

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



PROPOSAL TO AMEND THE APPENDICES

(in accordance with Annex 4 to Resolution Conf. 9.24 (Rev. CoP17), as amended)

Nineteenth meeting of the Conference of the Parties
Panama City (Panama) 14 - 25 November 2022

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

Proposal

To include *Tiliqua adelaidensis* in Appendix I, in accordance with Resolution Conf. 9.24 (Rev. CoP17), Annex 1 Paragraph B and Paragraph C.

Proponent

Australia*

Supporting statement

1. Taxonomy

Class: Reptilia

Order: Squamata

Family: Scincidae

Genus, species or subspecies: *Tiliqua adelaidensis* (Peters, 1864)

Scientific synonyms: *Cyclodus adelaidensis* (Peters, 1864)

Common names: English: Pygmy Bluetongue Lizard

French:

Spanish:

* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

2. Overview

The Pygmy Bluetongue Lizard (*Tiliqua adelaidensis*) is a moderately-sized, short-legged skink, endemic to remnant patches of native temperate grassland in a small area of the Australian state of South Australia. The species historically extended from the southern suburbs of the city of Adelaide, north to the town of Mannanarie (approximate distance of 220 km) and may have been widespread across this area prior to European settlement in 1836. Today, it appears to be extinct in the southern part of its former range and only survives in the north in approximately 30 mostly small patches of suitable habitat that are now widely disjunct due to intervening areas of intensive agriculture. Its evident disappearance from all but a few remnants, in addition to the small size and disjunct nature of these remnants, has led to the species being listed as Endangered by both Australian national (*Environment Protection and Biodiversity Conservation Act (EPBC) 1999*) and South Australian state (Schedule 7 of the *National Parks and Wildlife (NPW) Act 1972*) legislation. The species is also listed as Endangered B2ab (ii, iii, iv, v) in the IUCN Red List (Fenner et al., 2018).

The exceptional small size of the Pygmy Bluetongue, and its extreme rarity, combine to give it a high commercial value among collectors. The illegal trade of the species has started, with at least 17 specimens listed for sale at high prices on the European market within a six-month survey period over 2017 to 2018 (Altherr et al., 2019) and all believed to be sourced illegally. Increased overseas demand for Pygmy Bluetongues has the potential to increase illegal poaching, with significant conservation impacts on wild populations.

Although the volume of illegal trade is currently unknown and may not be high, with the species facing ongoing habitat degradation and loss, even moderate offtake levels may accelerate their decline. Illegal poaching from the wild to supply illicit trade further intensifies the threats already posed by the species' low reproductive rates, small populations, limited range, and habitat specialisation, while the depletion of specimen numbers risks reducing subpopulations to unviable numbers. Destruction of their habitat (spider burrows) during poaching is a further threat to the species.

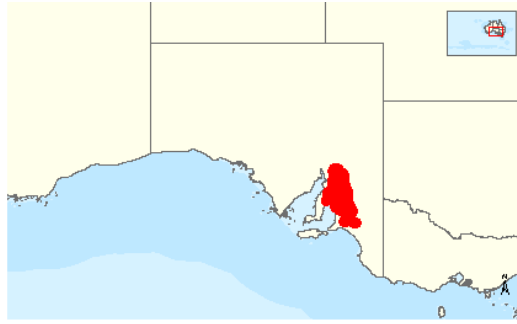
Referencing Resolution Conf. 9.24 (Rev. CoP17), this species is eligible for inclusion in Appendix I as it meets several criteria outlined in Annex 1 paragraphs B and C; namely that the wild population has a restricted area of distribution, is (paragraph B.i) fragmented and occurs in very few locations, (B. ii) has a high vulnerability to intrinsic and extrinsic factors, and (B. iv) has an observed decrease in the area of distribution, area of habitat, and the number of subpopulations; and where the species has incurred a marked decline in the population size in the wild, (C. ii) inferred on the basis of a decrease in area and quality of habitat.

3. Species characteristics

3.1 Distribution

The species is currently endemic to the state of South Australia, Australia, where it is known from approximately 30 discrete locations (Bull & Hutchinson, 2019) within an area approximately 100 km east to west and 140 km north to south. Most of the sites are small, less than 100 ha, with a few larger sites up to about 100 ha.

The lizard is entirely confined to the Iron-grass Natural Temperate Grassland of South Australia - an ecological community listed as critically endangered under national environmental legislation (Turner, 2012).



