

IUCN SSC Sonoran Desert Plant Specialist Group

2020 Report



Helen Rowe



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Co-Chairs

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Location/Affiliation

⁽¹⁾ McDowell Sonoran Conservancy, Scottsdale, Arizona, US; Northern Arizona University, Flagstaff, Arizona, US
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Number of members

25

Mission statement

The mission of the IUCN SSC Sonoran Desert Plant Specialist Group is to assess the extinction risk of all Sonoran Desert plant species, educate the public about Sonoran Desert species and threats, and implement conservation plans supported by the Red Listing process.

Projected impact for the 2017-2020 quadrennium

By the end of 2020, the IUCN SSC Sonoran Desert Plant Specialist Group (SDPSG) strives to have made substantial progress in beginning the ambitious agenda of assessing all Sonoran Desert species. At the same time, we expect to make substantive progress in surveying and removing high priority invasive species through greater coordination. Conservation planning will begin concurrently with the Red List assessments on high priority species chosen through the process of prioritising Sonoran Desert plants for assessment and by working with other Specialist Groups to create a comprehensive list of threatened species across taxa.

Targets for the 2017-2020 quadrennium

Assess

Red List: (1) identify target assessment groups for 2019–2020; (2) assess 250 species of Sonoran Desert plants.

Research activities: (1) complete vetting process of taxonomic list; (2) compare vetted plant list with remits of other Specialist Groups and agree on how to coordinate overlapping species; (3) complete a draft list of endemic species found in the Sonoran Desert; (4) monitor the distribution ranges of invasive plants, animals, and other consequences of global changes.

Plan

Planning: coordinate with other Specialist Groups to create an up-to-date list of threatened species in the Sonoran Desert and initiate conservation planning across taxonomic groups.

Proposal development and funding: submit three funding proposals to support assessments and expert workshops.

Act

Conservation actions: (1) control invasive plants and mammals in protected natural spaces; (2) advance in situ and ex situ conservation (seeds and living collections) of Critically Endangered and Endangered plants and preventive sampling of seeds of more widely distributed plant taxa.

Communicate

Communication: (1) create logo; (2) ensure regular communications and updates to members through an e-newsletter; (3) create a web presence and social media, e.g. Twitter and Facebook accounts.

Scientific meetings: (1) organise SDPSG meetings during regional meetings such as the Arid Lands Symposium; (2) include sessions/discussion panels on the activities and deliverables of the SDPSG in the Arid Lands Symposium or other relevant regional or international meetings.

Activities and results 2020

Assess

Red List

i. We have completed 75 draft assessments. (KSR #1)

Research activities

i. We accomplished the vetting process in terms of correcting taxonomy and synonymy. (KSR #1)

ii. We compared vetted plant lists with several other plant lists and coordinated efforts. (KSR #2)

Least Concern Saguaro cactus,
Carnegiea gigantea, in bloom
Photo: Lynne Russell



iii. We have an incomplete list of endemic species found in the Sonoran Desert but will continue this work in the new quadrennium. (KSR #12)

iv. We completed surveys of distribution ranges of invasive plants, animals, and other consequences of global changes on a total of 11,501 acres including trails, washes and other blocks on the McDowell Sonoran Preserve (~10,265 acres), plus an estimated 1,236 acres have been surveyed on the McDowell Mountain Regional Park. (KSR #12)

Plan

Proposal development and funding

i. We submitted a National Science Foundation and a Johnson proposal for funding but were not approved. (KSR #9)

Act

Conservation actions

i. Since inception, we have removed a cumulative 50 acres of buffelgrass and fountain grass. (KSR #4, 7, 13)

Communicate

Communication

i. We created a logo for our group.

ii. We did not host the Arid Lands Symposium in 2020 due to the pandemic, therefore did not have an SDPSG meeting.

Acknowledgements

We thank the McDowell Sonoran Conservancy for providing support as a host organisation and stewards for support on the mapping process. We thank students from Northern Arizona University for drafting species assessments.



Least Concern Teddy-bear Cholla,
Cylindropuntia bigelovii, nestled in poppies
Photo: Lynne Russell

Summary of activities 2020

Components of Species Conservation Cycle: 4/5

Assess	5	
Plan	1	
Act	1	
Communicate	2	

Main KSRs addressed: 1, 2, 4, 7, 9, 12, 13

KSR: Key Species Result