IUCN SSC Brazil Plant Red List Authority



2020 Report





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Red List Authority Coordinators

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Location/Affiliation

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Number of members

43

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Mission statement

To coordinate, promote and contribute to all necessary conditions to avoid extinctions of Brazilian flora species, in line with the targets of the Global Strategy for Plant Conservation (GSPC) and with the national mandate to assess extinction risk for the National Red List of Brazilian flora, for the elaboration of action plans and maps of priority areas for the conservation of species threatened with extinction.

Projected impact for the 2017-2020 quadrennium

By the end of 2020, we aim to increase knowledge about the state of conservation of Brazilian endemic flora. The focus of extinction risk assessments will be on endemic tree species that occur throughout the country, especially those occurring in territories that have a small number of conservation mechanisms. Re-assessments of threatened or Near Threatened species will be carried out, focusing on tree species and especially those with economic value. Supporting the extinction risk assessments is a network of approximately 208 experts in the taxonomy and ecology of Brazilian flora. In addition, a new version of the CNCFlora system will be developed, containing a database of threats, Red List Authority assessment reviews, and a module for the National Action Plans that lead to improvements in status and, ultimately, removal of species from the Red List. In a megadiverse country, where native vegetation is being converted or fragmented, conservation actions involving government agencies and local actors must be developed. Thus, by 2020, the Brazil Plant Red List Authority (BP-RLA) will participate in the elaboration of National Action Plans for threatened species with a focus on Critically Endangered species that do not currently benefit from conservation mechanisms.

Targets for the 2017-2020 quadrennium

Assess

Capacity building: (1) provide Red List capacity building for botanic experts; (2) provide two trainings on Communication and the Red List; (3) teach two training courses on georeferencing for assessment; (4) provide training in assessment tools (Environmental Impact Classification for Alien Taxa – EICAT).

Green List: test the Green List for one species.

Red List: (1) complete assessment of 2,600 Brazilian endemic trees; (2) complete assessment of 884 endemic species from Rio de Janeiro State; (3) review assessment of Brazilian endemic trees from Botanic Gardens Conservation International (BGCI) and Royal Botanic Gardens, Kew; (4) update CNCFlora Information System to version 3; (5) complete extinction risk assessments for Brazilian native species occurring in Pantanal, Caatinga and Pampas; (6) carry out extinction risk assessments of Brazilian endemic trees; (7) quality control of Red List assessments; (8) participate in the workshop on regional reassessment of endangered flora and fauna; (9) prepare for a National Red List Index.

Research activities: (1) carry out expedition field survey collections; (2) generate databases to be used for Red List assessments.

Plan

Planning: (1) conduct field expeditions for the elaboration of Territorial Action Plans; (2) publish Territorial Action Plans for conservation of flora; (3) organise meetings of the



Bromelia sp. found during field activities in the area of PAT Cerrado Tocantins - TO.
Photo: Marcio Verdi

National Action Plan for the conservation of Rio's endemic flora; (4) elaborate eight Territorial Action Plans; (5) support the implementation and monitoring of conservation strategies and plans for threatened flora.

Policy: (1) include species assessed as threatened in the National Official Red List; (2) organise meetings on the Impact Reduction Plan to support decision and environmental management; (3) provide advice for policy and decision making at the national level.

Δct

Conservation actions: (1) conduct three field expeditions to collect propagules of the target species of the *Discocactus horstii* Conservation Research Project: a Critically Endangered species of Cactaceae from northern Minas Gerais State. The propagules will be used in experiments of cultivation and propagation of species aimed at reintroduction; (2) promote conservation actions for threatened Cactaceae taxa through implementation of effective, collaborative and practical approaches.

Network

Capacity building: complete training courses on Conservation Action Plans.

Membership: recruit new members.

Scientific meetings: participate in symposia, meetings, and workshops.

Synergy: (1) engage in internal organisational issues of SSC groups, four meetings, collaborations and training; (2) strengthen cooperation agreements and partnerships; (3) provide letters of endorsement; (4) organise working groups of expert teams and networks; (5) participate in one meeting on invasive exotic species.

Communicate

Communication: (1) support and contribute to virtual libraries; (2) conduct media and outreach events; (3) produce Specialist Group publications; (4) participate in the Fourth IUCN SSC Leaders' Meeting.

