

Marsupial and Monotreme Taxon Advisory Group SSP Designation Addendum for Existing Regional Collection Plans 2022-2027

The following document serves as an addendum to existing Regional Collection Plans (RCPs; published in 2022 and earlier) to update the status of the Taxon Advisory Group's (TAG) Species Survival Plan (SSP) programs after completing the SSP Assessment process and moving programs into the new SSP Framework as of January 2023. The SSP designations outlined here supersede any previous designations and remain valid until the TAG publishes their next RCP, between the years of 2023 and 2027.

The TAG used the standardized AZA SSP Assessment process to identify appropriate SSP designations for the species under its purview. This process is presented and described at AZA SSP Reimagination Resources.

Program Management Update

The table below lists all of the SSPs approved in the current RCP, the new designation (Signature SSP, Provisional SSP, TAG-Monitored, Other), the previous designation (Red/Yellow/Green SSP), and contact information for the SSP Coordinator or Species Monitor assigned to that population, if relevant. If a population is no longer going to be actively monitored, they will be designated as 'unmonitored' in the last column.

Table 1: Animal Program Management Update Table

| Common Name (Scientific Name) | New 2022 SSP Program Designation | Previous SSP Program Designation | Contact (Name, Email) |
|----------------------------------|--|---|----------------------------|
| Western Gray Kangaroo | Signature | Yellow | Joseph Svoke |
| (Macropus fuliginosus) | SSP | | joseph.svoke@miamidade.gov |

| Tammar Wallaby | Provisional | Red | Jay Tetzloff | | |
|-------------------------|-------------|-----------|--------------------------------|--|--|
| (Macropus eugenii) | SSP | | jrtetzloff@blankparkzoo.org | | |
| Common Wallaroo | Provisional | Yellow | Beth Carlyle-Askew | | |
| (Macropus robustus) | SSP | | beth.carlyle-askew@zoo.org | | |
| Matschie's Tree | | Red | Kathy Russell | | |
| Kangaroo | Provisional | | kathy.russell@sfcollege.edu | | |
| (Dendrolagus | SSP | | | | |
| matschiei) | | | | | |
| Bennett's Wallaby | Provisional | Green | Valene Hautekeete | | |
| (Macropus rufogriseus) | SSP | | vmhautekeete@blankparkzoo.org | | |
| Brush-tailed Bettong | Studbook | Yellow | Andrea Delegal | | |
| (Bettongia penicillate) | | | andrea.delegal@lacity.org | | |
| Red Kangaroo | Provisional | Yellow | John Stanton | | |
| (Macropus rufus) | SSP | | johnp.stanton@buschgardens.com | | |
| Short-beaked Echidna | Studbook | Red | Jim Haigwood | | |
| (Tachyglossus | | | jhaigwood@sdzwa.org | | |
| aculeatus) | | | | | |
| Queensland Koala | Studbook | Yellow | Lindsey King | | |
| (Phascolarctos cinereus | | | lking@sdzwa.org | | |
| adustus) | | | | | |
| Parma Wallaby | Studbook | Candidate | Joni Hartman | | |
| (Macropus parma) | | | Jonihartman@fotzkc.org | | |
| Eastern Gray Kangaroo | Studbook | Red | Shelley Scherer | | |
| (Macropus giganteus) | | | shelley.scherer@kidszoo.org | | |
| Yellow-footed Rock | Studbook | TAG- | Heather Down | | |
| Wallaby | | Monitored | hdown@livingdesert.org | | |
| (Petrogale xanthopus) | | | | | |

SSP Assessment Results

Below are the outcomes of the SSP Assessments across the genetic, demographic, space & interest, and husbandry criteria for current SSPs within the TAG. The scores shown for each species have been agreed upon by the TAG and the APMC liaison, and reviewed by the full APMC.

