IUCN SSC Bryophyte Specialist Group



2020 Report





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Co-Chairs

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Location/Affiliation

 Swedish Museum of Natural History, Stockholm, Sweden
South African National Biodiversity Institute, Pretoria, South Africa
Swiss Federal Research Institute WSL, Birmensdorf, Switzerland

Number of members

29

Social networks

Website: https://eccbbryo.nhmus.hu/BSG_initial

Mission statement

The mission of the IUCN SSC Bryophyte Specialist Group is to promote the exploration of bryological diversity across all geographic scales and its long-term conservation.

Projected impact for the 2017-2020 quadrennium

By the end of 2020, we expect that substantially more bryophyte species will be properly assessed or reassessed at the global scale, following the latest IUCN guidelines. We expect the European Red List of Threatened Bryophyte Species, to be published in autumn of 2019, will support priority setting for conservation actions and inform policy decisions on biodiversity conservation in Europe. It will serve as a critical instrument to measure some aspects of the progress towards achieving the EU 2020 Biodiversity Strategy. The European Committee for Conservation of Bryophytes (ECCB) currently works on defining 'Important Bryophyte Areas' for Europe, based on the European Red List data. Many members of the Bryophyte Specialist Group (BSG) and other bryologists are now, after having attended the IUCN Red Listing workshop (https://www. bryology2019.com/iucn-red-listing-workshop/), familiar with the IUCN methodology for Red List assessment and its application. Several work on assessing species for the global Red List, while others focus on national and regional levels.

Targets for the 2017-2020 quadrennium

Assess

Red List: (1) complete assessment of 1,800 European bryophytes and publication of a European bryophyte Red List; (2) advance the Top 10 Initiative; (3) conduct Red List assessment of all Swiss bryophytes; (4) conduct Red List assessment of South African Pottiaceae; (5) ensure critical terms necessary for the application of Red List categories and criteria are refined to be suitable for clonal organisms, and consistently used in the assessments of European bryophytes.

Research activities: analyse the endemic bryophyte elements of southern Africa (South Africa, Botswana, Namibia, Eswatini, Lesotho).

Network

Capacity building: carry out capacity building among BSG members through a training workshop on IUCN Red List methodology.

Communicate

Communication: publish a paper on the most strongly threatened African bryophytes.

Activities and results 2020

Assess

Red List

i. A Top 10 list for South America is in progress. The target was brought forward to the next quadrennium, and more regions were included; there are ongoing discussions with bryologists in Borneo, Australia and North America. (KSR #1, 2)

ii. All 1,100 Swiss bryophytes were re-assessed. The National Red List is to be published in 2021, with finalisation early next quadrennium. (KSR #1, 2)



III. For Red List assessment of South African Pottiaceae: the student re-registered, completed the online IUCN Red Listing course and most of the species assessment forms for 101 species in 38 genera of Pottiaceae; assessments are underway. The target was brought forward to the next quadrennium. (KSR #1, 2)

Research activities

i. The PhD student re-registered and initiated a research project on analysis of the endemic bryophyte element of southern Africa (South Africa, Botswana, Namibia, Eswatini, Lesotho). Progress was hampered because of the pandemic. The target was brought forward to the next quadrennium. (KSR #26, 43)

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Summary of activities 2020

Components of Species Conservation Cycle: 1/5

Assess 4

Main KSRs addressed: 1, 2, 26, 43

KSR: Key Species Result

Least Concern Rose-moss, *Rhodobryum roseum*, is widespread in the Northern Hemisphere, but rarely reproduces sexually as on this image (i.e., forms sporophytes after successful fertilization) Photo: Lars Hedenäs

> The genetic set-up and reproductive biology of the Large Hook-moss, *Drepanocladus lycopodioides*, a species near-endemic to and Vulnerable in Europe, have recently been intensively studied Photo: Lars Hedenäs



Least Concern *Mannia androgyna* Photo: Ariel Bergamini