**Table S1.** Factors potentially contributing to limit the production of peer-reviewed papers and/or associated journal impact factor by Caribbean-based researchers working on biodiversity conservation in the insular Caribbean. Note that the relative importance of these factors is likely to vary across the insular Caribbean.

|  |  |  |  |
| --- | --- | --- | --- |
| **Factor** | **Issue** | **Paper production** | **Impact factor** |
| **Research priorities and/or target audiences** | Mismatch between what leading conservation journals seek in a paper, which is generally a focus on global significance (Habel et al., 2016; Mammides et al., 2016), and what Caribbean-based researchers perceive as important in their specific local context, with the latter approach being relegated to journals with lower impact factor (Mammides et al., 2016). |  | X |
| Lack of strong incentives for Caribbean-based researchers, particularly post-graduate students, to publish their work in peer-reviewed journals. | X |  |
| Caribbean-based researchers, particularly post-graduate students, might be encouraged to contribute to local and regional journals with the hope of improving journal impact factor over time. |  | X |
| **Research funding** | Limited access by Caribbean-based researchers to local funding to continuously support post-graduate students and/or post-doctoral fellows in Caribbean-based tertiary-education institutions. | X | X |
| Limited direct access of Caribbean-based researchers to funding for region-wide projects promoting intra-regional collaboration. | X | X |
| Publishing fees required by some prestigious high-impact factor journals (particularly for open access) remain prohibitively expensive for most Caribbean-based researchers and institutions (Pai 2020) |  | X |
| **Teaching focus versus research focus** | Limited time for research in Caribbean-based tertiary-education institutions due to heavy loads in teaching and administrative tasks, particularly with increasing numbers of students. | X | X |
| **Exposure to cutting-edge science** | Limited access by Caribbean-based researchers to peer-reviewed non-open access journal content. | X | X |
| Limited funding opportunities for additional training and conference/workshop attendance for Caribbean-based researchers. | X | X |
| **Research technology** | Limited direct access of Caribbean-based researchers to adequately maintained cutting-edge technology (Dangles et al., 2016; Habel et al., 2016; Malhado et al., 2014), particularly in the fields of molecular ecology and quantitative modelling. | X | X |
| **Field work support infrastructure** | Well-equipped biological field stations, a key component of research output production in biodiversity conservation (Stocks et al., 2008), remain insufficient in number and distribution across the region and in accessibility by land and/or sea. The latter is particularly true for the Greater Antilles because of the larger size of the islands, poor road conditions (Martinez et al., 2018), limited supplies of fuel, 4x4 vehicles and spare parts (Enoch et al., 2004) and, in some instances, safety issues (Izarali 2018). Marine field stations require beachfront access, which might be prohibitively expensive in small island states. | X | X |
| **Language** | Caribbean-based researchers for whom English is not the native language may face additional difficulties in successfully publishing articles in high-ranking, international journals (Nuñez et al., 2019). For example, researchers from Cuba and the Dominican Republic might be more likely to submit their articles to Latin American journals, which have recently increased in number, but tend to have a low impact factor (Crespo-Gascón et al., 2019). |  | X |
| **Socio-culture** | Weak enrolment of Caribbean-based students in biodiversity conservation disciplines compared to other University offerings (including other life science disciplines); these students might favor degrees in law, business, biotechnology, medicine, engineering or information technology. Moreover, under growing worldwide urbanization, Caribbean-based students are not immune to the global trend of an increase in detachment of societies from nature (Pergams and Zaradic 2008; Thomas-Thorpe 1996), which can only further exacerbate the problem. | X |  |