Department of the Environment (2022)

Map of South Australia and adjacent areas showing the region where the Iron-Grass Natural Grasslands is known to occur.

3.2 Habitat

The sites where the lizard occurs are scattered through a region of moderate rainfall (approximately 400-600 mm annually). Vegetation at these sites is remnant native temperate grassland, characterised by almost treeless landscapes with ground cover dominated by native perennial grasses (*Aristida* spp., *Austrodanthonia* spp., *Austrostipa* spp., *Themeda* spp.), often with characteristic clumps of mat-rush (*Lomandra* spp., *Asparagaceae* spp.), colloquially known as iron-grass. All known locations are on farmland and have a history of use as grazing pastures (Souter et al., 2007; Delean et al., 2013).

Within its native grassland habitat, the primary shelters for the lizards are spider burrows constructed by mygalomorph (trapdoor) and lycosid (wolf) spiders (Hutchinson et al., 1994; Milne & Bull, 2000; Fellows et al., 2009).

3.3 Biological characteristics

Pygmy Bluetongues are moderate-sized skinks, reaching a maximum snout-vent length (SVL) of 110 mm, and between 10g and 16g in mass. Females attain slightly higher body sizes than males (maximum male SVL 104 mm), are sexually mature at a snout-vent length of approximately 90 mm (85 mm in males; Hutchinson et al., 1994), and first breed at 2½ years of age during their third spring. Reproduction is viviparous. Following mating in November, birth of 1-4 (mode 3) young occurs in January-February. Their short-legged, elongate body form is correlated with their habits of utilising abandoned spider holes as retreat sites, especially those of large mygalomorphs (Milne & Bull, 2000; Fellows et al., 2007). The species is strongly diurnal, spending much of the day at the entrance to its spider-hole from which it can make short forays after prey (Pettigrew & Bull, 2014) with grasshoppers as the most important prey type (Fenner et al., 2007), and rapidly hide from potential predators (such as hovering hawks and elapid snakes).



Adult male Pygmy Bluetongue, grassland habitat in the background



Adult female Pygmy Bluetongue at the entrance to her spider hole retreat

3.4 Morphological characteristics

The species has an elongate body, with short legs (forelimbs and hind limbs similar in size, hind limb length approx. 15 per cent of snout-vent length) and tail (length approx. 67 per cent of snout-vent length). Body scales are small and smooth, but those on the relatively large head have thickened osteoderms and appear to provide some armoured protection, in contrast to the otherwise rather soft body (Hutchinson et al., 1994). Dorsally, the species is coloured grey-brown to medium tan, variably overlain with small, irregular black spots. In most populations spotting is fairly dense, and sometimes the spots in the dorsal midline form a vague vertebral stripe. The species is variable in colour and pattern, but especially so in some populations, where individuals show continuous variation in the degree of black spotting, from heavily spotted to completely unmarked. Juveniles usually have additional patterning of small white flecks, especially on the lateral surfaces, but these tend to disappear with age (Hutchinson et al., 1994).

3.5 Role of the species in its ecosystem

The species is a generalised predator of invertebrates, with a small amount of soft vegetation also included in its diet (Hutchinson et al., 1994).

4. Status and trends

4.1 Habitat trends

The apparently preferred habitat has been largely eliminated from the full geographic range of this species. Where the lizards survive, the ground cover is composed of a mix of native species and introduced pasture or weed species. Known sites have a history of grazing by sheep, and this activity appears to be generally favourable for the lizards by reducing a build-up of vegetation mats and maintaining open spaces between grass tussocks (Pettigrew & Bull, 2012).

Modelling by Delean et al. (2013) forecasted a future deterioration in the northern two-thirds of the current species range. Interactions with land use change as a result of the construction of wind farms and associated infrastructure in the species range has the potential to increase habitat fragmentation and degradation.

4.2 Population size

Population size has proven difficult to estimate. Estimates are of under 10,000 and probably around 5,000 individuals in the wild.

4.3 Population structure

Schofield et al., (2014) described the species as polygynous with stable non-social colonies. Individuals live solitarily in burrows, and juveniles disperse soon after birth (Milne et al., 2002; Souter et al., 2004).

4.4 Population trends

The species' population is severely fragmented among 33 sites, each separated by areas of unsuitable habitat (ploughed pasture, roads), with natural dispersal between subpopulations impossible.

Throughout the period when the species has been under study (from 1992 onwards) there has been no clear consistent trends across all populations; while some local populations have been stable, there have been marked downturns in others. The overall population trend is considered to be decreasing, with subpopulations known to have been lost potentially as a result of unviability (Fenner et al., 2018).

