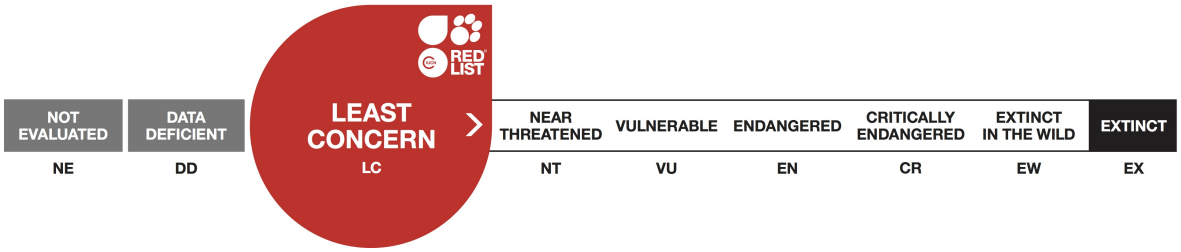
The IUCN Red List of Threatened Species™
ISSN 2307-8235 (online)
IUCN 2008: T170384A21644690
Scope: Global
Language: English

Chlamydosaurus kingii, Frilled Lizard

Assessment by: O'Shea, M., Allison, A., Tallowin, O., Wilson, S. & Melville, J.



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Citation: O'Shea, M., Allison, A., Tallowin, O., Wilson, S. & Melville, J. 2017. *Chlamydosaurus kingii. The IUCN Red List of Threatened Species 2017*: e.T170384A21644690.
http://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T170384A21644690.en

Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Reptilia	Squamata	Agamidae

Taxon Name: *Chlamydosaurus kingii* Gray, 1825

Common Name(s):

- English: Frilled Lizard

Taxonomic Notes:

This is the sole member of its genus.

Identification Information:

Chlamydosaurus kingii is grey to orange brown to almost completely black from above, with obscure dark brown variegations. Their distinctive frill is yellow-black, and often possesses flecks of orange (Cogger 2000).

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2017

Date Assessed: July 21, 2014

Justification:

Chlamydosaurus kingii has been assessed as Least Concern owing to its large distribution in Australia and southern New Guinea. It is tolerant of somewhat modified habitats and present in protected areas. There are a number of localized threats, however, these are not thought to impact large parts of this species' range. Monitoring this species population status and threats from trade in New Guinea should be undertaken, as the species may be at some risk in the Trans-Fly.

Previously Published Red List Assessments

2010 – Least Concern (LC)
http://dx.doi.org/10.2305/IUCN.UK.2010-4.RLTS.T170384A6773533.en

Geographic Range

Range Description:

This species has a wide distribution in Australia, the Torres Strait islands and southern New Guinea. In Australia it occurs from Kimberley district in Western Australia across the north of the Northern Territory to the Cape York Peninsula in northern Queensland, from there south to Brisbane and north to the Torres Strait islands of Muralug, Badu, and Mua. In southern New Guinea it occurs in the southern Trans-Fly region in Western Province (Papua New Guinea) and Papua Province (Indonesian New Guinea) (O'Shea 1991, Wilson and Swan 2003, Lavery *et al.* 2012). Most New Guinean records are from PNG (A.

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Allison unpubl. data). This savanna species will not penetrate into forested regions, and so is not expected to range further north in New Guinea than is presently known in the southern Trans-Fly (M. O'Shea and A. Allison pers. comm. 2014).

Country Occurrence:

Native: Australia (Northern Territory, Queensland, Western Australia); Indonesia (Papua); Papua New Guinea (Papua New Guinea (main island group))

Distribution Map

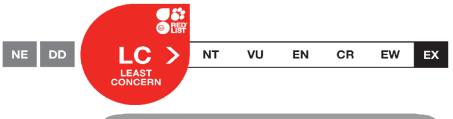
Chlamydosaurus kingii

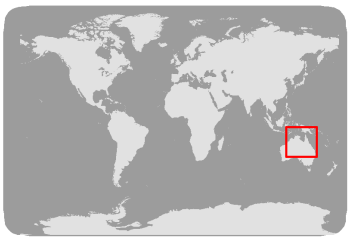
Range

Extant (resident)

Compiled by:

IUCN





The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

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Population

This species is well-represented in collections from southern New Guinea: in global collections, 93 records from 37 localities in the Trans-Fly and Papua are known (A. Allison unpubl. data). This species is probably reasonably common in suitable habitat in New Guinea, as is the case in northern Australia (A. Allison pers. comm. 2014), but this species may be under recorded as this is a quick, wary species that is difficult to both collect and record. The species' population status is unknown, but localized declines due to the effects of introduced species and - in New Guinea - harvesting cannot be ruled out.

