

2021 Report

IUCN SSC Australasian Marsupial and Monotreme Specialist Group



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NUMBER OF MEMBERS

13

SOCIAL MEDIA AND WEBSITE

Twitter: @OzMMSSG

Mission statement

To enhance the long-term conservation outlook for the marsupials and monotremes of Australia, Papua New Guinea and Indonesia.

Projected impact 2021–2025

Major focal areas in the 2021–2025 period will be: further increasing conservation efforts for marsupials and monotremes in Papua New Guinea and Indonesia, and completing conservation status assessments for species needing updated assessment, particularly species affected by extensive and severe wildfires in eastern and southern Australia in 2019–2020. The group will also contribute to recovery of fire-affected species, those at risk from other climate change-related events such as increasing heatwaves and flooding, and promote research on the status of Data Deficient species and recently described species.

Targets 2021–2025

ASSESS

T-001 Undertake new assessments for the species most affected by the catastrophic 2019–2020 Australian wildfires.

T-002 Undertake new assessments for poorly known marsupials in Papua New Guinea and Indonesia, including Peleng Cuscus (*Strigocuscus pelengensis*).

T-003 Undertake assessments of a set of taxonomically re-defined Australian marsupial species (e.g. Greater Glider, *Petauroides volans*; Sugar Glider, *Petaurus breviceps*).

T-004 Undertake new Red List assessments for high-profile Australian marsupials (Koala, *Phascolarctos cinereus*) and monotremes (Platypus, *Ornithorhynchus anatinus*), based on new information.

PLAN

T-005 Develop conservation action plan (and survey) for *Zaglossus* species.

ACT

T-007 Assist in the recovery of Australian marsupials most affected by 2019–2020 fires.

NETWORK

T-006 Enhance or expand group membership, including an annual or biennial meeting.

COMMUNICATE

T-008 Hold annual or biennial meetings of SSC members.

Activities and results 2021

ASSESS

Green Status

T-004 (KSR 6)

Number of new Green Status of Species assessments completed per species group, region, and biological realm: 1

Result description: Green Status assessment completed and published for Burrowing Bettong (*Bettongia lesueur*), in collaboration with the Green Status of Species Working Group. Red List assessments for Koala and Platypus will follow and be concordant with current national assessment through Australia's Environment Protection and Biodiversity Conservation Act (expected mid-2022).

Red List

T-001 (KSR 5)

Number of species significantly affected by the 2019–2020 Australian fires that have consequently had their Red List assessments updated: 0

Result description: Co-authored reports and papers provided estimates of proportional range burnt, and proportions of the population lost, in the 2019–2020 Australian megafires, for a large set of fire-affected Australian marsupials and monotremes. These assessments provide



Endangered Eastern Quoll (*Dasyurus viverrinus*)
Photo: Menna Jones



Stripe-faced Dunnart (*Sminthopsis macroura*),
Western Australia
Photo: Diana Fisher

a robust evidence base that about five species are now eligible for listing and another five for uplisting because of the impacts of these fires (Legge, S., et al. 2021. *Estimates of the impacts of the 2019–20 fires on populations of native animal species*. Project 8.3.2 report. Brisbane, Australia: NESP Threatened Species Recovery Hub. Available at: https://www.nespthreatenedspecies.edu.au/media/bx2p40w0/8-3-2-estimates-of-the-impacts-of-the-2019-2020-fires-on-populations-of-native-animal-species-report_v10.pdf). This information has also now been published in a peer-reviewed paper: Legge, S., et al. 2022. The conservation impacts of ecological disturbance: Time-bound estimates of population loss and recovery for fauna affected by the 2019–2020 Australian megafires. *Global Ecology and Biogeography* <https://doi.org/10.1111/geb.13473>

T-002 (KSR 6)

Number of global Red List reassessments completed: 0

Result description: We are supporting field assessments of status and threats for Talau Bear Cuscus (*Ailurops melanotis*) in Sulawesi (led by Sheherazade Jayadi, PROGRES Indonesia) and Gebe Cuscus (*Phalanger alexandrae*) on Gebe Island, Indonesia (led by Nurul Inayah, Perhimpunan Biologi Indonesia).

T-003 (KSR 6)

Number of new national Red List assessments published: 0

Result description: Assessments will follow from recent taxonomic reviews (e.g. Catullo, R.A., et al. (2021). 'Benchmarking taxonomic and genetic diversity after the fact: lessons learned from the catastrophic 2019–2020 Australian bushfires'. *Frontiers in Ecology and Evolution* 9:645820. <https://doi.org/10.3389/fevo.2021.645820>; Cremona, T., et al. (2021). 'Integrative taxonomic investigation of *Petaurus breviceps* (Marsupialia: Petauridae) reveals three distinct species'. *Zoological Journal*

of the Linnean Society 191:503–527. <https://doi.org/10.1093/zoolinnean/zlaa060>; McGregor, D.C., et al. (2020). 'Genetic evidence supports three previously described species of greater glider, *Petauroides volans*, *P. minor*, and *P. armillatus*'. *Scientific Reports* 10:19284. <https://doi.org/10.1038/s41598-020-76364-z>. The Australian Mammal Taxonomy Consortium (AMTC) is an affiliated body of the Australian Mammal Society. One of its major aims is to promote stability and consensus in the use of Australasian mammal scientific names via updatable online species lists approved by AMTC members, thereby supporting more rigorous study of mammals and their biodiversity. The AMTC is providing support for taxonomic decisions (<https://australianmammals.org.au/publications/amtc-species-list>).

ACT

Conservation actions

T-007 (KSR 10)

Number of species with increased or prevented decrease in population or range size, as a result of conservation actions: 0

Result description: Co-authored reports and papers provided estimates of proportional range burnt, and proportions of the population lost, in the 2019–2020 Australian megafires, for a large set of fire-affected Australian marsupials and monotremes. These assessments provide a robust evidence base that about five species are now eligible for listing and another five for uplisting because of the impacts of these fires (Legge, S., et al. 2021. *Estimates of the impacts of the 2019–20 fires on populations of native animal species*. Project 8.3.2 report. Brisbane, Australia: NESP Threatened Species Recovery Hub. Available at: https://www.nespthreatenedspecies.edu.au/media/bx2p40w0/8-3-2-estimates-of-the-impacts-of-the-2019-2020-fires-on-populations-of-native-animal-species-report_v10.pdf). Co-Chair Woinarski is co-editing a book on the impacts of the 2019–2020 Australian wildfires, which also includes chapters on

the management responses and recommendations to reduce comparable future risks and impacts.

NETWORK

Membership

T-006 (KSR 2)

Number of SSC members recruited: 13

Result description: Current membership is 13.

COMMUNICATE

Scientific meetings

T-008 (KSR 12)

Number of meetings held: 0

Result description: We have organised annual meetings to be held as part of the Australian Mammal Society annual conference.

Acknowledgements

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Summary of achievements

Total number of targets 2021–2025: 8

Geographic regions: 3 Asia, 8 Oceania

Actions during 2021:

Assess: 4 (KSR 5, 6)

Act: 1 (KSR 10)

Network: 1 (KSR 2)

Communicate: 1 (KSR 12)

Overall achievement 2021–2025:

