

Editorial

We Know How to Do Conservation—We Just Need to Do More of It!

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For decades, even centuries, people have taken deliberate, targeted actions for the conservation and management of species and ecosystems. Originally empirical and driven by utilitarian or aesthetic reasons, over time, evidence-based interventions have become the gold standard [1]. In this Special Issue, we focus on the Species Conservation Cycle, a conceptual framework developed by the International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) to provide structure to its scientific network of thousands of species conservation experts [2]. The backdrop is the Biodiversity Paradox, or the inequitable distribution of human, financial, and institutional resources to address biodiversity decline and loss [2]. Species conservation does not need only evidence-based conservation, but also significant expansion in the distribution of the funding and resource base [3–5].

Seventeen articles are included in this Special Issue of *Diversity* on “Assessments, Planning and Action for Conservation of Species and Ecosystems at Multiple Spatial Scales.” These were written by 209 authors from 55 countries and territories, including 12 in Africa, 14 in Meso and South America, 2 in North America and the Caribbean, 4 in Oceania, 10 in South and East Asia, and 12 in West Europe. West Asia is the only IUCN Statutory Region with no contributions, except one coauthor of this editorial. It was a truly collaborative effort, spanning 302 printed pages and a wealth of supplementary materials. All stages of the Species Conservation Cycle were addressed, with a particular focus on Assess and Communicate (Table 1). The latter is predictable, as publishing an article is part of communicating a group’s activities, while Assess continues to be the most cited focus of the work of SSC groups [6].



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Table 1. Stages of the Species Conservation Cycle addressed by type of article included in this Special Issue of *Diversity* on “Assessments, Planning and Action for Conservation of Species and Ecosystems at Multiple Spatial Scales”.

Article Type	General Subject	Species Conservation Cycle					Ref.
		Assess	Plan	Act	Network	Communicate	
Research	Tiger and Asian elephants in India	X	X			X	[7]
	Freshwater fishes in Central America	X	X			X	[8]
	Cheer pheasant in the Western Himalayas	X				X	[9]
	Species conservation planning		X			X	[10]
	Green status of species	X				X	[11]
	Global status of fungi	X				X	[12]
	Academic networks and student engagement	X			X	X	[13]
	Look-alike bears in India	X				X	[14]
	Atlantic humpback dolphin in coastal Africa	X	X	X	X	X	[15]
	Prioritizing species conservation and action	X	X			X	[16]
	Global Red List and species conservation in Seychelles	X				X	[17]
	Intact habitats for extinct species in the wild	X				X	[18]
	Black-faced spoonbill in East Asia	X	X	X	X	X	[19]
	Species conservation monitoring	X				X	[20]
Review	Primate conservation planning	X	X	X	X	X	[21]
	Global status of trees	X				X	[22]
Opinion	Biodiversity Paradox				X	X	[2]

The conclusion that one can derive from this collection of articles is that scientific research to support conservation action is alive and well. Species-specific contributions, such as those by Menon et al. [7], Kaul et al. [9], Garshelis et al. [14], Minton et al. [15], and Cano-Alonso et al. [19], illustrate how meticulous fieldwork serves to inform conservation interventions and set the baseline for monitoring their progress. Geographical and taxonomic perspectives, such as the work by Contreras-MacBeath et al. [8], Mueller et al. [12], Bullock et al. [17], Reuter et al. [21], and Harvey-Brown et al. [22], highlight the value of synthetic analyses to design conservation interventions that simultaneously address the needs of multiple species. Thematic approaches, such as those of Byers et al. [10], Grace et al. [11], Lacher et al. [16], and Stephenson et al. [20], show the value of cross-cutting research that transcends geography and taxonomy. Böhm et al. [13] also invite us to consider innovative capacity building approaches that go beyond the conventions of SSC in compiling the *IUCN Red List of Threatened Species* [23], while Dalrymple et al. [18] bring to our attention the case of Extinct in the Wild species, undoubtedly the most threatened animals, fungi, and plants, and show us that the efforts of aquariums, botanical gardens, and zoos need to be integrated with the protection of natural ecosystems for these species to thrive in the wild.

A greater amount of money is spent globally in unsustainably exploiting nature than in protecting it [24]. Evidence shows that if we give nature a chance to recover, restoration is possible. There are numerous examples of conservation success stories, products of carefully

planned conservation interventions [25,26]. The IUCN Species Survival Commission, our partners and collaborators, stand ready to support evidence-based conservation worldwide. In order to bend the curve of the biodiversity decline [27], and achieve the Kunming-Montreal Global Biodiversity Framework [28], we will need to convene expertise that is geographically, disciplinarily, institutionally, gender, and age diverse. It is not a matter of simply bringing different points of view together, it is about assuring that everyone has a role to play and about strengthening and supporting those best placed to deliver change.

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