

088 Task Force on developing a global standard for genetic diversity assessments

RECOGNISING that IUCN is a global leader in establishing global standards for biodiversity assessment;

ACKNOWLEDGING successful and widespread application of The IUCN Red List of Threatened Species™ and the IUCN Red List of Ecosystems (and other tools, e.g. Green Status, Key Biodiversity Areas) at national, regional and global levels, which help inform and catalyse action for biodiversity conservation and policy;

EMPHASISING that standardised approaches for assessing biodiversity can improve planning, action and monitoring, in line with IUCN's "Assess, Plan, Act" framework;

ALSO RECOGNISING genetic diversity as the foundational level of biodiversity, necessary for resilience, adaptability and long-term survival of species and ecosystems;

RECOGNISING FURTHER the prominent role of genetic diversity in the Convention on Biological Diversity's Kunming-Montreal Global Biodiversity Framework (KMGBF), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), and the Global Strategy for Plant Conservation, alongside species and ecosystems;

RECOGNIZING the enormous value and extensive experience of farmers, breeders and researchers with genetic diversity in cultivated plant species and domesticated farm animals;

APPRECIATING the work of the IUCN Species Survival Commission (SSC) Conservation Genetics Specialist Group (CGSG), the Coalition for Conservation Genetics (CCG) and others in piloting and demonstrating genetic indicators of the KMGBF, including a Headline Indicator and advancements towards a framework for assessing evolutionary significant units (ESUs);

ACKNOWLEDGING the lack of a comprehensive, globally adopted, standardized procedure/ protocol for assessing and addressing threats to genetic diversity, as well as the possible impact of loss of genetic diversity on extinction risk;

FURTHER RECOGNISING decades of scientific progress and the availability of techniques and data to quantify, map and assess genetic diversity of species and populations globally, such that large-scale assessment of genetic diversity is technically feasible, and cost effective and that genetic knowledge is aiding conservation action;

RECOGNISING ALSO that governments, non-governmental organisations (NGOs) and other actors often lack capacity, knowledge and guidance on conserving genetic diversity, and

CONCERNED about the documented decline of genetic diversity in species and populations, and the projected future losses of genetic diversity based on the best available science, which will impact population and species viability, nature's contributions to people, food security, health and well-being;

The IUCN World Conservation Congress 2025, at its session in Abu Dhabi, United Arab Emirates:

1. REQUESTS the Director General and SSC to establish a task force to develop, test and evaluate a standardised, global framework for assessing the genetic diversity status of species and populations, encompassing both conservation and erosion, and invite the participation of the Secretariat for the Convention on Biological Diversity as appropriate;

2. CALLS ON the Director General and SSC to ensure that the task force produce a public report, to be submitted to the Director General and SSC prior to the 2029 World Conservation Congress, on: advantages, challenges and feasibility of a standardized procedure/ protocol for assessment of genetic diversity; evaluation of current knowledge, metrics, and thresholds of such an assessment; logistics, the type of data and level of expertise needed; data curation, storage, sharing and availability; institutions responsible; and a roadmap of timelines and the applicable scale of

assessments; Applicability of a standardized genetic diversity assessment as a headline indicator for Goal A and Target 4 of the KMGBF, covering native, wild, and domesticated species;

3. URGES the Director General and SSC to help ensure that this task force includes members with expertise in relevant fields, including genetics and conservation, and is taking into account geographical and gender balance;

4. URGES Members, civil society, businesses and others, to engage and support this task force through inclusive consultative processes, webinars, workshops, surveys, etc; and

5. CALLS ON governments, NGOs, Indigenous Peoples, and local communities, financial institutions, funders and businesses to recognise the importance of assessing, monitoring, reporting on and safeguarding the genetic diversity of wild and domesticated species as a vital part of sustainable development, ecological restoration and biodiversity standards.