to the species you work on? Please complete the following grid for each species (unimportant/somewhat important/important/very important)	<ul style="list-style-type: none"> <li>• Poaching/hunting</li> <li>• Local persecution</li> <li>• Climate change</li> <li>• Hurricanes</li> <li>• Sea-level rise</li> <li>• Drought</li> <li>• Fire</li> <li>• Habitat loss</li> <li>• Habitat fragmentation</li> <li>• Habitat degradation</li> <li>• Invasive species</li> <li>• Disease</li> <li>• Pollution</li> <li>• Volcanic activity</li> </ul>
7: Barriers to conservation	Tell us about the challenges you face undertaking your conservation actions. Please provide an answer for each barrier	<ul style="list-style-type: none"> <li>• Insufficient funding</li> <li>• Lack of trained personnel in government</li> <li>• Lack of training opportunities for yourself</li> <li>• Lack of data on your species or habitat</li> <li>• Lack of access to information on your species or habitat</li> <li>• Insufficient protected habitat</li> <li>• Lack of effective conservation legislation</li> <li>• Weak enforcement of existing local laws</li> <li>• Degree of local community awareness and education</li> <li>• Degree of local community engagement</li> <li>• Lack of collaborators</li> <li>• Other</li> </ul>
8: Engagement with ETSWG	Have you attended any of the Endemics and Threatened Species Working Group Meetings?	Yes/No
9: Barriers to engaging with ETSWG	What prevents you from engaging with the Endemics and Threatened Species Working Group? (Please tick any that apply)	<ul style="list-style-type: none"> <li>• I was unaware the group existed</li> <li>• I didn't know that this was an open group</li> <li>• I felt I had nothing to offer the group</li> <li>• I am a non-English speaker and uncomfortable engaging with the group in English</li> <li>• The group does not currently offer activities that are of interest to me</li> <li>• I am already a member of other BirdsCaribbean working groups</li> <li>• I think the group is ineffective</li> <li>• I need an incentive (funding or training) to engage</li> <li>• I am too busy</li> <li>• Other</li> </ul>
10: ETSWG activities	What activities could the Endemics and Threatened Species Working Group undertake that would be most helpful to your conservation work?	<ul style="list-style-type: none"> <li>• Grant writing training</li> <li>• Habitat management training</li> <li>• Species recovery plan training</li> <li>• Species monitoring</li> <li>• Data analysis training</li> <li>• Mentoring for conservation publication</li> <li>• Hosting an Action Learning Group on endemic/threatened species</li> <li>• Hosting a database of regional conservation projects</li> <li>• Training on policy engagement</li> <li>• Training on local community engagement</li> <li>• Personal resiliency</li> <li>• Other</li> </ul>