4.5 Geographic trends

The known historic geographic distribution is within South Australia, from Peterborough south to Adelaide. Prior to 1992, there had been no record of the species in the wild for 33 years (Armstrong & Reid, 1992), and there was no information on the species or its habitat. Land use changes that regularly disturb the soil structure and destroy established shelter burrows, common in the region following 19th century European colonization, resulted in fragmentation of suitable habitat within the current known range (Delean et al., 2013).

The species has not been observed near Adelaide since the 1950's and currently its most southern extent is to Bagot Well (Fenner et al., 2018), occupying fragmented locations within an area approx. 100 km east to west and 140 km north to south. This represents a decline in geographic range. In 2018, the species was listed as Endangered on the IUCN red list based on an area of occupancy less than 500 km² which is severely fragmented and undergoing continual decline through a reducing area of occupancy and quality of habitat, declining loss of subpopulations and mature individuals.

The species now appears to occupy only the northern part of its former distribution, suggesting a loss of roughly 40 per cent of its former range as well as a massive decline within the remaining area (Duffy et al., 2012). Most of the occupied sites are small, less than 100 ha, with a few larger sites up to 100 ha² in size.

Moreover, modelling predicts future deterioration of the species' habitat in the the northern two-thirds of the current species range (Delean & Fordham, 2013).

5. Threats

Identified threats include changed land use. Grazing is the one agricultural activity that is demonstrably compatible with the survival of the species, and it may even make a positive contribution. However, changes in land use, including changes in farming practices (grazing regime

and stocking rates) and other agricultural activities, such as any that involve ploughing or other soil disturbance, rapidly alter the soil compaction, resulting in the destruction of the spider holes on which the lizards depend.

Fragmentation of populations poses another threat. Human activities have reduced the species to small populations separated by large areas of hostile terrain that either restrict, inhibit or prevent movement of individuals between populations. The lizards are in any case disinclined to move long distances (Schofield et al., 2012). Two consequences that are likely to threaten the species in the future are loss of genetic diversity and inbreeding, and inability to track habitat changes. Both threats are likely to be best managed by translocation of individuals (Fordham et al., 2012; Ebrahimi et al., 2015).

Modelling predicts the future deterioration of the species' habitat in the northern two-thirds of the current species range (Delean et al., 2013). Other land use changes including the location of wind farm developments within areas of preferred habitats in response to climate change, further the slow but incremental loss of and fragmentation of suitable habitat through degradation due to service road construction and weed invasion along service roads and around infrastructure.

Poaching to supply trade is also an increasing threat. Advertisements in Europe were first reported to the South Australia Government in 2017-18, offering individual animals for sale between 6,000 and 9,000 Euros each. *Tiliqua* skinks are highly sought in the trade throughout the northern hemisphere and the uniqueness, rarity and high value of this species make it a lucrative target for trafficking.

In 2018, Pygmy Bluetongues were detected in a reptile trade outlet in the UK. It is understood that gravid adults had been purchased (for 5,000 Euros a pair) from Germany.

A report of burrows being excavated was received by the South Australia Government in March 2021. The activity was reported by scientists carrying out quarterly monitoring inspections who found the disturbance when they arrived at a subpopulation they were studying. Examination revealed that the burrows had been dug out by shovel or similar tools. Individuals of this subpopulation exhibit a more striking pattern and colour than many others, which would make them attractive in the trade.

Illegal collecting of lizards is likely to damage habitat, in particular the destruction of burrows. Loss of the essential refuge for the species, coupled with relatively small brood size and long generation time (3 years to maturity) mean that damaged populations are likely to be slow to recover. As many subpopulations have low numbers of individuals, with no connection to other subpopulations, even low levels of collection from the wild can have significant effects.

6. Utilization and trade

6.1 National utilization

The species is not utilized for any commercial purpose. Within Australia the species is regulated. The species is listed as Endangered at both the national and state levels. Under South Australian legislation (*NPW Act 1972*) the species is recognised as both a protected species and as a threatened species. This Act requires the issuing of permits for scientific research, for marking of individuals, for exporting and/or importing of individuals from/to South Australia, and for taking from and/or releasing to the wild. It also provides for fines for illegal possession and molestation of individuals. Specimens cannot be kept or traded as pets.

No examples of this species are currently held in private collections in Australia and no permits have been granted for the species to be taken from the wild for the purpose of export.

