



Nature Conservation Society
of South Australia

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The Director
Terrestrial Species Conservation Section
Wildlife, Heritage and Marine Division
Department of the Environment
P.O. Box 787
Canberra ACT 2601

June 27, 2014

Re: Listing Eligibility and Conservation Actions for the Short-tailed Grasswren (Flinders Ranges) (*Amytornis merrotsyi merrotsyi*) and the Short-tailed Grasswren (Gawler Ranges) (*Amytornis merrotsyi pedleri*)

Dear Sir/Madam,

The Nature Conservation Society of South Australia (NCSSA) welcomes the opportunity to provide comments on the eligibility of the Short-tailed Grasswren (Flinders Ranges) (*Amytornis merrotsyi merrotsyi*) and the Short-tailed Grasswren (Gawler Ranges) (*Amytornis merrotsyi pedleri*) for inclusion on the EPBC Act threatened species list and necessary conservation actions for these species. As South Australia's primary nature conservation advocacy organisation, the NCSSA has an active interest in the protection and conservation of South Australia's natural resources with particular attention being paid to nationally and state listed threatened plants, animals and ecological communities.

Since 1962, NCSSA has played a key role in establishing and expanding the reserve system in South Australia by promoting the protection of key biodiversity assets through the dedication of reserves and by undertaking ecological research to inform their management. Our current and past activities also address the significant need for ongoing management and monitoring both within parks and across the broader landscape to provide long-term conservation of biodiversity.

Please refer to the following pages for our comments on these EPBC Act nominations and associated conservation actions. If you would like to clarify or discuss any of the points raised please contact me on (08) 7127 4633 or via email at nicki.depreu@ncssa.asn.au

Yours sincerely,

Nicki de Preu

Conservation Ecologist

NCSSA provides the following comments on the eligibility of the Short-tailed Grasswren (Flinders Ranges) (*Amytornis merrotsyi merrotsyi*) and the Short-tailed Grasswren (Gawler Ranges) (*Amytornis merrotsyi pedleri*) for inclusion on the EPBC Act threatened species list and necessary conservation actions for these species. Please note that our comments for the two sub-species are similar given that the habitat, behaviour and threats to their survival are comparable.

A. Nomination for Listing of Short-tailed Grasswren (Flinders Ranges) (*Amytornis merrotsyi merrotsyi*)

1. *Do you agree with the current taxonomic position of the Australian Faunal Directory and Birdlife Australia for this species (as identified in the draft conservation advice)*
We agree with the listing of this species as Vulnerable given the restricted geographic distribution, observed continuing decline in area of occupancy and extent and quality of habitat and ongoing impacts of key threatening processes affecting population numbers.
2. *Can you provide any additional references, information or estimates on longevity, age of maturity, average life span and generation length?*
No
3. *Has the survey effort for this species been adequate to determine its national distribution and adult population size?*
We consider that the survey effort to determine extent of occurrence and area of occupancy has been adequate however due to the cryptic nature of the species it is difficult to detect and therefore extremely difficult to accurately determine population size.
4. *Do you accept the estimate provided in the nomination for the current population size of the species?*
We accept the estimate for the current population size of this species. Previous surveys by Carpenter (1996, 2001 & 2004) and Carpenter & Bellchambers (2003) have mapped and increased knowledge of Grasswren habitat in the Flinders Ranges and developed a prediction model for assessing suitable habitat.
5. *For any population with which you are familiar, do you agree with the population estimate provided? If not, are you able to provide a plausible estimate based on your own knowledge?*
We have not conducted targeted surveys for this species so cannot offer any additional information about population estimates.
6. *Can you provide any additional data, not contained in the current nomination, on declines in population numbers over the past or next 10 years or 3 generations, whichever is the longer?*
No
7. *Is the distribution as described in the nomination valid? Can you provide an estimate of the current geographic distribution (extent of occurrence or area of occupancy in km²) of this species?*
We consider the distribution described in the nomination to be valid and do not have any further information on the extent of occurrence or area of occupancy.
8. *Has this geographic distribution declined and if so by how much and over what period of time?*
It is highly likely that recent wildfires in the southern part of this species range have reduced the geographic distribution within the past 12 months. The ongoing impact of grazing by sheep is also highly likely to have affected habitat quality since the 1850's particularly with the more recent introduction of dorper breeds that have a broader diet than traditional merinos.
9. *Do you agree that the species is eligible for inclusion on the threatened species list, in the category listed in the nomination?*
We agree that the species is eligible for inclusion on the threatened species list as Vulnerable given the restricted geographic distribution, observed continuing decline in area of occupancy and extent and quality of habitat and ongoing impacts of key threatening processes affecting population numbers.

