

# IUCN SSC Cactus and Succulent Plants Specialist Group

2020 Report



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## Co-Chairs

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## Number of members

38

## Social networks

Facebook:

IUCN SSC Cactus and Succulent Plants  
Specialist Group

Instagram: [iucn\\_cssg](#)

Twitter: [@CsgSsc](#)



## Mission statement

The mission of the Cactus and Succulent Plant Specialist Group (CSSG) is to contribute to the conservation of cactus and succulent plants through better understanding of their taxonomy, ecology and threats.

## Projected impact for the 2017-2020 quadrennium

By the end of the quadrennium, we envisage a priority conservation plan to conduct activities on the ground to improve the conservation status of highly threatened cactus species. We have generated the Red List assessments for other complete groups of succulent plants such as *Agave* and *Yucca*, which will enable us to start setting and planning conservation. We have achieved a more diverse Specialist Group that includes members from a wider geography, and we have increased the female ratio of our membership.

## Targets for the 2017-2020 quadrennium

### Assess

Red List: assess three hundred succulent plant species.

Research activities: (1) publish one scientific paper; (2) identify Alliance for Zero Extinction sites (AZEs) and Key Biodiversity Areas (KBAs) for all cacti.

### Plan

Planning: produce one national or regional conservation action plan for cacti.

Policy: participate in one policy-related forum.

Research activities: publish one scientific paper.

### Act

Conservation actions: collaborate on Operación Atacama, seizure of illegally traded cacti in Italy.

## Network

Capacity building: train four CSSG members as Red List Assessors.

Membership: increase the number of CSSG members, with 40 as the goal.

Research activities: strategic planning of activities to conduct with host institution Desert Botanical Garden.

Synergy: (1) hire a Programme Officer; (2) ensure CSSG participation in outreach events.

## Communicate

Communication: (1) publish a *CSSG Newsletter*; (2) build a presence on social media platforms; (3) ensure the Global Cactus Assessment paper reaches 100 citations; (4) design the new CSSG logo; (5) create the CSSG Newsletter Editorial Committee.

## Activities and results 2020

### Assess

#### Red List

i. The majority of the 296 Red List assessments (251 published assessments and 45 assessments in review process) committed for the quadrennium were done during two workshops that took place in 2018. Many assessments were finalised remotely, working with CSSG members from the US, some of whom are based in our host institution, the Desert Botanical Garden (DBG), and include the Red List Authority Coordinator. These assessments were published on The Red List in 2020. In addition, in collaboration with the Madagascar Plant Specialist Group, we finalised the assessment review process of all *Aloe* species from Madagascar. These assessments were published on The Red List in 2020. (KSR #1)

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## PATRIARCAS DE LOS ANDES



Este evento es avalado por el  
Grupo de Especialistas en Cactáceas y Plantas Suculentas  
Comisión de Supervivencia de Especies, UICN

### Plan

#### Planning

i. The CSSG is working on its first conservation action plan for a complete genus of cacti. In collaboration with Chester Zoo in the UK and Universidad de Concepción in Chile, the three-day stakeholder workshop ‘Conservation action-planning workshop for *Copiapoa* cacti’ was initially planned for 25–27 May 2020. Unfortunately, it was postponed as a result of travel restrictions and social distancing due to COVID-19. We are looking into running the workshop remotely in 2021. The workshop will focus on understanding the current conservation status of the genus *Copiapoa*, which comprises 22 cactus species endemic to the Atacama Desert in northern Chile, their threats and conservation needs, to develop a 10-year conservation action plan. (KSR #15)

### Act

#### Conservation actions

i. For over a year, the CSSG, Associazione per la Biodiversità e la sua Conservazione (Italy) and Universidad de Concepción (Chile) have collaborated with Carabinieri Forestali of Ancona (Italy) and Chilean authorities in Operación Atacama, to repatriate the largest seizure of illegally traded cacti in Italy to date. In February 2020, a shipment of 1,019 cacti was seized, most of which were Chilean plants, mainly belonging to the genera *Copiapoa* (876 plants) and *Erioseyca* (79 plants). Additional seized plants belong to several other genera and species from the US, Mexico and Argentina. A second seizure took place on 17 November, when Italian authorities confiscated a total of 171 plants, of which 80 were from Chile, 89 from Mexico and two from the US. Operación Atacama has been