Activities and results 2020

Assess

Capacity building

i. Four professionals from CNCFlora/Jardim Botânico do Rio de Janeiro (JBRJ) were trained in the online capacity building course on the new tool for Environmental Impact Classification for Alien Taxa—EICAT, provided by several Global Environment Facility (GEF) Pro-Species partner institutions. Three assessors also participated in a technical meeting about the use of criterion A for assessments of Atlantic Forest species in Brazil with Catia Canteiro's staff at Royal Botanic Gardens, Kew. (KSR #2, 5)

Red List

- i. In 2020, we performed 1,008 extinction risk assessments/reassessments, in addition to 1,003 assessments/reassessments undertaken in 2019. From 2018 through the end of 2020, we evaluated the extinction risk of 2,815 predominantly tree species, in partnership with BGCI working towards the Global Tree Assessment (GTA) Campaign and also with support of the GEF Pro-Species project. Assessments are constantly being submitted to the IUCN Red List of Threatened Species via SIS Connect by the team of experts of GTA/BGCI. (KSR #1, 2, 7, 8)
- ii. As our assessments are regularly submitted to the IUCN Red List of Threatened Species, we frequently receive feedback from the IUCN Red List Unit technical team, which represents a great improvement in many assessments. (KSR #2)

- **iii.** In 2020, we reviewed the extinction risk assessment of over 194 plants that have occurrence records (not exclusively) in Brazil. Together with the reviews we completed through 2019 (672 assessments) upon request from BGCI, the Plant Assessment Unit at Royal Botanic Gardens, Kew and other SSC Members and Commissions, we have reviewed the risk of over 865 taxa to date. In 2018, we also completed the review of the conservation assessment of 685 species of Brazilian plants with the Plant Assessment Unit led by Eimear Nic Lughadha at Royal Botanic Gardens, Kew. (KSR #1, 2, 7, 8)
- iv. We have conducted analyses to identify the main opportunities for selecting an appropriate set of Brazilian plant species to be designated as our sample list for monitoring, in order to develop a comprehensive and informative National Red List Index for plants. (KSR #3)

Research activities

i. An expedition to PAT Cerrado Tocantins took place in January 2020 to collect information on species considered Critically Endangered that are known to occur in this area, to support the elaboration of the Territorial Action Plan Cerrado Tocantins. (KSR #1, 12)

Plan

Planning

i. We supported conservation planning workshops for the preparation of the Territorial Action Plan for the conservation of threatened species of the Planalto Sul (in press), Territorial Action Plan for the conservation of threatened species of the Cerrado Tocantins (https://central3.to.gov.br/arquivo/536142/), Territorial Action Plan for the conservation of threatened species of the Espinhaço Mineiro (in press), and Territorial Action Plan for the conservation of threatened species of the Chapada

Garganta, Serra Geral do Tocantins, in the border between Bahia and Tocantins states, Brazil. Expedition GEF Pro Species towards the elaboration of the Territorial Action Plan Cerrado Tocantins. Expedition to detect at-risk species occurring inside PAT Cerrado Tocantins area Photo: Eduardo Fernandez



Diamantina-Serra da Jiboia (http://www.inema.ba.gov.br/wp-content/uploads/2021/03/05.03_sumario-exec-pat-bahia-com-links-e-novas-fotos.pdf). In addition, we are supporting six other conservation planning workshops under the GEF Pro-Species Project. (KSR #15, 20, 21)

- **ii.** As the COVID-19 health crisis remains high in the country, expeditions and travel between states to elaborate territorial action plans are on hold until further notice. (KSR #15)
- iii. Meetings and activities were held on the implementation of the National Action Plan for the conservation of endemic threatened flora of Rio de Janeiro State; a virtual workshop discussed the challenges in the conservation of rare plants (such as Dimorphandra species) and the next steps of the National Action Plan for the conservation of Wilson's Faveiro (Dimorphandra wilsonii Rizzini); conservation actions from the National Action Plan for the conservation of threatened flora in the region of Grão Mogol-Francisco Sá have been implemented; and virtual meetings of the Technical Advisory Group on the implementation of the Territorial Action Plan for the conservation of threatened species of the territory Espinhaço Mineiro took place. (KSR #15)