**Table S2.** Measures for consideration to increase the relative contribution of Caribbean-based researchers to the peer-reviewed literature on biodiversity conservation in the Caribbean and actors that should be particularly involved in adopting them.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Category** | **Measure** | **Scientific Publishers / Editors** | **International Funding Bodies** | **Local / Regional Governments** | **Local / Regional NGOs** | **Local/Regional tertiary Education Institutions** | **Local/ Regional Private sector** |
| **Funding** | Re-allocate part of the funding support for research and conservation projects to local capacity building. |  | X | X |  |  |  |
| Establish a regional fund accessible to Caribbean-based researchers and institutions engaged in collaborations to support research projects of strategic intra-regional importance. |  | X | X | X |  |  |
| Develop fiscal instruments (e.g. tax deductions), particularly for the nature-based private sector (e.g. ecotourism; dive tourism, etc), to incentivize contributions to a national-level research fund. |  |  | X |  |  | X |
| Allocate funding from Payment for Ecosystem Services (PES) mechanisms (Salzman et al., 2018) towards a national- and/or regional-level research fund. |  |  | X |  |  | X |
| Partner with existing regional networks of field stations (e.g. the Association of Marine Laboratories of the Caribbean (AMLC)) to establish a fund to support post-graduate /early career research via the network. |  | X | X |  | X |  |
| **Diversity, Equity & Inclusion Policies** | Place greater focus on the inclusion and training of Caribbean-based researchers and students within conservation science projects submitted by foreign-based researchers wishing to operate in the insular Caribbean. |  | X | X | X |  |  |
| Lower costs of access to peer-reviewed journals for Caribbean-based institutions. | X |  |  |  |  |  |
| Recommend that submitted manuscripts include an ethical note describing how a project run by foreign-based researchers in the insular Caribbean contributed to local capacity building. | X |  |  |  |  |  |
| **Language** | Integrate a foreign language course as part of the STEM curriculum of tertiary-education institutions. |  |  | X |  | X |  |
| **Scientific Production** | Develop both teaching-focus vs research-focus career paths for Caribbean-based academic staff to optimize human resource use. |  |  |  |  | X |  |
| Incentivize peer-reviewed publication by Caribbean-based researchers. |  |  |  |  | X |  |
| Establish programs for post-doctoral fellow recruitment in Caribbean-based institutions to assist with teaching and research. |  | X | X |  | X |  |
| Develop Caribbean-based post-graduate scholarships and academic exchange programs specifically promoting collaborations with other research institutions within and/or outside the region. |  | X | X |  | X |  |
| **Scientific Exposure** | Build capacity for high-quality peer-reviewed regional journals, perhaps through joint-ventures between major publishing houses and a consortium of Caribbean-based research institutions. | X |  |  |  | X |  |
| Encourage foreign-based researchers working in the insular Caribbean to publish in peer-reviewed open-access and/or regional journals. |  | X |  |  |  |  |
| Develop a consortium of libraries of Caribbean-based research institutions to collectively bargain for more affordable and comprehensive international peer-reviewed journal access. |  |  |  |  | X |  |

**References**

Crespo-Gascón, S., Tortosa, F.S., Guerrero-Casado, J., 2019. Producción de revistas científicas en América Latina y El Caribe en Scopus, Journal Citation Reports y Latindex en el área de los recursos naturales: su relación con variables económicas, ambientales y de inversión en investigación. Rev. Esp. Doc. Cient. 42.

Dangles, O., Loirat, J., Freour, C., Serre, S., Vacher, J., Le Roux, X., 2016. Research on biodiversity and climate change at a distance: Collaboration networks between Europe and Latin America and the Caribbean. PLoS One 11, e0157441.

Enoch, M., Warren, J.P., Valdés Rı́os, H., Henrı́quez Menoyo, E., 2004. The effect of economic restrictions on transport practices in Cuba. Transp. Policy 11, 67-76.

Habel, J.C., Lens, L., Eggermont, H., Githiru, M., Mulwa, R.K., Shauri, H.S., Lewinsohn, T.M., Weisser, W.W., Schmitt, T., 2016. More topics from the tropics: Additional thoughts to Mammides et al. Biodivers. Conserv. 26, 237-241.

Izarali, M.R., 2018. Crime, Violence and Security in the Caribbean. Routledge Studies in Latin American Politics. Routledge, New York.

Malhado, A.C.M., de Azevedo, R.S.D., Todd, P.A., Santos, A.M.C., Fabré, N.N., Batista, V.S., Aguiar, L.J.G., Ladle, R.J., 2014. Geographic and temporal trends in Amazonian knowledge production. Biotropica 46, 6-13.

Mammides, C., Goodale, U.M., Corlett, R.T., Chen, J., Bawa, K.S., Hariya, H., Jarrad, F., Primack, R.B., Ewing, H., Xia, X., Goodale, E., 2016. Increasing geographic diversity in the international conservation literature: A stalled process? Biol. Conserv. 198, 78-83.

Martinez, S., Sanchez, R., Yañez-Pagans, P., 2018. Road safety: Challenges and opportunities in Latin America and the Caribbean. IDB Technical Note 01598, p. 30. Inter-American Development Bank, New York.

Nuñez, M.A., Barlow, J., Cadotte, M., Lucas, K., Newton, E., Pettorelli, N., Stephens, P.A., 2019. Assessing the uneven global distribution of readership, submissions and publications in applied ecology: Obvious problems without obvious solutions. J. Appl. Ecol. 56, 4-9.

Pai, M., 2020. How Prestige Journals Remain Elite, Exclusive And Exclusionary. Forbes. Retrieved from: <https://www.forbes.com/sites/madhukarpai/2020/11/30/how-prestige-journals-remain-elite-exclusive-and-exclusionary> [Online Resource]. Accessed on 18 Feb 2021.

Pergams, O.R.W., Zaradic, P.A., 2008. Evidence for a fundamental and pervasive shift away from nature-based recreation. Proc. Natl. Acad. Sci. USA 105, 2295-2300.

Salzman, J., Bennett, G., Carroll, N., Goldstein, A., Jenkins, M., 2018. The global status and trends of Payments for Ecosystem Services. Nat. Sustain. 1, 136-144.

Stocks, G., Seales, L., Paniagua, F., Maehr, E., Bruna, E.M., 2008. The geographical and institutional distribution of ecological research in the tropics. Biotropica 40, 397–404.

Thomas-Thorpe, E., 1996. The environmental dilemna in Caribbean context, In The Grace Kennedy Foundation. Kingston, Jamaica.