10. *Do you agree that the threats listed are correct and that their effects on the species are significant?*

We consider the threats listed for this species to be accurate and that without some form of intervention their effects are highly likely to be significant resulting in further decline of localised populations and subpopulations. Predation by feral cats is also likely to be a significant threat to this species particularly in areas where rabbits are abundant that can support a higher cat population (T Mooney, pers. com. 2012).

11. *To what degree are the identified threats likely to impact on the species in the future?*

Identified threats are highly likely to impact on this species in the future if left unmitigated.

12. *Can you provide additional or alternative information on threats, past, current or potential that may adversely affect this species at any stage of its life cycle?*

We have no further information on the way various threats may adversely affect this species although current climate change models (e.g. Cary et al. 2012) clearly indicate that there will be an increase in the frequency of bushfires that will affect habitat quality and could lead to extinctions of local subpopulations.

13. *In seeking to facilitate the recovery of this species, can you provide management advice for the following:*

- *What individuals or organisations are currently, or need to be, involved in planning to abate threats and any other relevant planning issues?*
Department of Environment, Water & Natural Resources, NGOs including Arkaroola Sanctuary, Warraweena Sanctuary, Yellow-footed Rock-wallaby Preservation Society, Australian Wildlife Conservancy & NCSSA, South Australian Arid Lands and Northern & Yorke NRM Boards, Consultants/expert ornithologists for specific knowledge of sites, survey techniques and monitoring.
- *What threats are impacting on different populations, how variable are the threats and what is the relative importance of the different populations?*
We have no further information on the way various threats are impacting different populations or their degree of impact.
- *What recovery actions are currently in place, and can you suggest other actions that would help recover the species? Please provide evidence and background information.*
Broadscale fox baiting and goat control is currently undertaken by DEWNR on the Flinders Ranges National Park, Vulkathunha-Gammon Ranges National Park and a number of private landholdings in the northern and southern Flinders. Further investigation of a baiting program targeting feral cats is warranted to reduce the threat of predation.
We strongly support the listed management actions and further research and monitoring required to achieve the primary conservation objectives on Pages 7-8 of the nomination.

14. *Can you provide additional data or information relevant to this assessment?*

An analysis of habitat data collected during surveys by Carpenter (DEWNR, 2006) found that this species was able to utilise suboptimal habitat in areas subject to regular fox-baiting.

We strongly recommend that a long-term and rigorously designed monitoring program is implemented to enable population trends to be assessed and allow for early detection of declines.

We recommend that an additional item is added to the list of Information required, research and monitoring priorities, namely:

- Investigate and determine the impacts of predation by feral cats

We also recommend that the following additional management actions are added:

- To investigate options for covenants or stewardship agreements with landholders where grazing by domestic stock occurs at key sites where this species occurs.
- To investigate options for feral cat control at key sites where this species occurs.

B. Nomination for Listing of Short-tailed Grasswren (Gawler Ranges) (*Amytornis merrotsyi pedleri*)

1. *Do you agree with the current taxonomic position of the Australian Faunal Directory and Birdlife Australia for this species (as identified in the draft conservation advice)*

We agree with the listing of this species as Endangered given the restricted geographic distribution, observed continuing decline in area of occupancy and extent and quality of habitat and ongoing impacts of key threatening processes affecting population numbers.

2. *Can you provide any additional references, information or estimates on longevity, age of maturity, average life span and generation length?*

No

3. *Has the survey effort for this species been adequate to determine its national distribution and adult population size?*

We consider that the survey effort to determine extent of occurrence and area of occupancy has been adequate however due to the cryptic nature of the species it is difficult to detect and therefore extremely difficult to accurately determine population size. Previous surveys by Parker (1982), Baxter & Paton (1998), Pedler and Carpenter (2006), have mapped and increased knowledge of Grasswren habitat and developed a prediction model for assessing suitable habitat.

4. *Do you accept the estimate provided in the nomination for the current population size of the species?*

We accept the estimate for the current population size of this species although recent fires may have significantly reduced the size of population.

5. *For any population with which you are familiar, do you agree with the population estimate provided? If not, are you able to provide a plausible estimate based on your own knowledge?*

We have not conducted targeted surveys of this species so cannot offer any additional information about population estimates.

