

## **WCC-2016-Res-086-EN**

### **Development of IUCN policy on biodiversity conservation and synthetic biology**

RECOGNISING the need for an internationally agreed definition of synthetic biology;

RECOGNISING that the diverse field called 'synthetic biology' is developing rapidly, largely independently of the field of biodiversity conservation, and, depending on the type of application, may have significant implications for many aspects of biodiversity and nature conservation, including sustainable use and equitable sharing of benefits arising from the use of genetic resources;

NOTING that some applications of synthetic biology may have the potential to be beneficial to biological diversity and nature conservation and some have the potential to pose risks;

RECOGNISING that the topic of synthetic biology has been under active consideration by the Convention on Biological Diversity (CBD), by its Ad Hoc Technical Expert Group on Synthetic Biology, by the Subsidiary Body on Scientific, Technical and Technological Advice, and by the Ad Hoc Technical Expert Group on Risk Assessment convened under the Cartagena Protocol on Biosafety; that Parties to the Convention have urged a precautionary approach in line with the preamble to the Convention, for Parties to carry out scientific risk assessments with regard to potential effects on human health, and addressing, as appropriate and according to national and/or regional legislation, food security, and socio-economic considerations with, where appropriate, the full participation of indigenous and local communities;

NOTING the extensive work already undertaken by the Secretariat of the CBD to synthesise knowledge, views and experiences of governments, civil society, indigenous peoples and local communities and other stakeholders to assess the implications of organisms, components and products of synthetic biology techniques on the conservation and sustainable use of biodiversity published in CBD Technical Series No. 82, 'Synthetic Biology';

NOTING the existing 'Principles for Oversight of Synthetic Biology' developed and endorsed by 111 civil society organisations including many conservation, environmental and biodiversity-based organisations, and the work of the International Civil Society Working Group on Synthetic Biology;

AWARE that a series of meetings between conservationists and synthetic biologists were held recently to start to explore these potential synergies and conflicts;

WELCOMING in particular the initiative of the IUCN Commissions in holding a workshop on this topic in December 2015 in Bellagio, Italy, supported by the Rockefeller Foundation;

RECOGNISING that biodiversity conservation and synthetic biology can benefit from continued positive engagement of these communities; and

CONCERNED that, without further clarity and guidelines on how biodiversity conservation and synthetic biology interrelate, the two fields may continue to develop independently, to the potential detriment of biodiversity and nature conservation;

### **The World Conservation Congress, at its session in Hawai'i, United States of America, 1-10 September 2016:**

1. CALLS UPON the Director General and Commissions to undertake an assessment, to be completed by 2020, drawing on relevant resources and expertise within and outside IUCN, to examine the organisms, components and products resulting from synthetic biology techniques and the impacts of their production and use, which may be beneficial or detrimental to the conservation and sustainable use of biological diversity and associated social, economic, cultural and ethical considerations, and to recommend how IUCN, including its Commissions and Members, could approach the topic of synthetic biology and engage in ongoing discussions and deliberations with the synthetic biology community;

2. CALLS UPON the Director General and Commissions with urgency to assess the implications of Gene Drives and related techniques and their potential impacts on the conservation and sustainable use of biological diversity as well as equitable sharing of benefits arising from genetic resources, in order to develop IUCN guidance on this topic, while

refraining from supporting or endorsing research, including field trials, into the use of gene drives for conservation or other purposes until this assessment has been undertaken;

3. REQUESTS the Director General and Commissions to seek the necessary support and resources, including technical support and capacity building, for the assessment to be undertaken;

4. REQUESTS that the assessment be based on scientific and empirical evidence and subject to peer review by an independent panel of experts to be appointed by the Director General; and

5. CALLS UPON Council, based upon the recommendations of the assessment, to develop an IUCN policy to guide the Director General, Commissions and Members on biodiversity and nature conservation in relation to synthetic biology.

**State and agency Members of the United States** voted against this motion (and amendments).