Current Population Trend: Unknown

Habitat and Ecology **(see Appendix for additional information)**

In Australia this species inhabits dry sclerophyll forests and open woodlands and disturbed urban areas. In New Guinea, it is associated with savannah woodland characterized by *Melanoleuca* and *Eucalyptus*, habitats which can be seasonally flooded. Lizards have been collected basking on termite mounds (M. O'Shea pers. comm. 2014). It is arboreal and rarely encountered during the dry season presumably remaining in the canopy. It is frequently seen in the rainy season perching 1-2 m from the ground on trunks of standing rough-barked trees, and often descends to the ground after rain. Studies on this species in Australia have revealed the size and/or location of the home range shows little variation between seasons (Brown *et al.* 2005). The mean home range of females was almost identical between seasons (dry = 0.63 ha, wet = 0.68 ha), and the mean male home range increased in the wet season (dry = 1.96 ha, wet = 2.53 ha) (Brown *et al.* 2005). This diurnal 'sit and wait' predator spends the majority of its time clinging to branches of trees but descends to the ground to forage, interact with other lizards and move to new trees. Diet consists of insects, primarily caterpillars, ants, termites, and beetles (Cameron and Cogger 1992, Cogger 2000, Wilson and Swan 2003).

Systems: Terrestrial

Use and Trade

Allison (2006) noted that in the southern Trans-Fly region this was the only species of special concern, as it is highly sought after for the pet trade. Yuwono (1998) indicated that trade in this species was from Indonesian New Guinea (export being banned from both Papua New Guinea (PNG) - M. O'Shea pers. comm. 2014 - and Australia) and that animals were was always available in adequate numbers. This does not however imply that export is sustainable, and this species is very common in trade. Many of the specimens exported from Indonesia are likely to come from PNG.

Threats **(see Appendix for additional information)**

There are no major threats to this species across its range as a whole.

Late dry season fires in the Northern Territory were responsible for an approximate 30% mortality rate in a small monitored population in Kakadu National Park, though no mortality was recorded in the early dry season fires (Griffiths 1994). While localized, short-term declines have been reported from fires, this species is associated with fire-adapted habitats and is probably not declining as a result of this pressure. Local population declines have also been reported after the arrival of the Cane Toad *Rhinella marina* (Breeden 1963). Predation by cats has also caused declines in this species (Brook *et al.* 2004). In the

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Trans-Fly region of New Guinea, this species is reported to be "sought after for the pet trade" (Allison 2006). There is insufficient information to determine whether trade represents a threat at present, but this species is very hard to breed in captivity and most specimens reported as captive-bred are believed to be wild-caught (M. O'Shea pers. comm. 2014), and trade might well occur at a level sufficient to cause declines in New Guinea. While not currently a major threat, the rapidly changing climate could be detrimental for this species given that they temperature affects the sex and body size of hatchlings (Harlow and Shine 1999).

Conservation Actions **(see Appendix for additional information)**

There are no known species-specific conservation measures in place for this species. This species occurs in the Wasur National Park in Indonesian New Guinea and the Tonda Wildlife Management Area in Papua New Guinea. It also occurs in a variety of National Parks across Australia, including Kakadu (Shine and Lambeck 1989). Localized populations of this species are monitored to study the impact that major threats such as fire are having on its abundance. This species is not listed under CITES and does not have protected status or an export quota in Indonesia. Research into its harvest levels in New Guinea should be carried out, as well as monitoring of numbers found in trade and also to confirm that animals found in trade are not sourced from Australia.

Credits

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Disclaimer

External Resources

For Images and External Links to Additional Information, please see the Red List website.

Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.5. Forest - Subtropical/Tropical Dry	Resident	Suitable	-
2. Savanna -> 2.2. Savanna - Moist	Resident	Suitable	-
14. Artificial/Terrestrial -> 14.4. Artificial/Terrestrial - Rural Gardens	Resident	Marginal	-
14. Artificial/Terrestrial -> 14.5. Artificial/Terrestrial - Urban Areas	Resident	Marginal	-

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
11. Climate change & severe weather -> 11.3. Temperature extremes	Ongoing	Unknown	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.3. Indirect species effects -> 2.3.7. Reduced reproductive success		
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	Unknown	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.3. Trend Unknown/Unrecorded	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Felis catus)	Ongoing	Unknown	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.2. Named species (Rhinella marina)	Ongoing	Unknown	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.1. Species mortality		

Conservation Actions in Place

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: Yes

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Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.3. Trade trends

Additional Data Fields

Population
Population severely fragmented: No

The IUCN Red List Partnership

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