

IUCN SSC Conservation Genetics Specialist Group

2016-2017 Report



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Co-Chairs

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Location/Affiliation

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Number of members

106

Social networks

Twitter:
@congenetics



CONSERVATION GENETICS
SPECIALIST GROUP

Mission statement

The Conservation Genetics Specialist Group (CGSG) will establish guidance for pressing genetic policy and management issues. CGSG also provides genetic advice on policy and management within IUCN's Species Survival Commission (SSC) and expert knowledge and assistance to SSC specialist groups. CGSG will facilitate a fuller appreciation, evaluation and conservation of genetic diversity and resources at all levels, providing a forum for all stakeholders to value and conserve this crucial element of Planet Earth's life systems.

Main activities by Key Priority Area (2016 & 2017)

Capacity building

- Capacity building
 - i. Technical workshop for non-geneticists at the World Conservation Congress, organised by the North American Chapter. (KSR #17)
 - ii. Specific workshop on Lynx genetic breeding at Doñana National Park, Spain. (KSR #18)
 - iii. Workshop and training on seed resources, Adelaide, Australia. (KSR #18)

Scientific meetings

- i. Genetic symposium at 2017 International Congress for Conservation Biology, Cartagena, Colombia.
- ii. Meeting of European members, bringing genetic topics to the attention of the conservation community.

Technical advice

- i. Miscellaneous advice, including to African Elephant and Sirenian Specialist Groups. (KSR #27)

Communications

Research activities

- i. Publication of scientific paper on Synthetic Biology as results of the 2015 meeting in Bellagio, Italy.
- ii. Publication of scientific papers of several members of the group on Evolutionary Applications, resulting from a workshop on next generation genetic monitoring in 2016.

Conservation action

Conservation activities

- i. Developing an action plan for the quadr ennium. (KSR #15)

Increasing diversity of SSC

Membership

- i. Membership increased to 106 and regional coverage nearly completely obtained, with two fully functional regional groups established.



First CGSG Workshop in Antwerpen, November 2017
 Photo: Gernot Segelbacher

Acknowledgements

We would like to acknowledge the support of the Centre for Conservation Research at the Royal Zoological Society of Antwerp, for support in the Specialist Group's first global workshop.

Targets for the quadrennium 2017-2020

Bolster work at national scales

Capacity building: build regional capacity for conservation genetics advice with an aim of having self-supporting regional groups in five years. Starting groups will contain domiciled individual and non-domicile advisors active in regional research and capacity building, under the understanding that non-domicile individuals will step back from group after 5 years.

Capacity building

Capacity building: Guidelines on Distinct Genetic Diversity during the development of "A Global Standard for the Identification of Key Biodiversity Areas".

Synergy: every Specialist Group chair has a direct contact point(s) in CGSG, who is responsible for rapid response to genetic questions, advice, support and escalation of major issues to wider IUCN CGSG.

Communications

Communication: (1) position statement for the use of genetics in defining conservation units; (2) provide online resources for definitions of genetic terminology, guidelines on sampling and study design and distinguish among technical approaches.

Policy advice: (1) propose an IUCN resolution on genetics in CBD targets; (2) developing an IUCN guidance for monitoring changes in genetic diversity; (3) guidance document on biobanks and planning for conservation of intra-specific genetic diversity.

Technical advice: guidance document for the use of genetics in Red List assessment.

Policy

Communication: (1) be pro-active in communicating the activities of the CGSG; (2) raise awareness of conservation genetics within the broader community.

Policy advice: engaging with the CBD 2020 process.

Projected impact for the quadrennium 2017-2020

Genetic diversity is one of the three major components of biodiversity, but still overlooked in most plans for conserving biodiversity. We foresee that raising the awareness of genetic diversity as one of the key requisites for species to adapt and survive will directly benefit species action plans. In addition, the implementation of genetic criteria into the Red List assessment process will help us to define the conservation status more precisely.

Summary of activities (2016-2017)

Key Priority Area ratio: 4/7

Key Priority Areas addressed:

- Capacity building (6 activities)
- Communications (2 activities)
- Conservation action (1 activity)
- Increasing diversity of SSC (1 activity)

Main KSRs addressed: 15, 17, 18, 27

KSR: Key Species Result