6. *Can you provide any additional data, not contained in the current nomination, on declines in population numbers over the past or next 10 years or 3 generations, whichever is the longer?*

No

7. *Is the distribution as described in the nomination valid? Can you provide an estimate of the current geographic distribution (extent of occurrence or area of occupancy in km²) of this species?*

We consider the distribution described in the nomination to be valid and do not have any further information on the extent of occurrence or area of occupancy.

8. *Has this geographic distribution declined and if so by how much and over what period of time?*

We are aware that there has been a number of large and smaller scale bushfires in the Gawler Ranges National Park and surrounding areas over the past twelve years. These fires have affected a range of vegetation communities including *Triodia* Hummock Grassland habitat and are highly likely to have reduced the geographic distribution of this species. The ongoing impact of grazing by sheep is also highly likely to have affected habitat quality since the 1870's particularly with the more recent introduction of dorper breeds that have a broader diet than traditional merinos.

9. *Do you agree that the species is eligible for inclusion on the threatened species list, in the category listed in the nomination?*

We agree that the species is eligible for inclusion on the threatened species list as Endangered given the restricted geographic distribution, low population numbers and recent declines in area of occupancy and extent and quality of habitat due to bushfires.

10. *Do you agree that the threats listed are correct and that their effects on the species are significant?*

We consider the threats listed for this species to be accurate and that without some form of intervention their effects are highly likely to be significant resulting in further decline of localised populations and subpopulations. Inappropriate fire regimes are of particular concern for this species.

Predation by feral cats is also likely to be a significant threat particularly in areas where rabbits are abundant that can support a higher cat population (T Mooney, pers. com. 2012).

11. *To what degree are the identified threats likely to impact on the species in the future?*

Identified threats are highly likely to impact on this species in the future if left unmitigated.

12. *Can you provide additional or alternative information on threats, past, current or potential that may adversely affect this species at any stage of its life cycle?*

We have no further information on the way various threats may adversely affect this species although current climate change models (e.g. Cary et al. 2012) clearly indicate that there will be an increase in the frequency of bushfires that will affect habitat quality and could lead to extinctions of local subpopulations.

13. *In seeking to facilitate the recovery of this species, can you provide management advice for the following:*

- *What individuals or organisations are currently, or need to be, involved in planning to abate threats and any other relevant planning issues?*

Department of Environment, Water & Natural Resources, NGOs including Nature Foundation SA & NCSSA, South Australian Arid Lands NRM Board, Consultants/expert ornithologists for specific knowledge of sites, survey techniques and monitoring.

- *What threats are impacting on different populations, how variable are the threats and what is the relative importance of the different populations?*

We have no further information on the way various threats are impacting different populations or their degree of impact.

- *What recovery actions are currently in place, and can you suggest other actions that would help recover the species? Please provide evidence and background information.*

Broadscale fox baiting and ongoing goat control has been undertaken by DEWNR on the Gawler Ranges National Park since 2002 (DEWNR, 2012). The Nature Foundation has recently implemented goat control and fox baiting programs on the former Hiltaba Station that was purchased in 2012 and is now managed for nature conservation (<http://www.naturefoundation.org.au/our-work/hiltaba/>). Further investigation of a baiting program targeting feral cats is warranted to reduce the threat of predation. We support the listed management actions and further research and monitoring required to achieve the primary conservation objectives on Page 8 of the nomination.

14. *Can you provide additional data or information relevant to this assessment?*

A recent survey by NCSSA staff found a pair/group of grasswrens at a previously unmapped location.

We strongly recommend that a long-term and rigorously designed monitoring program is implemented to enable population trends to be assessed and allow for early detection of declines.

We recommend that an additional item is added to the list of Information required, research and monitoring priorities, namely:

- Investigate and determine the impacts of predation by feral cats

We also recommend an additional management action is added:

- To investigate options for covenants or stewardship agreements with landholders where grazing by domestic stock occurs at key sites where this species occurs.

References

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- Carpenter, G. (2006) Short-tailed Grasswrens in the Flinders Ranges, in Bounceback Progress Report (Eds D. Pearce and N. de Preu) Pages: 75-86, Department for Environment & Heritage, South Australia.
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- Parker, S.A. (1982) Notes on *Amytornis striatus merrotsyi* Mellor, a subspecies of the Striated Grasswren inhabiting the Flinders Ranges. *South Australian Ornithologist* 29: 13-16.