

IUCN SSC Sonoran Desert Plant Specialist Group



2019 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 as species are assessed. We will work with other Specialist Groups to coordinate conservation planning on threatened species across taxa in the region.

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 of invasive plants and mammals in protected natural spaces; (2) *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) 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.



Cylindropuntia fulgida in McDowell Sonoran Preserve, Scottsdale, Arizona
Photo: Steve Jones



Echinocereus engelmannii in McDowell Sonoran Preserve, Scottsdale, Arizona
Photo: Steve Jones



Oenothera cespitosa marginata in Tonto National Forest, Arizona
Photo: Steve Jones



Melampodium leucanthum, Scottsdale, Arizona
Photo: Steve Jones

Activities and results 2019

Assess

Red List

i. We will target Fabaceae as our target assessment group. We are also conducting rapid assessments using the new shiny app for all species. (KSR #1)

Research activities

i. Vetting of the taxonomic list against World Flora Online was completed; it is now being vetted against Tropicos. This process is complete for 1,500 of 4,000 of our species. (KSR #1)

ii. The Red List coordinator is comparing the vetted taxonomic list with species in the IUCN SIS database. This process is complete for 1,500 of 4,000 of our species. (KSR #1)

iii. Our host organisation has trained volunteer groups to survey invasive species across Maricopa County. Removal efforts are underway. Regional invasive species planning is underway. Coordination on invasive species mapping is progressing. (KSR #12)

Plan

Planning

i. Dr Rowe is working with undergraduate students to document conservation planning across the Sonoran Desert, starting with US Fish and Wildlife Service documents. (KSR #4, 7, 15)

Act

Conservation actions

i. We undertook thirty acres of invasive species removal. (KSR #4, 7, 13)

Communicate

Communication

i. We have completed a rough draft.

Scientific meetings

i. The Red List coordinator met with members at Botany meetings in Tucson, Arizona, in July 2019, to discuss priorities/next steps to organise SDPDG meetings during regional meetings.

ii. Dr Rowe presented IUCN work in September 2019 at the 15th Biennial Conference of Science and Management on the Colorado Plateau and Southwest Region. We are planning a session at the 2020 Arid Lands Symposium. (KSR #28)

Acknowledgements

We thank the McDowell Sonoran Conservancy for providing support as a host organisation to initiate this new Species Specialist Group.

Summary of activities 2019

Components of Species Conservation Cycle: 4/5

Assess	4	
Plan	1	
Act	1	
Communicate	3	

Main KSRs addressed: 1, 4, 7, 12, 13, 15, 28

KSR: Key Species Result