

# IUCN SSC Phylogenetic Diversity Task Force



**CHAIR**

Nisha Owen

On the Edge,  
London, UK

**VICE CHAIR**

Rikki Gumbs

Zoological Society  
of London, London, UK

**NUMBER OF MEMBERS**

16

**SOCIAL MEDIA AND WEBSITE**

Twitter: @IUCN\_TreeOfLife

Website: <https://www.pdtf.org>

**Mission statement**

The aim of the IUCN SSC Phylogenetic Diversity Task Force (PDTF) is to provide leadership and guidance on the inclusion of phylogenetic diversity in conservation strategies. By providing the necessary scientific and technical expertise, we will promote wider adoption and greater understanding of this approach by conservation practitioners, decision makers and the public.

**Projected impact 2021–2025**

Throughout the 2021–2025 period, the PDTF will positively impact multiple species conservation statuses by supporting implementation and providing guidance and advice for practitioners and decision makers on selecting and using appropriate phylogenetic diversity (PD) approaches and incorporating PD into policy. As part of this, the PDTF has committed to the production of two indicators proposed to the Convention on Biological Diversity. The PDTF will also seek to compile information and identify gaps in knowledge or application of PD-based approaches, and will encourage its members and the wider scientific and conservation community to undertake scientific research and conservation applications that will add to the knowledge base.

**Targets 2021–2025**

**ASSESS**

**T-002** Develop state-of-the-art methods for measuring and categorising the success of conservation.

**PLAN**

**T-005** Develop knowledge exchange and consultation between stakeholders to advance adoption of PD-prioritisation.

**ACT**

**T-007** Develop a variety of documents, including position paper, perspectives piece and guidelines that will include practical examples and review obstacles and lessons to share best practice on the ground.

**NETWORK**

**T-001** Maintain existing partnership with host organisation (On the Edge) and key PDTF member institutions, and develop new partnerships where appropriate.

**T-003** Ensure diversity among Task Force membership.

**T-004** Collaborate with IUCN bodies and SSC groups on incorporating PD into conservation prioritisation.

**COMMUNICATE**

**T-006** Communicate species conservation work around the application of PD, best practice, and PDTF achievements and activities.

**Activities and results 2021**

**ASSESS**

**Research activities**

**T-002** (KSR 5)

**Produce the expected PD loss indicator and EDGE Index on an annual basis:** Ongoing.

**Result description:** The PDTF has proposed two indicators for inclusion in the Convention on Biological Diversity (CBD) post-2020 global biodiversity framework in 2021 to meet the drafted goals, elements and targets. Our indicators explicitly and uniquely interlink Goal A (preventing extinctions and improving conservation status) and Goal B (valuing nature's contributions to people). These indicators fill an important current gap in the draft monitoring framework relating to Nature's Contributions to People, as well as the lack of linkages with the work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) to date. Our proposed indicators recognise both phylogenetic diversity as a valuable aspect of biodiversity and the neglected species that represent our evolutionary history, enabling conservation, measurement and monitoring into the future. Read more about the indicators here: <https://www.pdtf.org/publications>.

More than half of the world's crocodylians face extinction, including the evolutionarily and ecologically unique Critically Endangered Gharial, *Gavialis gangeticus*  
Photo: Rikki Gumbs / ZSL



## PLAN

### Planning

T-005 (KSR 8)

**Stakeholders incorporating PD into conservation planning:** Ongoing.

**Result description:** The PDTF has been actively contributing to the Convention on Biological Diversity (CBD) post-2020 process and attending the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) and Subsidiary Body on Implementation (SBI) virtual meetings to meet its aim. The aim is to ensure the adoption of two PDTF indicators that have been previously proposed for inclusion in the post-2020 global biodiversity framework. To date, the CBD has adopted one of the indicators as part of their complementary list of indicators. The PDTF has provided guidance and support to other organisations involved in the CBD process. The Global Biodiversity Information Facility, a partner to the CBD, is collaborating with the PDTF to incorporate PD metrics in their database. UN Environment Programme World Conservation Monitoring Centre (UNEP WCMC), as part of the biodiversity indicator partnership, has published a multidimensional biodiversity index with a view to including PD metrics. The Royal Botanic Gardens, Kew, included Evolutionarily Distinct and Globally Endangered (EDGE) in its 2021–25 Science Strategy with the support of a member of the PDTF.



The PDTF provided technical support to the SSC EDGE Internal grant, awardees included action planning for the Evolutionarily Distinct and Globally Critically Endangered Atlantic Humpback Dolphin, *Sousa teuszii*  
Photo: Shutterstock





Endangered *Ginkgo biloba* is the sole survivor from an ancient clade of trees that predates the dinosaurs, making it the most evolutionarily distinct gymnosperm alive today  
Photo: Shutterstock

## Policy

T-005 (KSR 9)

**Number of documents provided to support/guide policy making:** 4

**Result description:** The PDTF submitted comments relating to the prioritisation of the Tree of Life to the CBD and UNEP WCMC. The PDTF published a pre-print of their policy paper covering the two proposed indicators, and submitted the paper to a peer-reviewed journal. PDTF recommendations were shared with UK government, Department for Environment, Food & Rural Affairs (DEFRA), in stakeholder consultation on the CBD monitoring framework, with IUCN, and recommendations were shared with the members of the French Delegation to the CBD.

T-005 (KSR 9)

**Number of MEA meetings attended by the SSC group:** 3

**Result description:** The PDTF attended the CBD post-2020 technical meetings of the SBSTTA, Open-ended Working Group and SBI.

