Evidence on Listing Eligibility and Conservation Actions 2018

Strepera versicolor (Latham, 1801) (Grey Currawong)

Current EPBC Act status: not listed

Current TPWC Act status: Critically Endangered (Possibly Extinct)

<u>Proposed Action:</u> change status under TPWC Act. <u>Nominated Status:</u> Extinct in the NT

<u>Taxonomy</u>

Scientific name:	Strepera versicolor (Latham, 1801)			
Common name:	Grey Currawong			
Family name:	Artamidae	Fauna 🖂	Flora	

Species Information

Description

Six subspecies of the grey currawong occur in Australia and these vary both in colour (from grey to brown to almost black) and size. Records of the species in the NT are attributed to the western subspecies *S. v. plumbea*, which is the subspecies common in Western Australia.

The western grey currawong is a large bird (head-body length up to 50 cm), predominantly dark in colour. Most of the upper and underbody is smoky-grey with a brownish tinge. The face and throat has a sooty wash. A large white patch is present on the wings and extends from the base of the primary flight feathers to the outer secondary flight feathers. The tips of both primary and secondary flight feathers are white. The dark tail has a white band at its tip. The bill and legs are black. The eye is bright yellow. Sexes are similar in size and appearance.

Distribution

The grey currawong is endemic to Australia and occurs as six subspecies in the southern half of the continent.

The species' distribution ranges from just north of Sydney, south through Victoria, southern South Australia and south-west Western Australia. It also occurs in eastern Tasmania. The historic range of subspecies *plumbea* extends from south-west Western Australia across into north-west South Australia and into the south-west corner of the NT. There are six records of the Grey Currawong in the NT in NTG databases, all from the Petermann Ranges area. The first four were recorded in January 1969, one was in in May 1969 and the sixth was in November 1976, though the last record is not acknowledged in the review of conservation status of birds in arid Australia by Reid & Fleming (1992). Storr (1977) considered the species uncommon in the NT and reported its range as 'north to the Petermann Ranges and east to 35 km west of Victory Downs'.

Parker and Horton (1990) considered the Grey Currawong was extinct in the north-west of SA by 1990 (see also Reid and Fleming 1992).

Adequacy of Survey

All records of the Grey Currawong in the NT were recorded between January 1969 and November 1976 (the last being doubtful). There are several historical records of the species from northern South Australia and adjacent areas of Western Australia, mostly from the 1960s or date unknown (presumed old; Atlas of Living Australia <u>https://bie.ala.org.au/</u>). The closest, most recent records are 570 km and 450 km southwest of the tri-state border point (Surveyor General's Corner) in 2012 and 2013, respectively.

There have been no targeted surveys for the species but it is a large and fairly distinctive species with a loud call, easily distinguished from other superficially similar species (crows and ravens) that occur in the region. In the period since the last NT record there has been a concerted effort to seek reports for this species including throughout the Anangu Pitjantjatjara Yankunytjatjara lands of northern SA (C. Pavey *pers comm*). There is a large number of reporting mechanisms for reporting of bird sightings, including the systematic bird atlas program. The species is not cryptic and is easy to describe, therefore the likelihood that the species was present and was missed is low. Due to the significant time since the species was last seen, the survey effort is considered adequate to conclude that *Strepera versicolor* is regionally extinct in the NT.

Relevant Biology/Ecology

Relatively little is known about the ecology of the grey currawong in central Australia as it is nowhere common in arid Australia. Usually single birds or pairs are observed, although historical accounts indicate that large flocks formed. The species has a distinctive loud ringing call that draws attention to its presence. It is a carnivore that feeds mostly on insects that are obtained within the leaf litter or while foraging on tree trunks.

In the Northern Territory, the species has been reported from patches of tall acacia and river red gum woodland on flats near the foot of ranges (Storr 1977). Elsewhere it occupies a range of woodlands and forests. The breeding season is from July to November. Two or three oval eggs are laid in a cup-shaped nest located on a tree branch.