6.2 Legal trade

There is no legal commercial trade in this species or any parts of this species. Pygmy Bluetongues are not utilized commercially nor are they legally traded domestically. Australia's national environmental legislation prohibits the export of live Australian native reptiles from Australia for commercial purposes. Export of live reptiles from Australia has been regulated since at least 1982 under the *Wildlife Protection (Regulation of Exports and Imports) Act 1982* when exports of live reptiles were only permitted for specific non-commercial purposes. Export continues to be regulated under current Australian national environmental legislation (*EPBC Act 1999*) under which export permits can only be issued for live reptiles if for specified non-commercial purposes (exhibition, conservation breeding, research, education) as described in the legislation.

6.3 Parts and derivatives in trade

None.

6.4 Illegal trade

Bluetongue Lizards (*Tiliqua* spp.) are highly characteristic skinks popular among reptile-keeping hobbyists in Europe, the United Kingdom and North America (Hauschild et al., 2000). Most species of the genus are only found in Australia, but *T. gigas* is also known to occur in New Guinea and some islands of Indonesia.

Australia is aware of the first reports of individual Pygmy Bluetongues for sale internationally in late 2017. Australia is aware of the appearance of two specimens of Pygmy Bluetongue advertised for sale by a pet shop in 2018 in the UK priced at 6,000 Euros each. Altherr et al. (2019) reported that 17 specimens were offered for sale on-line within a six-month period during mid-September 2017 and mid-March 2018. These sale offers were made on online platforms and in social media posted in Germany, the UK and Russia. These advertisements support concerns that the exceptional small size of the Pygmy Bluetongue and its extreme rarity combine to give it a high commercial value among collectors. Australian wildlife enforcement authorities understand that, because specimens have attracted high prices on the black market, international demand for this species will increase thereby increasing the threat to the species in the wild.

The species has not been permitted to be exported live from Australia commercially since at least 1982, was considered to be extinct up until 1992, and there have been no permits providing for the legal live export from Australia for non-commercial purposes since at least 2002. Since no lawful exports of live Pygmy Bluetongues have been permitted since at least 2002 the individuals available for sale outside Australia were almost certainly illegally exported specimens or are the progeny of illegally exported specimens.

Recent wildlife enforcement operations have uncovered a strong demand for Australian reptiles across East Asia, Southeast Asia, Europe and North America. A growing number, variety and rarity of Australian native reptiles are available in overseas pet markets, and Australian wildlife enforcement authorities are concerned that reptile trafficking syndicates are turning their attention to poaching Pygmy Bluetongues to satisfy overseas demand.

Australian wildlife enforcement authorities received information in 2021 to indicate that Pygmy Bluetongues specimens are being advertised for sale in Japan.

Domestically, there is no lawful market for the species in Australia. The species cannot be taken, held or traded commercially.

6.5 Actual or potential trade impacts

Fenner et al. (2018) noted the potential for small numbers to be in illegal trade but at that time did not consider it likely that the species was traded in any significant numbers. Recent indications suggest that this trade is now more substantial and is likely to be increasing due to increased demand. Potential illegal trade impacts include reduction or even elimination of local populations and destruction of habitat.

The species is notably timid and rapidly hides in their spider holes when startled. Methods of collection from the wild are therefore likely to be by digging animals out of these spider holes, which will permanently remove the hole as a possible refuge and rendering the habitat unusable. Suitable substrate within spider burrows is a limiting factor for the species – destruction of habitat is therefore a further threat to the species.

Because the species is restricted to fragmented and isolated populations, any depletion through direct take or habitat damage as a result of poaching, risks rendering the subpopulation to unviable numbers. Regulation in trade in the species to address illegal trade is necessary to avoid further reduction of wild populations and the risk of accelerating the rate of population decline.

7. Legal Instruments

7.1 National

Tiliqua adelaidensis is listed as Endangered under Australian national environmental legislation (*EPBC Act 1999*). The species is also listed as Endangered in Schedule 7 of the South Australian *NPW Act 1972*.

7.2 International

The species is listed on CITES Appendix III, effective 22 June 2022.

8. Species Management

8.1 Management measures

The species has been subject to a recovery program since 1992. Prior to 1992 the species was considered to be extinct. Therefore, a major research focus has been to determine the management requirements of the species. *Tiliqua adelaidensis* is subject to an approved recovery plan that came into force under national environmental legislation in 2012. The recovery plan (Duffy et al., 2012) identifies the management actions and research necessary to stop the decline of, and support the recovery of, the species so that its chances of long-term recovery in the wild are maximised.