Copiapoa “Patriarchs of the Andes”  
Photo: Andrea Cattabriga, CSSG



Seized *Copiapoa* spp. during "Operación Atacama"  
Photo: Marco Caccianiga, University of Milan



Conversation about succulents with the Embassy of Mexico in South Africa  
Photo: CSPSG archives

investigating the criminal networks behind the illicit market of cacti, particularly of the genus *Copiapoa*, and has looked into how sellers and collectors communicate, how cacti are removed from their country of origin and shipped through several countries to their final destinations, and who buys them.

### Network

#### Membership

i. The CSSG has been actively expanding the taxonomic and geographic representation for the group. In 2020, we recruited a total of two new experts; the three experts that had pending registration also registered, increasing the number of members from 38 to 43 and meeting our target. During 2020, we have been curating a list of experts to be invited that will allow us to achieve a broader and diverse membership, in addition to increasing the female participation ratio.

#### Synergy

i. The CSSG had the opportunity to participate in three events that allowed us to raise awareness among the general public about the importance of cacti and succulent plants and their conservation: (1) in one of these events, in a presentation delivered on 12 March 2020 during British Science Week, 8-year-old children learnt about these fascinating plants and their importance, as well as how botanists perform their fieldwork; (2) the Specialist Group participated in a conversation hosted by the Embassy of Mexico in South Africa about succulent plants from Mexico and South Africa. The discussion, held virtually on 27 August 2020, covered the similarities that Mexican and South African succulents share in terms of diversity and endemism, challenges presented by land conversion, illegal collection, unsustainable use and climate

change, and methods established to share knowledge and expertise to help each other; (3) the Specialist Group endorsed the exhibition '*Copiapoa*, Patriarchs of the Andes', organised by member Andrea Cattabriga during 'La Festa del Cactus', one of the most important Italian commercial exhibitions specialised in succulents. The photographic exhibition, dedicated to the genus *Copiapoa*, raised awareness among the 3,500+ succulent enthusiasts from all over Europe who visited the event on how their consumer behaviour can fuel illegal poaching and illegal markets, which are driving many species in this genus to extinction. The event was held in Bologna, Italy, on 11–13 September 2020. (KSR #28)

### Communicate

#### Communication

i. We are happy to share that the scientific paper titled 'High proportion of cactus species threatened with extinction', published in October 2015 in the journal *Nature Plants* (bit.ly/2V6rhoi), reached 100 citations in April 2020. This paper was co-authored by many CSSG members, and it was thanks to this publication that media attention was caught worldwide. As of April 2020, more than 22 media outlets and tens of newspapers, magazines, and radio programmes have used this information to draw attention to the illegal trade of cacti. (KSR #28)

ii. With the support of our host institution, Desert Botanical Garden, we redesigned our logo. It now includes succulent plants from two different geographies. We have used two iconic species, the Saguaro (*Carnegiea gigantea*) from the New World and a true Aloe (*Aloe vera*) native to the Old World, so there is no doubt about what plants we focus our work on. Here, we present the stacked version of the new CSSG logo. (KSR #28)

iii. After the successful publication of three newsletter issues, we are now expanding this publication's content to convert it to a reference source for our readers. To ensure success, we have formed the CSSG Newsletter Editorial Committee. Our first two committee members are Dr Shannon Fehlberg and Dr Jafet M. Nassar. (KSR #28)

### Acknowledgements

We thank our host institution, Desert Botanical Garden, for their generous support to the CSSG, kindly financing our Programme Officer's part-time position, providing design expertise to create our new logo, and providing IT support for multiple activities.

### Summary of activities 2020

Components of Species Conservation Cycle: 5/5

Assess	1	█
Plan	1	█
Act	1	█
Network	2	██
Communicate	3	███

Main KSRs addressed: 1, 15, 28

KSR: Key Species Result