Policy

- i. We participated in meetings and supported the elaboration of the Plan to Reduce Impacts from Amazon Hydroelectric Dams on Biodiversity, the Plan to Reduce Impacts from Oil and Gas Exploration on Marine and Coastal Biodiversity, and the Plan to Reduce Impacts from Mining on Biodiversity. (KSR #26)
- **ii.** It is expected that the extinction risk assessments produced by CNCFlora/JBRJ through June 2021 will be forwarded to the Ministry of Environment's Technical Committee to update the National Red List. We hope to add nearly



Cocos Rivers, an affluent of Araguaia river, Parque Estadual do Cantão, Tocantins Photo: Eduardo Fernandez

2,000 assessments, conducted between 2017–2021, to the National Red List. (KSR #2)

Act

Conservation actions

i. As part of the Discocactus horstii Conservation Research Project: a Critically Endangered species of Cactaceae from northern Minas Gerais State, we and our collaborators studied eight threatened Cactaceae species and conducted the following activities: (1) mapped the populations of the target species and collected relevant new data for conservation; (2) developed a protocol for the propagation and cultivation of the target species to support in situ and ex situ conservation actions: (3) collected information with the communities and local institutions on the threats that affect the populations of the target species; (4) produced educational materials for schools and local communities, increasing visibility for the conservation of target species

(http://dspace.jbrj.gov.br/jspui/handle/doc/108); (5) wrote a document addressing technical information to support local environmental policies and in situ and ex situ conservation actions, and to reduce and mitigate threats such as illegal extraction and international trade of target species. This Project aimed to implement three conservation actions of the National Action Plan for the conservation of threatened flora in the region of Grão Mogol-Francisco Sá. (KSR #29)

Network

Capacity building

i. We conducted training on species conservation planning (Territorial Action Plan in Brazil) for staff from 13 State Environmental Agencies within the scope of the GEF Pro-Species Project. We are also organising a National Seminar on Management of Action Plans for the Conservation of Endangered Species in Implementing research actions on the target species of the National Action Plan for the conservation of endangered flora in the region of Grão Mogol Francisco Sá (Minas Gerais State) Photo: Fernanda Saleme





partnership with Ministry of the Environment– MMA and Chico Mendes Institute for Biodiversity Conservation–ICMBio. This National Seminar is being rescheduled due to the COVID-19 health crisis continuing at high levels in Brazil. (KSR #17)

Scientific meetings

i. We participated in: the IV Interinstitutional Meeting on Conservation, Restoration and Forest Economy (Programa Arboretum, Teixeira de Freitas, BA); the workshop 'Databases on Endangered Flora and their use in Environmental Licensing' (in Portuguese; Day 1 available at https://youtu.be/vxu9U78ZPYE, Day 2 available at https://youtu.be/Huxk81iyTTU) in the scope of the implementation of the National Action Plan for the conservation of endemic threatened flora of Rio de Janeiro State; and a virtual workshop discussed the challenges in the conservation of rare plants (such as Dimorphandra species) and the next steps of the National Action Plan for the conservation of Wilson's Faveiro (Dimorphandra wilsonii Rizzini) (in Portuguese; https://www.youtube. com/channel/UCZDSVhONwv4F54dDPbnisUg/ videos). Two professionals from CNCFlora were invited to talk about the efforts to conserve Dimorpandra spp. (Fabaceae) in the country, in particular about the National Action Plan for Dimorphandra wilsonii, and about conservation assessments and the green status of this rare species. The symposium 'Challenges in the conservation of rare plants: the case of Dimorphandra species' was held online in December 2020 (https://floraemdebate.wixsite. com/floraemdebate). (KSR #1, 18)

Communicate

Communication

i. We published a letter entitled 'Amazonian fires endanger threatened plants and protected areas' (Mortara, S.R., et al. (2020). 'Amazonian

fires endanger threatened plants and protected areas'. *Frontiers in Ecology and the Environment* 18:177–178. https://doi.org/10.1002/fee.2197). (KSR #28)

Acknowledgements

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Summary of activities 2020

Components of Species Conservation Cycle: 5/5

Assess 6 || || || |

Plan 4 || || |

Act 1 |

Network 2 || |

Communicate 1 ||

Main KSRs addressed: 1, 2, 3, 5, 7, 8, 12, 15, 17, 18, 20, 21, 26, 28, 29

KSR: Key Species Result