Management of the species depends on the protection of the habitat by eliminating mechanical disturbance of the soil. Ploughing or other intensive land uses are very likely to rapidly eliminate local populations because such activities eliminate spider holes from the region and the uncompacted soil renders any new holes ephemeral. Human-made holes can act as temporary boosters to improve recruitment or allow releases (Milne et al., 2003) but in the long-term the habitat must have compacted and stable soil in which spider holes can potentially endure for years. Grasslands are dynamic habitats, and lizards do not appear to survive if grass is allowed to grow into dense thickets with the ground completely smothered by overgrown tussocks and matted dead vegetation (Souter et al., 2007). Prior to European settlement, it seems probable that a combination of fire and grazing kept the grasslands open. Current relatively dense settlement and complex patterns of grazing and cropping through the region (yielding high fuel

loads) makes fire an unacceptable landscape management tool in this region, leaving grazing as the essential landscape management method. Sheep are suitable grazers (Clayton & Bull, 2015), and the levels of grazing needed are compatible with good agricultural land management. Therefore, management depends on maintaining good relationships between landowners and conservation groups, as the long-term survival of Pygmy Bluetongues will require actively managed landscapes.

8.2 Population monitoring

Their unique sedentary life based on spider holes means that once located, the same animal can be relocated and monitored at its 'home address' - an unusual opportunity for researchers working with small vertebrates. Monitoring methodology and equipment has been developed to monitor this species. The essential technology in use for monitoring the species is the optic fiberscope, used to probe down a likely spider hole to identify its occupant. The holes themselves are generally easy to miss, with openings no more than 20-25 mm in diameter. Thus, locating a new population is a laborious process. Even in locations where the lizards are known, they occur in local patches with extensive apparently lizard-less areas in between (Duffy et al., 2012).

8.3 Control measures

8.3.1 International

This species is listed on CITES Appendix III, effective 22 June 2022. Altherr et al. (2016, 2019) reviewed this issue, noting the role of CITES listing in many locations, including the European Union, in order for the illegal trade outside of Australia to be addressed.

International export of the species from Australia is regulated under this national legislation. Export of live individuals is not permitted for commercial purposes. Export of live specimens is only permitted for non-commercial purposes (e.g., exhibition, scientific research as outlined in the legislation) and prior to issuing of any export permit, the proposed export must demonstrate this purpose among other requirements. No such permits have been issued for the export of live specimens from Australia. The illegal export of an Australian native reptile is punishable by a term of imprisonment of up to 10 years.

8.3.2 Domestic

Tiliqua adelaidensis is protected through national and state legislation throughout its range (see section 7.1). It is listed as Endangered under Australian national environmental legislation (*EPBC Act 1999*). The *EPBC Act 1999* also requires that an action obtains approval from the Australian Government Environment Minister if the action has, will have, or is likely to have, a significant impact on the species.

The species is also provided with additional protection by being entirely confined to the Iron-grass Natural Temperate Grassland of South Australia - an ecological community listed as critically endangered under national environmental legislation (Turner, 2012). Similarly, any action that is likely to have a significant impact on this nationally listed ecological community, must be referred to the Australian Government Environment Minister for assessment and approval before the proposed action is taken (Turner, 2012).

Tiliqua adelaidensis is also listed in the state of South Australia as Endangered under the *NPW Act 1972*. Under this state legislation, the species is recognised as both a protected species and as a threatened species. The *NPW Act 1972* requires the issuing of permits for scientific research, for marking of individuals, for exporting and/or importing of individuals

from/to South Australia, and for taking from and/or releasing to the wild. It also provides for fines for illegal possession and molestation of individuals.

As a listed threatened fauna species, the habitats of Pygmy Bluetongues are also protected, firstly from clearance due to development, through Schedule 1—Principles of native vegetation clearance under the *Native Vegetation Act 1991*, and secondly, in a more specific sense, where the species occurs within the protected areas network under the *NPW Act 1972*; *Wilderness Protection Act 1992*; native vegetation Heritage Agreements under the *Native Vegetation Act 1991*, or Indigenous Protected Areas. There are few Pygmy Bluetongues known from such protected areas, with the Nature Foundation of South Australia-managed Tiliqua Reserve being an exception. The majority of known locations are on private properties. However, on those private properties habitats are further protected under the *EPBC Act 1999* where Pygmy Bluetongues occur within listed Threatened Ecological Communities such as the Iron-grass Natural Temperate Grassland of South Australia Threatened Ecological Community.

