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Looking Back and Moving Forward: Reflections on 60 Years of the Association for Tropical Biology and Conservation

Jennifer S. Powers[1] | Emilio M. Bruna[2,3] | Lúcia G. Lohmann[4]

[1]Department of Plant and Microbial Biology, University of Minnesota, St. Paul, Minnesota, USA | [2]Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, Florida, USA | [3]Center for Latin American Studies, University of Florida, Gainesville, Florida, USA | [4]Missouri Botanical Garden, St. Louis, Missouri, USA

Correspondence: Jennifer S. Powers (powers@umn.edu)

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In 1962 a group of scientists met in Trinidad and Tobago to discuss how best to make progress on the challenges making the study of tropical botany such an "enthralling but formidable task" (Bulletin 1, p. 17). Among the recommendations made by the workshop participants was the creation of a new international organization—*The Association for Tropical Biology*—whose mission will sound remarkably similar to its current members: (1) advancing and intensifying research in all aspects of tropical biology, (2) the vigorous promotion and support of training and interchange of students, teachers, and investigators, (3) cooperation and communication among investigators, (4) the development of facilities to attain these objectives, and (5) the preservation of essential selected natural areas and the establishment or development of botanical gardens to safeguard the natural living heritage for posterity and for the preservation of gene pools (Bulletin 1, pp. 40, 41). With over 1000 members in over 60 countries, the Association for Tropical Biology and Conservation (ATBC)—the "C" was formally added to in 2003—is the largest scholarly society in the world dedicated to the study of tropical ecosystems and their biota.

In 1969 the ATBC's leadership decided to create a new outlet for cutting-edge research in tropical biology: the journal *Biotropica* (Figure 1; Bruna 2019). As the society's flagship journal, we are honored to celebrate the 60th anniversary of the ATBC with this Special Issue devoted to both reviewing what we have learned about the biology of the tropics since the society's founding and casting an eye toward the future of the field. In an open call to the ATBC community, the journal's Editorial Board solicited submissions that not only review and summarize previously published studies, but also those that placed prior findings in the context of pressing challenges facing tropical ecosystems, their constituent species, and interactions with humans. The resulting papers can be roughly divided into three categories: conceptual syntheses, reflective papers on how we practice science and conservation as a community, and those that point toward new horizons by identifying gaps in knowledge and opportunities for future work (Table 1).

The papers addressing conceptual issues range from evaluations of climate change effects on species distributions along elevational gradients (Colwell and Feeley 2025) to the fundamental tradeoffs that define life history strategies of tropical tree species and constrain forest dynamics (Swenson and Rubio 2025). One review paper questions the extent to which concepts from dynamical systems theory such as alternative stable states and hysteresis have been integrated into research and literature on tropical ecosystems and disturbance (Mata et al. 2025); using unified terminology for how we characterize system dynamics helps facilitate the identification of critical stages or tipping points. Another paper took a historical approach to trace the effects of ancient Mayan land use on contemporary forest composition in the Maya Lowlands in meso-America (Brokaw et al. 2025). Collectively, these papers illustrate how tropical ecosystems, species, and their dynamics respond to changes in climate and land use across varied spatial and temporal scales.