Table 2: SSP Assessment Results Summary Table

| Species | Genetics | Demography | Space & Interest | Husbandry | Designation |
|-----------------------------|----------|------------|---------------------|-----------|-----------------|
| Western Gray Kangaroo | + | + | + | + | Signature SSP |
| Tammar Wallaby | + | - | Neutral | Neutral | Provisional SSP |
| Common Wallaroo | Neutral | - | Neutral | Neutral | Provisional SSP |
| Matschie's Tree Kangaroo | Neutral | - | Neutral | Neutral | Provisional SSP |

| Bennett's Wallaby | + | - | + | Neutral | Provisional SSP |
|-------------------------|---------|---|---|---------|-----------------|
| Brush-tailed Bettong | Neutral | - | + | + | Studbook-only |
| Red Kangaroo | Neutral | - | + | + | Provisional SSP |
| Short-beaked Echidna | Neutral | + | + | + | Studbook-only |
| Queensland Koala | + | - | + | + | Studbook-only |
| Parma Wallaby | + | - | + | Neutral | Studbook-only |

Optional Additional Explanation for SSP Assessment Results

Tammar Wallaby

Two organizations are committed to being holders in early 2023 which will bring this program up to 15 AZA institutions. There is also a waiting list of institutions wanting this species. In addition, the population size is currently increasing.

Common Wallaroo

One AZA institution was recently added which puts this population at 14 institutions. There are also other institutions that have expressed interest in this species. Pandemic related lack of animal moves really affected this population. From 2014 – 2018, the population averaged 8 – 9 births per year which is needed to maintain population size. Projected growth rate at that time was 1.019.

Matschie's Tree Kangaroo

Founders are available from Ports Moresby Nature Center in Papua, New guinea. They are a partner in the Tree Kangaroo SAFE program and have been involved with the SSP for many years. Lambda has increased from 0.941 to 0.971 since 2021. Four births per year is needed to maintain the population size and this population has had 3 – 5 births every year for the past 15 years. Deaths in this population from 2016 – 2021 were due to unexpected, non-age-related causes. A high death rate was mentioned in the 2021 breeding and transfer plan; however, this population does not have an inherently high mortality rate. It is unlikely that these high numbers will occur again. There are currently 17 AZA institutions in this program. By 2023, there will be 20. The target size for this population listed on the 2018 RCP is inflated and will be adjusted on the 2023 RCP.

Bennett's Wallaby

Current lambda is 0.982, however, the pandemic significantly affected breeding opportunities for this species. In addition, some institutions lost their AZA status which also affected the lambda. The 5-year lambda prior to the pandemic was 1.001. A Breeding and Transfer Plan was published in July 2022, and it should be feasible to achieve a lambda \geq 1. The target population size is also inflated for this species and will be adjusted in the 2023 RCP.

Brush-tailed Bettong

This population is housed at 13 AZA institutions and current lambda is 0.99. This program will need to incorporate at least two more AZA institutions and achieve a minimum of 7 births per year.

Red Kangaroo

The TAG requested that this population be reduced in order to increase other kangaroo populations. This management plan resulted in a decreased birth rate. In addition, non-AZA institutions were pulled out of the studbook which changed the population in the studbook from 400 at 71 institutions to 300 at 43 institutions. The population is currently sustaining at 300 animals which is the goal set in the RCP. Potential founders are also available.

Short-beaked Echidna

This species is housed at 11 AZA facilities. The number of holding institutions was reduced to increase breeding success. However, reaching 15 holders is not achievable at this time.

Queensland Koala

This species is housed at 10 AZA institutions.

Parma Wallaby

This species is housed at 5 AZA institutions.

Eastern Gray Kangaroo

This species is housed at 6 AZA institutions. An SSP assessment was not completed for this species due to reaching 15 holders not being feasible at this time.

Further resources outlining the overall SSP Assessment Process can be found at

AZA SSP Reimagination Resources and in the following documents:

AZA SSP Assessment Criteria Flowchart

AZA SSP Assessment Form and How to fill out the AZA SSP Assessment

AZA TAG Evaluation of the SSP Assessments