## ACT

**Conservation actions**

T-007 (KSR 10)

**Number of technical documents provided to support conservation actions:** 0

**Result description:** The PDTF has prepared a policy paper on indicators for peer-review publication and will expand on its work to develop guidance documents for conservation action in the following years.

## NETWORK

**Membership**

T-003 (KSR 2)

**Number of SSC members recruited:** 1

**Result description:** The PDTF has expanded its membership and recruited Sebastian Pipins as the Communications Officer in 2021 and is planning to invite more members in 2022. The PDTF appointed one of its members, Rikki Gumbs, as the Deputy Chair of the PDTF.

## Synergy

T-001 (KSR 1)

**Number of in kind partnerships established and maintained:** 1

**Result description:** We have maintained our partnership with On the Edge and they have renewed their commitment to resource the PDTF and its activities.

T-004 (KSR 3)

**IUCN bodies with which the PDTF collaborates to advance targets:** ongoing.

**Result description:** The PDTF participated in a panel discussion held in the Reverse the Red Pavilion at the IUCN World Conservation Congress on 7 September 2021. The panel was chaired by Monika Bohm of the Global Centre for Species Survival, and attended by Nisha Owen of On the Edge and as the PDTF Chair, Roseli Pellens of the Muséum National d'Histoire Naturelle and as a PDTF member, Andrew Terry of the Zoological Society of London and Barney Long of Re:wild. The speakers shared their views on why we should concentrate conservation efforts on conserving the Tree of Life. The PDTF supported the SSC EDGE Grant (2021/22) for highly Evolutionarily Distinct (ED) and EDGE species, by providing up to date lists, expertise and guidance. The eight awarded SSC groups included under-represented taxa such as plants, fungi and reptiles with a variety of range state involvement.

T-004 (KSR 3)

**Non-IUCN bodies with which the PDTF collaborates to advance targets:** ongoing.

**Result description:** The PDTF is actively involved in the Convention on Biological Diversity (CBD) post-2020 process and has



engaged in SBSTTA and SBI meetings in 2021. The PDTF is also engaging with UNEP WCMC and the Global Biodiversity Information Facility as supporting organisations to the CBD. PDTF members are actively engaging with national level stakeholders, such as the Muséum National d'Histoire Naturelle in France and the UK Government Department for Environment, Food & Rural Affairs (DEFRA) and the Parliament office.

## COMMUNICATE

### Communication

T-006 (KSR 13)

**Contribute to the increased awareness and wider adoption of PD-informed conservation through representations at events:** Ongoing.

**Result description:** A number of key international events planned for 2021 were cancelled or postponed due to the global pandemic. Despite this, the PDTF attended a variety of virtual and in-person meetings. The PDTF participated in the ongoing SBSTTA and SBI virtual meetings held by the Convention on Biological Diversity (CBD). The PDTF participated in the in-person panel discussion on Conserving the Tree of Life that was held at the IUCN World Conservation Congress Reverse the Red Pavilion on 7 September 2021. The Chair of the PDTF participated in several workshops led by the UK Government DEFRA who invited NGOs to provide their views on the CBD monitoring framework. The Chair and the members of the PDTF presented at the Society for Conservation Biology 2021 Symposium. A PDTF member presented on PD loss due to future land use change in the International Conference of Agricultural Economists.

T-006 (KSR 13)

**Digital resources that demonstrate applied use of PD in conservation and its benefits:** Ongoing.

**Result description:** The PDTF published the PDTF Principles document and a Glossary list of key terms of Tree of Life, Phylogenetic Diversity and evolutionary heritage on its website (<https://www.pdtf.org/glossary>) and shared on Twitter. PDTF members contributed to the development of two short videos, *Saving the Tree of Life* and *The weird, the wonderful and the overlooked*, demonstrating the applied use of PD in conservation, for the IUCN World Conservation Congress Reverse the Red Pavilion screening, produced by On the Edge.

T-006 (KSR 13)

**Communication through website and social media:** Ongoing.

**Result description:** The PDTF has been actively updating its website (<https://www.pdtf.org>) and Twitter (@IUCN\_TreeOfLife) with blogs, resources and publications. Website resources are adapted for Twitter posts to reach more audiences. This resulted in a greater engagement online on EDGE species conservation stories, the Tree of Life resources and the science behind phylogenetic diversity. The PDTF has supported its wider network by re-sharing posts by the SSC network, including SSC group results of the SSC EDGE grant and the Reverse the Red initiative. The PDTF was active on social media during the IUCN World Conservation Congress week by celebrating the Reverse the Red Panel event attended by PDTF members and amplifying success stories from the wider SSC Reverse the Red initiative. This has resulted in a substantial increase of followers on Twitter, rising from 50 to 140 followers in one year and increasing engagement on posts that highlight the importance of the Tree of Life, Phylogenetic Diversity and our evolutionary heritage.



PDTF participated in a panel discussion held at the IUCN World Conservation Congress, Reverse the Red Pavilion  
Photo: On the Edge

## Acknowledgements

We thank On the Edge for resourcing the group and their activities. We thank the EDGE of Existence Programme at the Zoological Society of London for facilitating meetings, sharing technical resources and providing a platform for collaboration.

## Summary of achievements

**Total number of targets 2021–2025:** 7

**Geographic regions:** 7 Global

**Actions during 2021:**

- Assess: 1 (KSR 5)
- Plan: 3 (KSR 8, 9)
- Act: 1 (KSR 10)
- Network: 4 (KSR 1, 2, 3)
- Communicate: 3 (KSR 13)

**Overall achievement 2021–2025:**