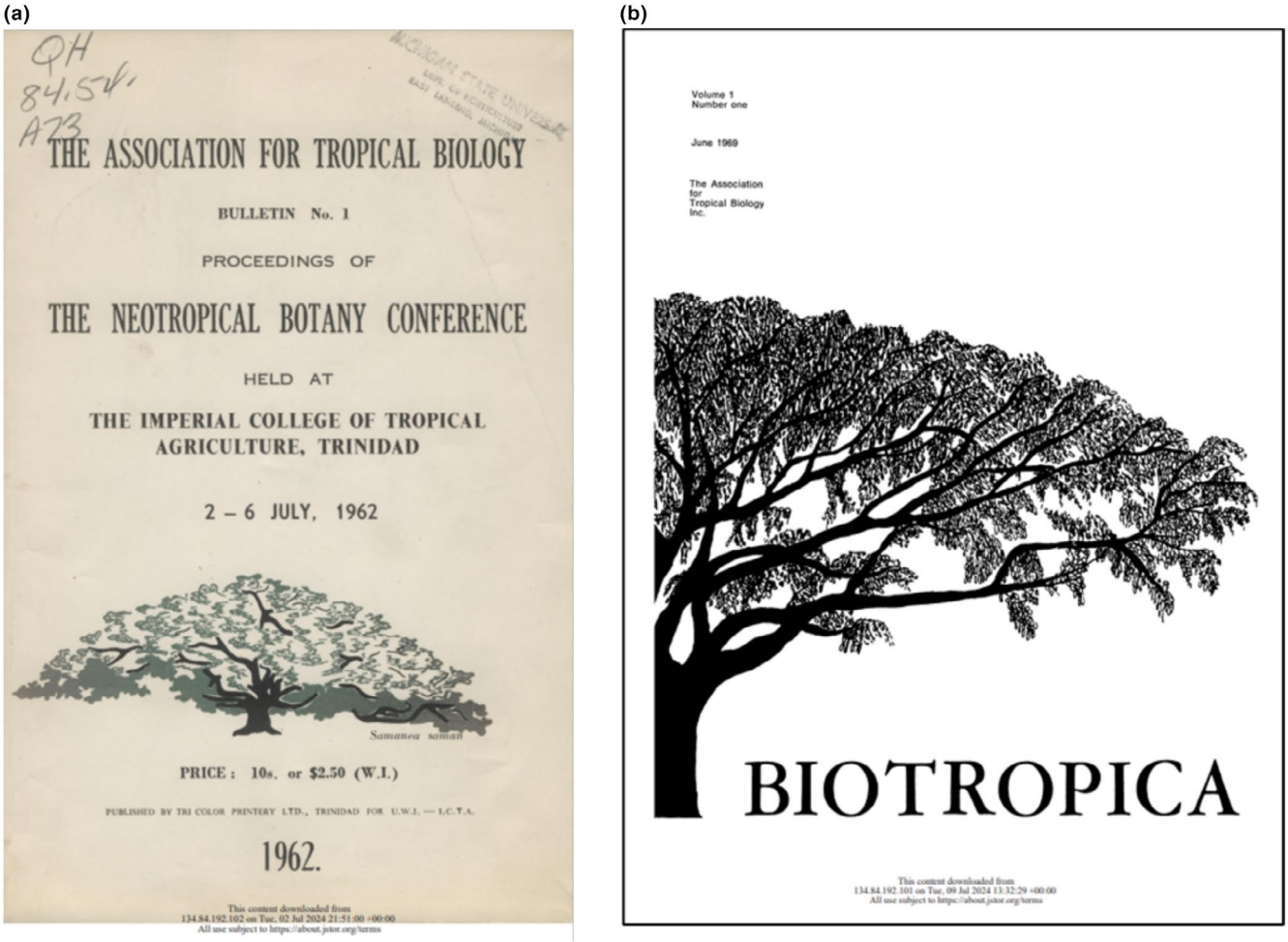

FIGURE 1 | (a) The cover of the Proceedings of the Neotropical Botany Conference held in Trinidad in 1962, which marked the formation of the Association for Tropical Biology, and (b) first cover of the society's journal, *Biotropica*.

Another suite of authors coin the new term—"Lemurology"—as part of their effort to highlight the extensive but often hidden research on Madagascar's famed primates. These papers include a review of how small, nocturnal lemurs contribute to seed dispersal (Ramananjato 2025) and two companion papers reviewing decades of research on lemurs using bibliometric (Ramananjato et al. 2025) and synthesis methods (Razafindratsima et al. 2025). It is particularly notable that these three papers are led by authors *from* Madagascar; this certainly portends a bright future for "Lemurology."