Threat (describe the threat and how it impacts on the species. Specify if the threat is past, current or potential)	Extent (give details of impact on whole species or specific subpopulations)	Potential Impact (what is the level of threat to the conservation of the species)
Habitat degradation resulting in loss of suitable habitat and / or decline in food availability. The cause of such degradation is not known, but i) fire regimes are likely to have changed dramatically since the loss of traditional burning practices, ii) Feral herbivores, such as camels, horses and rabbits, may also have had an impact. Weeds, such as buffel grass, are now encroaching on the area but were not prevalent at the time of the species' decline.	100 % of the range in the NT	Presumed extreme
Predation by feral carnivores (cats and foxes). Grey Currawongs spend considerable time foraging on the ground which may make them vulnerable to these introduced predators.	100 % of the range in the NT	unknown

Threats

Summary of IUCN attributes¹

EOO	0 km ² in the NT		A00	0 km ² (2x2km grid method) in the NT. Generation length			Generation length	c. 10 years
No. loo	cations	0 in the N	IT	Severely fragmented? Yes		Yes No Unknown		
No. su	bpopulations	0 in the N	IT	No. mature individuals 0 in the N		Г		
Percentage global population within Australia				na				
Percentage population decline over 10 years or 3 ge			generations	100% dec the last 40	line in the N 0-50 years.	T population, s	sometime in	



¹ Refer to <u>Guidelines for using the IUCN Red List Categories and Criteria</u> for definitions. Basis for calculations of number of locations and number of subpopulations should be given in the Distribution section.

Assessment of available information in relation to the listing Criteria

Criterion A. Population size reduction (reduction in total numbers) Population reduction (measured over the longer of 10 years or 3 generations) based on any of A1 to A4							
		Critically Endang Very severe reduc	ered ction	En Seve	dang re rec	ered duction	Vulnerable Substantial reduction
A1		≥ 90%			≥ 70	%	≥ 50%
A2,	A3, A4	≥ 80%			≥ 50	%	≥ 30%
A1	Population reduction observed, estima suspected in the past and the causes are clearly reversible AND understood	ted, inferred or of the reduction AND ceased.			(a)	direct obs	servation [<i>except A3</i>]
A2	Population reduction observed, estima or suspected in the past where the cau reduction may not have ceased OR may understood OR may not be reversible.	n reduction observed, estimated, inferred cted in the past where the causes of the may not have ceased OR may not be od OR may not be reversible.		based	(b) (c)	an index the taxon a decline	of abundance appropriate to in area of occupancy, extent
A3	Population reduction, projected or susp met in the future (up to a maximum of cannot be used for A3]	uspected to be of 100 years) [(<i>a)</i>		of the followin	(d)	of occurre actual or	ence and/or quality of habitat potential levels of exploitation
A4	An observed, estimated, inferred, proje suspected population reduction where must include both the past and the futu max. of 100 years in future), and where reduction may not have ceased OR may understood OR may not be reversible.	ected or the time period ure (up to a e the causes of ay not be			(e)	the effect hybridizat competito	s of introduced taxa, tion, pathogens, pollutants, ors or parasites

Evidence:

In the NT, the Grey Currawong is known from only a small number of records, 40-50 years ago. The absence of recent records indicates a total decline of the species in the NT

Crite	Criterion B. Geographic distribution as indicators for either extent of occurrence AND/OR area of occupancy					
			Critically Endangered Very restricted	Endangered Restricted	Vulnerable Limited	
B1.	Extent of oc	currence (EOO)	< 100 km²	< 5,000 km²	< 20,000 km²	
B2.	Area of occ	upancy (AOO)	< 10 km²	< 500 km²	< 2,000 km²	
AND	at least 2 of	the following 3 conditions	indicating distribution is pr	ecarious for survival:		
(a)	Severely fra locations	agmented OR Number of	= 1	≤ 5	≤ 10	
(b)	(b) Continuing decline observed, estimated, inferred or projected in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) area, extent and/or quality of habitat; (iv) number of locations or subpopulations; (v) number of mature individuals					
(c)) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulations;(iv) number of mature individuals					

Evidence:

As above.