The Environment Compliance Branch within the Australian Department of Agriculture, Water and the Environment maintains specialised investigative and intelligence capabilities to disrupt wildlife crime within Australia. It works closely with other domestic and international border, law enforcement and environmental authorities to detect and disrupt illegal trade. A large proportion of time is dedicated to investigating the illegal export of Australian native reptiles.

A number of measures have been introduced within Australia for the purpose of detecting and disrupting illegal trade specifically in Pygmy Bluetongues. The Australian Government and South Australian Government initiated an operation to investigate the illegal export of Pygmy Bluetongues, ensure controls are in place within South Australia, and to detect illegal poaching and export at the Australian border. Intelligence collection, targeted intelligence-led inspections and monitoring has included: identification of supply chains and export pathways; assessment of networks and likelihood of export pathways; analysis of persons of interest's financial transactions and monitoring of travel activities; liaison with European authorities to inform compliance checks at the Australian border; targeted compliance inspections and permit checks; established efficient reporting channels; provision of advisory material to border force officials and postal services alerting of concealment methods and likelihood of export; targeted baggage searches on international flights; and advisory and awareness-raising visits to local government agencies and businesses to encourage reporting of poaching and illegal wildlife activity.

These specific activities to prevent poaching and illegal trade in Pygmy Bluetongues is in addition to broader strengthening of domestic compliance, including capacity development and intelligence training for compliance officers and ranger/park staff; increased collaboration among Australian wildlife enforcement agencies, including joint investigative and intelligence operations and information sharing; targeted compliance inspections; maintenance partnerships with international counterparts; comprehensive intelligence assessments of alleged wildlife crimes; capacity building of border officials and postal services in contemporary trafficking methods and illegal consignments; and influencing prioritisation of wildlife crime among Australian law enforcement.

8.4 Captive breeding and artificial propagation

Since the mid-1990s, a small captive population of Pygmy Bluetongues has been held by Zoos South Australia. For many years, attempts to establish breeding in this population had been unsuccessful with the population being noted as aggressive and territorial (Duffy et al., 2012). In

2014, a new purpose-built outdoor research and breeding facility was established at Monarto Safari Park, and in early 2015, the first captive breeding of this species was recorded. Since then, the captive population has reproduced on multiple occasions. The captive population remains viable and is used for on-going studies to further understand the biology and captive husbandry requirement of this species (P Ainsley, pers comm 19 May 2022).

8.5 Habitat conservation

Awareness-raising in the local community has helped to increase awareness of, and involvement in actions to help conserve the species, including habitat protection (Duffy et al., 2012). Formal habitat conservation in tenure requires cooperative management agreements with private landholders and this aim is continuing in line with the species' management plan. Currently one site is protected by such an agreement.

8.6 Safeguards

Refer to 'domestic control measure' in section 8.3.1 above.

9. Information on similar species

There are no similar species; morphology and ecology are unique nationally and internationally. Congeneric species (*Tiliqua* spp.) are all much larger and non-fossorial (Cogger, 2018). Unlike other species of *Tiliqua*, Pygmy Bluetongues have a pink tongue. Primary features for identification of the species are its unique size and proportions, combined with its plain or speckled colour pattern. Other species of *Tiliqua* are similar in proportions but are very much larger with markedly different colour patterns, and only juveniles of those other species fall into the size range of *T. adelaidensis* (Cogger, 2018). For identification purposes, the most similar species are two species of *Cyclodomorphus*, *C. branchialis* and *C. venustus*, which are similar in size and greyish speckled colouring to *T. adelaidensis*. Both *Cyclodomorphus* species have longer tails (tail length = SVL, versus much shorter than SVL in *T. adelaidensis*) that can be shed and regrown (tail cannot be shed in *T. adelaidensis*) and vertical black barring or series of black spots on the sides of the neck. Morphological similarity to some species of *Cyclodomorphus* would not be an identification issue for CITES export regulators at the Australian border because live specimens of native reptiles cannot be exported for commercial purposes and other non-commercial international trade in native reptiles requires export permits under Australia's national environmental legislation.

10. Consultation

The South Australian Government was consulted in the preparation of this proposal. Consultation on the listing was undertaken with the Australian public during 2021 by the Australian CITES Management Authority.

11. Additional Remarks

None.

12. References

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