

Advice to the Minister for the Environment and Heritage from the Threatened Species Scientific Committee (TSSC) on Amendments to the list of Threatened Species under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

1. Scientific name, common name (where appropriate), major taxon group

Collocalia esculenta natalis (Glossy Swiftlet (Christmas Island))

2. Description

The Glossy Swiftlet (Christmas Island) is a small bird (9-11 cm long), mostly glossy blue-black or green-black above and dark grey below, with a prominent white abdominal patch.

On Christmas Island, the Glossy Swiftlet nests primarily in caves in inland limestone cliffs. The nests are generally deep in the caves, in near total darkness, high up on the wall and often sheltered behind a stalactite. The nests are cup-shaped; mostly made of lichen, interwoven with dried fibres of Sago Palm and cemented to the wall with saliva.

Glossy Swiftlets feed on the wing over most terrestrial habitats, mostly in more open areas of the island, but utilising shadier spots in the midday hours. Flying ants make up most of their diet. Glossy Swiftlets are commonly seen on Christmas Island, swooping through clearings and skimming the forest canopy capturing flying insects.

3. National Context

This subspecies of Glossy Swiftlet is endemic to Christmas Island. It is not listed as threatened under any State or Territory legislation, nor is it currently listed under the EPBC Act.

4. How judged by TSSC in relation to the EPBC Act criteria.

TSSC judges the subspecies not to be eligible for listing under the EPBC Act. The justification against the criteria is as follows:

Criterion 1 – It has undergone, is suspected to have undergone or is likely to undergo in the immediate future a very severe, severe or substantial reduction in numbers.

The Glossy Swiftlet (Christmas Island) is abundant on the island and numbers are unlikely to have altered substantially since settlement.

The most serious threat to the Glossy Swiftlet (Christmas Island) was disturbance by increasing numbers of people visiting the caves in which the major nesting colonies occur. One of the Glossy Swiftlet nesting caves was abandoned by the birds for a short period in 1984, possibly because of the increasing number of visitors (Stokes 1988). The cave was the most popular and accessible nesting cave for visitors on Christmas Island. However, access to this cave has since been restricted and the other nesting caves are relatively inaccessible.

The spread of Yellow Crazy Ants (hereafter called Crazy Ants) has been suggested as a possible threat to the Glossy Swiftlet (Christmas Island). Crazy Ants are an aggressive invasive species that were accidentally introduced to Christmas Island between 1915 and 1934 and are now widespread throughout the rainforest and settled areas on the island. They can build up into colonies with extremely high numbers called supercolonies. Before recent abatement programs, Crazy Ant supercolonies had formed in 24.4% of island's rainforest.

Glossy Swiftlets (Christmas Island) may occasionally nest in tree hollows and in pockets of limestone in pinnacles and scree slopes in which Crazy Ants also form nesting colonies. However, the Glossy Swiftlet primarily relies on caves for nesting and, as the Crazy Ants do not inhabit these caves, they are unlikely to cause a substantial decline in Glossy Swiftlet nest site availability. There also appears to be no competition for food or interference with foraging behaviour. There has been no observed attacks on any Glossy Swiftlets, and nestling predation by Crazy Ants is unlikely. There is no evidence of any decline of the Glossy Swiftlet that may have taken place since Crazy Ant supercolonies began to develop and spread on Christmas Island.

Crazy Ants appear to have no direct effect on this species although it may be possible that the long term effects on the Crazy Ant on the island's ecosystem processes could have an effect in the future. At this stage, there are insufficient quantitative data to show any decline in the species. Therefore it is **not eligible for listing** under this criterion.

Criterion 2 –Its geographic distribution is precarious for the survival of the species and is very restricted, restricted or limited.

This subspecies of Glossy Swiftlet is endemic to Christmas Island. The bird's extent of occurrence is the whole of Christmas Island, an area of 135 km². However, its area of occupancy is defined by its essential breeding habitat, the caves in which it primarily nests, an area of 3 km². The subspecies therefore has a very restricted geographic distribution.

While the subspecies has a very restricted distribution and is known to exist at only a small number of locations, there has been no observed or projected decline. Therefore the Glossy Swiftlet (Christmas Island) is **not eligible for listing** under this criterion.

Criterion 3 – The estimated total number of mature individuals is limited to a particular degree and: (a) evidence suggests that the number will continue to decline at a particular rate; or (b) the number is likely to continue to decline and its geographic distribution is precarious for its survival.

The estimated population size of the Glossy Swiftlet (Christmas Island) is 100,000-1,000,000 birds (Van Tets 1975). Therefore this species is **not eligible for listing** under this criterion.

Criterion 4 – The estimated total number of mature individuals is extremely low, very low or low.

Although the total population of the Glossy Swiftlet (Christmas Island) is geographically very restricted, occurring in a small number of caves with an estimated area of occupancy of 3 km², the species is abundant on the island and appears to be under no threat. Therefore this species is **not eligible for listing** under this criterion.

Criterion 5 - Probability of extinction in the wild

There are no quantitative data available against this criterion. Therefore the subspecies is **not eligible** for listing under this criterion.

5. CONCLUSION

The Glossy Swiftlet (Christmas Island) is endemic to Christmas Island. Although the species occurs over the whole island, its area of occupancy is restricted to a number of caves with an area of 3 km². The Glossy Swiftlet (Christmas Island) is abundant with an estimated population of 100,000-1,000,000 birds. There is no evidence that the species has undergone any declines in population or to suspect it is likely to do so in the future. There are no known threats.

This species is not eligible for listing under the EPBC Act.

6. Recommendation

TSSC recommends that the species *Collocalia esculenta natalis* (**Glossy Swiftlet (Christmas Island)**) is **not eligible** for inclusion in the list referred to in section 178 of the EPBC Act.

Associate Professor Robert J.S. Beeton

Chair

Threatened Species Scientific Committee

Publications used to assess the nomination

Davis, N. 2002. *The Invasive Yellow Crazy Ant (Anoplolepis gracilipes) on Christmas Island, Indian Ocean: Impacts on the Frugivorous Bird Fauna*. Honours thesis, Monash University.

Higgins, P.J. (Ed.) 1999. *Handbook of Australian, New Zealand and Antarctic Birds. Volume 4. Parrots to Dollarbird*. Melbourne: Oxford University Press.

Humphreys, W.F. & Eberhard, S. M. 1998. *Assessment of the Ecological Values & Management Options for cave use on Christmas Island*. Report prepared for Parks Australia North, Western Australian Museum.

Stokes, T. 1988. *A review of the birds of Christmas Island, Indian Ocean*. Australian National Parks & Wildlife Service Occasional Paper 16.

Van Tets 1975. *A report on the conservation of resident birds on Christmas Island*. XII Bulletin of the ICBP.