Criterion C. Population size and decline					
	Critically Endangered Very low	Endangered Low	Vulnerable Limited		
Estimated number of mature individuals	< 250	< 2,500	< 10,000		
AND either (C1) or (C2) is true					
C1 An observed, estimated or projected continuing decline of at least (up to a max. of 100 years in future)	Very high rate 25% in 3 years or 1 generation (whichever is longer)	High rate 20% in 5 years or 2 generation (whichever is longer)	Substantial rate 10% in 10 years or 3 generations (whichever is longer)		

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C2	An observed, estimated, projected or inferred continuing decline AND its geographic distribution is precarious for its survival based on at least 1 of the following 3 conditions:			
	(i) Number of mature individuals in each subpopulation	≤ 50	≤ 250	≤ 1,000
(a)	(ii) % of mature individuals in one subpopulation =	90 – 100%	95 – 100%	100%
(b)	Extreme fluctuations in the number of mature individuals			

Evidence:

As above.

Criterion D. Number of mature individuals					
	Critically Endangered Extremely low	Endangered Very Low	Vulnerable Low		
D. Number of mature individuals	< 50	< 250	< 1,000		
D2. Only applies to the VU category Restricted area of occupancy or number of locations with a plausible future threat that could drive the taxon to CR or EX in a very short time.	-	-	D2. Typically: AOO < 20 km² or number of locations ≤ 5		

Evidence:

As above.

Criterion E. Quantitative Analysis					
	Critically Endangered Immediate future	Endangered Near future	Vulnerable Medium-term future		
Indicating the probability of extinction in the wild to be:	≥ 50% in 10 years or 3 generations, whichever is longer (100 years max.)	≥ 20% in 20 years or 5 generations, whichever is longer (100 years max.)	≥ 10% in 100 years		

Evidence:

No such quantitative analysis has been done for this species and there are insufficient quantitative data available to do so.

Summary

In the NT, the Grey Currawong is known from only a small number of records, 40-50 years ago. The areas previously occupied by Grey Currawong in central Australia were at the edge of the species' distribution and individuals there must have been at the limits of the species' physiological tolerances. However, the threatening processes causing the decline have not been identified.

Whilst there have been no targeted searches for the species in the NT there have been concerted efforts to seek birder's records of the species from central Australia, without success. The species is large and distinguishable from similar species so the likelihood that the species was present and was missed is low. Due to the significant time since the species was last seen, the survey effort is considered adequate to conclude that *Strepera versicolor plumbea* is regionally extinct in the NT.

Management and Recovery

Is there a Recovery Plan (RP) or Conservation Management Plan operational for the species?	Yes 🗌	No 🗌				
List all relevant recovery or management plans (including draft, in-preparation, out-of-date, national and State/Territory recovery plans, recovery plans for other species or ecological communities, or other management plans that may benefit or be relevant to the nominated species). none 						
List current management or research actions, if any, that are being undertaken that benefit the conservation of the species.None, as extinct in the NT						
List further recommended management or research actions, if any, that would benefit the conservation of the species.						
None, as extinct in the NT						
Further comment.						
Given the large and relatively secure distribution of the species in southern Aus conservation imperative to reintroduce the species in the NT. There are also etl translocation of individuals to areas that are likely to severely challenge their ph changing climate.	stralia there is hical considera nysiological lim	little ations in the hits in a time of				

References

Reid J and Fleming M (1992). The conservation status of birds in arid Australia. *Rangelands Journal* **14**, 65-91 Storr GM (1977). *Birds of the Northern Territory*. (Western Australian Museum, Perth.)