

**SIDE EVENT: Protected Areas and Biodiversity Conservation in the 21st Century:  
Mainstreaming biodiversity, sustainable development, and global environmental benefits**

Panel Members:

1. Sandra Díaz, Chair. STAP Panel Member on Biodiversity (Moderator)
2. Tom Lovejoy - UN Foundation and George Mason University (Introductory remarks)
3. Andrew Pullin - Bangor University, Centre for Evidence-Based Conservation
4. Brian J. Huntley - Past Director, South African National Biodiversity Institute
5. Ernesto C. Enkerlin-Hoeflich - Chair, World Commission on Protected Areas, IUCN
6. Mark Zimsky - GEF Secretariat, Biodiversity Coordinator, Senior Biodiversity Specialist

Environmental change, with concomitant impacts to flora and fauna, continues to accelerate<sup>1 2,3</sup>. Conservation efforts have traditionally focused on creating and managing protected areas (PAs) as the “first line of defense” to address the biodiversity crisis<sup>4</sup> and these areas now cover approximately 12.7% of the planet’s land surface area<sup>5</sup> with a target of 17% by 2020 (10% target for coastal and marine areas - <http://www.cbd.int/sp/targets/>). Concomitantly, biodiversity conservation efforts are increasingly being called upon to deliver socio-economic co-benefits. The overall impacts of PAs on habitats and species is not entirely clear due to a lack of comprehensive evidence, and some studies conclude that global conservation targets based on area alone will not necessarily stem the loss of biodiversity<sup>6</sup>.

Biodiversity mainstreaming is the process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, to advance the goals of the Convention on Biological Diversity of conservation, sustainable use, and equitable benefit sharing – both locally and globally. Over the last 10 years the Global Environment Facility (GEF) has spent \$1.6 billion with \$5.3 billion in co-financing on 327 mainstreaming initiatives.

Strategic Goal A of the Strategic Plan for Biodiversity calls on Parties to “Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society”. Protected areas are pivotal to successful mainstreaming. They anchor key conservation efforts, while at the same time delivering important co-benefits to communities and society more broadly.

While the impact of PAs on habitats and species is reasonably well known<sup>7</sup>, the evidence base vis-à-vis the impact of PAs on human well-being provides a range of possibilities to inform, but

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<sup>1</sup> Barnosky et al. 2011. Has the Earth’s sixth mass extinction already arrived? *Nature* **471**: 51 – 57.

<sup>2</sup> Rockstrom et al. 2009. Planetary Boundaries: Exploring the Safe Operating Space for Humanity. *Ecology and Society* 14(2). [online] URL: <http://www.ecologyandsociety.org/vol14/iss2/art32/>

<sup>3</sup> Chapin et al. 2000. Consequences of changing biodiversity. *Nature* **405**: 234 – 242.

<sup>4</sup> Jenkins, C. N. and L. Joppa. 2009. Expansion of the global terrestrial protected area system. *Biological Conservation* **142**: 2166 – 2174.

<sup>5</sup> Geldmann, J. et al. 2013. Effectiveness of terrestrial protected areas in reducing habitat loss and population declines. *Biological Conservation* **161**: 230 – 238.

<sup>6</sup> Edgar, G. J. et al. 2014. Global conservation outcomes depend on marine protected areas with five key features. *Nature* **506**: 216 – 220.

<sup>7</sup> *Ibid.*

often lacks concrete data and information to help decision-makers maximize interventions. And because of rapid and unprecedented climate change, it is unclear whether or not existing PAs will continue to be suitable for many of the species and ecological processes they were designed to protect<sup>8,9</sup>, along with delivering continued co-benefits into the future.

The Global Environment Facility has had an impressive record of helping to establish and maintain protected area systems over the last two decades with more than 1,000 projects in more than 155 countries and investing in over 2,809 PAs covering more than 708 million hectares<sup>10</sup>. This information could be used to improve the evidence base for PA project impacts and the design of future projects, as well as to inform science, practitioner, and policy communities in this domain more broadly. This session will examine biodiversity mainstreaming as a key conservation paradigm for the 21st century, and the critical role played by protected areas. It will identify approaches to ensure that both protected areas and mainstreaming initiatives generate empirical results, contributing to the evidence-base for successful future mainstreaming efforts.

Programme (90 minutes)

<b>Time</b>	<b>Topic</b>	<b>Presenter</b>
5	Welcome and opening remarks	Sandra Diaz, Tom Lovejoy
20	Impacts of Protected Areas on Human Well-Being	Andrew Pullin
20	Mainstreaming Biodiversity	Brian J. Huntley
15	Challenges and opportunities for protected areas in contributing to sustainability	Ernesto C. Enkerlin-Hoeflich
15	The GEF-6 Biodiversity Focal Area Strategy	Mark Zimsky
15	Questions and comments from the audience and concluding remarks	Sandra Díaz

<sup>8</sup> Mokany, K. et al. 2013. Comparing habitat configuration strategies for retaining biodiversity under climate change. *Journal of Applied Ecology* **50**: 519 – 527.

<sup>9</sup> Beaumont, L. J. et al. 2011. Impacts of climate change on the world's most exceptional ecoregions. *PNAS* **108**(6): 2306 – 2311.

<sup>10</sup>The Global Environment Facility (GEF). 2013. Behind the Numbers: A closer look at GEF Achievements.

<http://www.thegef.org/gef/sites/thegef.org/files/publication/Behind%20the%20Numbers%20low%20resolution.pdf>