Several of the papers focus inward to the community of researchers who study tropical ecosystems. The first of these (Maas et al. 2025) conducted a survey of ATBC members to gauge their perceptions of the roles of professional societies in promoting diversity, equity and inclusion compared to their workplaces (Maas et al. 2025). The authors conclude with recommendations for how societies can foster inclusive environments at annual meetings and beyond. Another provocative study attempts to answer the question "is there such thing as tropical biology?" (Bruna 2025). Emilio Bruna builds arguments for why the answer this question might be "no," "yes," or "maybe" while delving into what differentiates tropical biology from other biological realms and what unites the ecosystems we study with extra-tropical biology.

The final papers in the Special Issue present future-looking perspectives that leverage past findings to set the tone for tropical biology moving forward. Natural history is the foundation of much of tropical biology, but has been deemphasized in academia in concert with the rise in molecular approaches in biology, among other factors. Biotropica recently created a new paper category, Natural History Field Notes (Powers et al. 2021), to provide a platform for novel natural history observations. The first 2 years of Natural History Field Notes highlight how there remains much to be learned about tropical species and their interactions (Powers 2025). The remaining papers in the ATBC 690th Anniversary Special Issue focus on themes that are important for tropical biology now and in the future: urban ecosystems, restoration, and conservation. Bonebrake and colleagues highlight a major gap in the literature—the notable lack of research devoted to understanding urban ecosystems in the tropics. They present a comprehensive review and research agenda for urban ecosystems in the tropics (Bonebrake et al. 2025). In an effort to rectify this knowledge gap and foster research into urban ecosystems in the tropics, the 2026 Special Issue of Biotropica will be devoted to urban ecosystems. By contrast, there is already global attention devoted to ecosystem restoration, as we are currently halfway through the United National Decade on Ecosystem Restoration. Lussier and colleagues review the question of how

TABLE 1 | Papers in the special issue celebrating the 60th anniversary of the Association for Tropical Biology and Conservation.

Topics and titles	
Conceptual synthesis	
Still little evidence of poleward range shifts in the tropics, but lowland biotic attrition may be underway	Colwell and Feeley (2025)
The functional underpinnings of tropical forest dynamics—Functional traits, groups and unmeasured diversity	Swenson and Rubio (2025)
The ancient Maya and the modern forest	Brokaw et al. (2025)
Alternative stable states in tropical terrestrial ecosystems—A systematic review	Mata et al. (2025)
Contributions of small nocturnal lemurs to seed dispersal in Madagascar: A review	Ramananjato et al. (2025)
120 years of "Lemurology": A qualitative review of what we have learned	Razafindratsima et al. (2025)
120 years of "Lemurology": What has changed?	Ramananjato et al. (2025)
How we do science	
Supporting Inclusive Scientific Communities: Insights from the ATBC Society Survey	Maas et al. (2025)
Is there really such a thing as Tropical Biology?	Bruna (2025)
New horizons	
A Place for Natural History in the 21st century	Powers (2025)
Tropical cities as windows into the ecosystems of our present and future	Bonebrake et al. (2025)
Seeding Success: Integrating seed dispersal networks in tropical forest restoration	Lussier et al. (2025)
The shifting paradigms of biodiversity conservation: Perspectives from South Asia	Sengupta et al. (2025)

seed dispersal networks that explicitly consider both animal and plant-centric perspectives can advance our understanding of restoration and conservation through documenting interspecific interactions (Lussier et al. 2025). Last, Sengupta and colleagues review different models for conservation in South Asia and conclude with specific recommendations for more equitable and actionable conservation (Sengupta et al. 2025). In conclusion, the papers in this Special Issue celebrate past achievements of 60 years of the ATBC and research in tropical biology, and underscore that we cannot rest on our laurels, as much is left to be learned and done (Table 1).

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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